	Exh. TCB-4
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION	
DOCKET LIE 240004	
DOCKET UE-240006  DOCKET UG-240007	
EXH. TCB-4	
TIA C BENJAMIN	
REPRESENTING AVISTA CORPORATION	



### Avista Corp.

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March 31, 2023

Amanda Maxwell Executive Director & Secretary Washington Utilities and Transportation Commission 621 Woodland Square Loop SE Lacey, Washington 98503

### RE: Compliance Filing (Provisional Capital for 2022) - Dockets UE-220053, UG-220054 and UE-210854 (consolidated)

Avista Corporation, dba Avista Utilities (Avista or the Company), hereby submits its 2022 Washington Annual Provisional Capital Report, per Order 10/04, in Dockets UE-220053, UG-220054 and UE-210854 (consolidated).<sup>1</sup>

Per Order 10/04, Dockets UE-220053, et. al., page 28, para. 79, the Commission summarized the Full Multiparty Settlement Stipulation ("Settlement") with regards to Provisional Capital Reporting as follows:

The Settling Parties agree to the reporting process for reviewing capital projects outlined in Avista witness Andrews's testimony, with certain changes. Avista's provisional capital reporting will include assurance that the "provisional capital included prior to the rate effective period (for 2022 capital) and during [Rate Year 1] (2023 capital) and [Rate Year 2] (2024 capital) is in service for customers during the rate effective periods, or will be subject to refund." The Settling Parties' proposed changes extend the review period from three to four months to allow parties to review and respond to Avista's annual capital report filing. Within 30 days of completing the capital projects review, Avista would be required to file with

<sup>1</sup> Washington Annual Provisional Capital Reports are due annually on March 31<sup>st</sup> during the Company's approved Multi-Year Rate Plan in effect from December 21, 2022 through December 20, 2024. These annual reports will provide support for actual Provisional Capital Additions occurring in 2022, 2023 and 2024 versus the total level of plant approved by the Commission in Dockets UE-220053, et. al.

<sup>2</sup> Per the Settlement (see UE-220053-Appendix A to Order 10/04 -Settlement-Stipulation-6-28-22, page 10, para. 20), Parties must complete their review and file any response no later than four months (on or before July 31<sup>st</sup> annually).

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the Commission an accounting petition to provide refunds, and create a separate tariff through which rate refunds to customers will be returned and spread to schedules based on an equal share of base rate revenues, exclusive of tax credit refunds. For the purposes of the Capital Projects Review only (*i.e.*, for the comparison of provisional capital additions included in Rate Year 1 and Rate Year 2), the Settling Parties further agree that Rate Year 1 and Rate Year 2 capital additions and rate base are adopted as initially filed by Avista except with the exclusion of the Dry Ash Disposal System.

The Commission approved the Settlement's capital project review and process at page 30, para. 85 of Order 10/04, adding the following "Condition" related to the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA):

Condition. We condition our approval of the Settlement on the modification of the capital projects review, requiring that Avista must demonstrate all offsetting benefits received or for which it has applied for through the IRA and IIJA for all retrospective review of provisional plant (capital projects). Further, we require Avista's reporting to include all funding for which it has applied and the reasons justifying any decision not to pursue IRA and IIJA funding options for which it may be eligible. Subject to this condition, we determine that the Settling Parties' agreement regarding capital projects review is in the public interest and should be approved.

### ANNUAL PROVISIONAL CAPITAL REPORTING

In accordance with Order 10/04 in Dockets UE-220053 et. al., Avista has provided, in this compliance filing, a review of all capital additions for year-end 2022, and incremental information for capital additions with a "significant cost variance" greater than ten percent and \$500,000<sup>3</sup> from the pro-formed amount, containing evidence (either directly or by reference to previously-filed evidence) as described below. This report serves to validate that such plant is, in fact, in-service, is used and useful, and at what final investment amount (after any offsetting benefits). This report will provide the Commission with assurance that the capital included prior to the rate effective period (for 2022 capital) is in service for customers.

As outlined in Company witness Ms. Andrew's direct testimony (Exh. EMA-1T, starting at page 46), in compliance with the Multi-Party Settlement approved by the Commission with regards to Provisional Capital Reporting over the Company's Multi-Year Rate Plan, the Company agreed to provide the following:

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<sup>&</sup>lt;sup>3</sup> By using the \$500,000 and +/- 10% threshold, the Company is providing additional explanation and support for 99% of the variance in capital additions for 2022. See Attachment A.



Each annual report will provide evidence as follows:

- a) Final actual "Net Plant after ADFIT" balances versus Commission Authorized "Net Plant after ADFIT" balances, for each calendar year. This will ensure final rates represent all actual additions, retirements, offset by Accumulated Depreciation (A/D) and Accumulated Deferred Federal Income Taxes (ADFIT) representing final net plant balances that are used and useful, serving customers, and reflect associated costs (net of any benefits).
- b) The <u>justification</u> for the Business Cases, including supporting information, if different than what was included in the Company's direct filed case;
- c) Actual in-service date(s);
- d) Actual final costs, as well as explanations for significant cost variances;
- e) Any <u>changes to the Business Cases</u> themselves, (for example, deviations from the scope and descriptions provided in the initial filing in this case);
- f) Evidence that any <u>significant cost overruns</u> and the <u>decision to continue</u> to invest in the project under any relevant changed circumstances was prudent;
- g) <u>Updated information</u> (if any) on offsetting factors presented in this case specific to the Business Cases:
- h) In responding to items (a) (g) above, the Company will provide a listing of the Business Cases as filed in this proceeding for the calendar year, with updated information, and an explanation for any changes. As circumstances change, and capital is redeployed to other new or existing Business Cases during 2022 2024, any redeployed capital will be supported as prudent and used and useful, in order to allow for recovery.
- i) Recovery of capital investment, therefore, will be <u>capped</u> at the total overall net plant after ADFIT and resulting revenue requirement balances, by calendar year, approved by the Commission, in its initial Order approving the Two-Year Rate Plan. The Company, however, reserves the right to seek a deferral for additional costs not recovered through this review process.

To meet the above requirements, as discussed below, the Company is providing the following attachments as part of this report:

- Attachment A: Provides a summary including a list of all Business Cases filed in Dockets UE-220053, et. al., including the calendar 2022 as-filed gross plant additions and the actual 2022 gross plant additions transferred into plant on a system basis. This summary includes the variance amount and percent between the 2022 as filed and actual gross transfers to plant, as well as identification of meeting the "significant cost variance" threshold established by Avista to provide additional support for project variances. Additionally, Attachment A points to where all capital addition support for each individual Business Case can be found.
- Attachment B: Provides detailed actual transfers to plant data by Business Case, by month, with amounts and in-service dates on a system basis, as well as Washington electric and Washington natural gas basis.



- Attachment C: Provides Capital Variance Explanation Forms, new or revised Business Cases, and other supporting documentation as justification for each Business Case that has demonstrated a variance greater than the \$500,000 and +/- 10% "significant cost variance" threshold on a system basis. The Capital Variance Explanation Forms include an explanation of the variance, discussion of management approval for cost overruns and discuss any changes to offsets for 2022.
- Attachment D: Provides a description for any Business Case not included in the original filing with actual 2022 additions below the \$500,000 and +/- 10% "significant cost variance" threshold.
- Attachment E: Provides the Company's capital additions native excel file supporting the additions by adjustment updated with 2022 monthly <u>actual</u> transfers to plant, net of revised Accumulated Depreciation (A/D) and Accumulated Deferred Federal Income Taxes (ADFIT), resulting in the updated 2022 "Net Plant after ADFIT" used for comparison to the as-filed 2022 "Net Plant After ADFIT", (excluding Colstrip Units 3 and 4 pro formed/provisional capital investment).
- Attachment F: Provides a listing of the grant opportunities available through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, that the Company is monitoring for applicability to Avista directly, or which might benefit Avista indirectly by partnering with other entities.

### a) 2022 Actual Transfers-To-Plant and Final Actual "Net Plant after ADFIT" Balances

The Company has updated its as-filed transfers-to-plant additions for 2022 to reflect monthly <u>actual</u> transfers-to-plant data, resulting in actual transfers to plant of \$214,330,000 for Washington electric (excluding Colstrip Units 3 and 4 investments) and \$54,698,000 for Washington natural gas, for calendar year 2022. Table No. 1 summarizes the Washington electric and Washington natural gas results of actual 2022 transfers-to-plant, as well as the overall Net Plant After ADFIT balances, versus that as-filed and approved by the Commission in Dockets UE-220053, et. al.

Table No. 1 – 2022 Actual Transfer-To-Plant & Net Plant After ADFIT versus Authorized

Washington 2022 Actual Transfer-To-Plant & Net Plant After ADFIT versus Authorized														
(000s)														
Electric Natural Gas Washington Total														
Actual Transfers-To-Plant	\$	214,330	\$	54,698	\$	269,028								
As-Filed Transfers-To-Plant	\$	167,665	\$	46,387	\$	214,052								
Variance Over Authorized	\$	46,665	\$	8,311	\$	54,976								
			l											
Actual Net Plant After ADFIT	\$	2,001,820	\$	504,232	\$	2,506,052								
As-Filed Net Plant After ADFIT	\$	1,968,699	\$	503,561	\$	2,472,260								
Variance Over Authorized	\$	33,121	\$	671	\$	33,792								



For Washington electric, the actual transfers to plant for 2022 of \$214,330,000 is \$46,665,000 more than the <u>as-filed</u> transfer-to-plant amount of \$167,665,000 (excluding Colstrip Units 3 and 4 investments) for calendar year 2022. Including the impact on A/D and ADFIT, the Company has also updated the "Net Plant after ADFIT" as of the twelve-months-ended December 31, 2022, on an end of period basis, resulting in a "Net Plant after ADFIT" balance of \$2,001,820,000 versus the as-filed level (excluding Colstrip Units 3 and 4 pro forma and provisional additions) of \$1,968,699,000. Please see <u>Attachment E</u> for the updated Capital Additions Adjustment native excel file supporting the electric actual transfer-to-plant data and updated A/D and ADFIT detail, resulting in the 2022 "Net Plant After ADFIT" balances. As noted above, the updated actual electric 2022 transfers-to-plant and 2022 "Net Plant After ADFIT" balances reflect amounts greater than that included by the Company in its as-filed case, resulting in no overall capital additions subject to "refund" as of December 31, 2022.

For Washington natural gas, the actual transfers to plant for 2022 of \$54,698,000 is \$8,311,000 more than the <u>as-filed</u> transfer-to-plant amount of \$46,387,000 for calendar 2022. Including the impact on A/D and ADFIT, the Company has also updated the "Net Plant after ADFIT" as of the twelve-months-ended December 31, 2022, on an end of period basis, resulting in a "Net Plant after ADFIT" balance of \$504,232,000 versus the as-filed level of \$503,561,000. Please see <u>Attachment E</u> for the updated Capital Additions Adjustment native excel file supporting the natural gas actual transfer-to-plant data and updated A/D and ADFIT detail, resulting in the 2022 "Net Plant After ADFIT" balances. As noted above, the updated actual natural gas 2022 transfers-to-plant and 2022 "Net Plant After ADFIT" balances reflect amounts greater than that included by the Company in its as-filed case, resulting in no overall capital additions subject to "refund" as of December 31, 2022.

### b) Business Case Justification

Attachment A provides a summary of all Business Cases included in the Company's filed case in Dockets UE-220053, et. al., including the calendar 2022 system <u>as-filed</u>, planned gross plant additions, compared to the <u>actual</u> system gross plant additions transferred into plant in 2022. Further, this summary includes the variance amount and percent between the as-filed and actual gross transfers to plant by Business Case during 2022.

For each Business Case with a transfer to plant "significant cost variance" greater than \$500,000 and +/- 10% of the amount as-filed, those Business Cases are flagged as "met = Yes," and additional support is provided, including a Capital Variance Explanation Form, which discusses the reason for the variance, management oversight and authorization for cost overruns, and the impact, if any, to offsets versus that included by the Company in its direct-filed case (see section g) "Offsetting Factors" below for actual 2022 offsets). By using this threshold, the Company is providing additional justification for 99% of the variance in transfers-to-plant identified between actual capital additions in 2022 versus that included in the Company's direct filed case and approved by the Commission.

Additionally, if a new Business Case was introduced in the year, with a transfer to plant amount greater than the \$500,000 "significant cost variance" threshold, the associated new Business Case



is provided with the Capital Variance Explanation Form in <u>Attachment C</u>. If the transfer-to-plant variance is below the \$500,000 "significant cost variance" threshold, a description of the Business Case was provided in <u>Attachment D</u>.

Finally, support of the 2022 capital pro forma and provisional additions were provided with the Company's direct filed case, including a description of each Business Case located within the respective direct testimony of Company witnesses Mr. Thackston (Exh. JRT-1T), Mr. Magalsky (Exh. KEM-1T), Ms. Rosentrater (Exh. HLR-1T), Mr. Kensok (Exh. JMK-1T), Mr. Howell (Exh. DRH-1T) and Mr. Kinney (Exh. SJK-1T). Additionally, an exhibit was filed with each witness's testimony including each full Business Case. Please see <u>Attachment A</u> for reference to each witness' respective exhibit and pages where each Business Case can be found.

### c) Actual In Service Dates

The Company has provided detailed information by Business Case, of system and Washington electric and Washington natural gas actual transfers-to-plant by month, with actual in-service dates, provided within Attachment B.

### d) Actual 2022 Final Costs

As noted above, Attachment A summarizes, by Business Case, actual final costs <u>at a system level</u> <u>for 2022</u>, and identifies any "significant cost variances," pointing elsewhere for support of those variances. Monthly actual transfer-to-plant amounts by Business Case directly assigned or allocated to Washington electric or Washington natural gas are provided within Attachment B.

### e) Changes to Business Cases

Changes in Business Cases, resulting from deviations of the scope and description from that provided in the Company's initial filing, and meeting the "significant cost threshold" of \$500,000 and +/- 10% variance are listed in Table No. 2 below. Capital Variance Explanation Forms for these Business Cases providing the variance justification narrative is provided in <u>Attachment C</u>. These Business Cases are included in Table No. 2 because either the Business Case was not included in the original filing or because an update has been made since the original filing. Additionally, in several instances the Company is providing additional documentation in <u>Attachment C</u> along with each Capital Variance Explanation Form, to support the variance in transfers to plant. Examples of the additional documentation being provided include steering committee meeting notes or Business Case Funds Change Request Forms, seeking funding change approval from the Capital Planning Group.

<u>Table No. 2 – Changed Business Cases</u>

		2022 TTP Plan	2	022 Actual TTP	Variance \$ over/(under)
Business Case	ĵΨ	Gross Plant 💌		Gross Plant 💌	Gross Plant 💌
Energy Delivery Modernization & Operational Efficiency		\$ 5,560,672	\$	8,762,727	\$ 3,202,055
Gas ERT Replacement Program		\$ -	\$	778,042	\$ 778,042
Gas PMC Program		\$ 3,500,004	\$	1,657,533	\$ (1,842,471)
KF_Fuel Yard Equipment Replacement		\$ -	\$	31,118,690	\$ 31,118,690
Strategic Initiatives - Clean Energy Fund 2		\$ -	\$	555,858	\$ 555,858



### f) Prudent Decision Making For Cost Variances

For each Business Case with "Significant cost variances" meeting the defined threshold of \$500,000 and +/- 10% of the amount as-filed, the Company has provided in Attachment C, a Capital Variance Explanation Form which contains a discussion of the management oversight of the project or program should significant cost overruns occur. It is common practice at Avista for capital Business Cases to have a steering committee or be reviewed at various budget committee meetings in the year. If additional funding (spend) is needed, a request is then provided to the Capital Planning Group (CPG). Every funding request put before the CPG, and approved by the CPG, includes a description, and is signed by the Business Case owner, supporting the decision to continue to invest in the project under the relevant changed circumstances.

### g) Offsetting Factors

As a part of the 2022 Provisional Capital Report and Business Case review, the Company evaluated the expected direct O&M offsets included in its filed case (Dockets UE-220053 et. al.) for any changes per actual results. Table No. 3 below provides the as-filed <u>direct O&M offsets</u> versus the actual direct O&M offsets determined for the 2022 investments.

Table No. 3 – As-Filed Direct O&M Offsets versus Actual Direct O&M Offsets

2022 Direct O&M Offsets	As Filed	Actual
Customer Experience Platform Program	\$29,582	\$29,582
Distribution Grid Modernization	\$26,684	\$115,169
Downtown Network - Performance & Capacity*	\$79,200	\$47,520
Energy Delivery Modernization & Operational Efficiency	\$100,000	\$100,000
Gas Airway Heights HP Reinforcement	\$2,312	\$2,312
Gas PMC Program*	\$38,000	\$0
Gas Reinforcement Program	\$2,400	\$2,400
N Lewiston Autotransformer - Failed Plant	\$266,000	\$266,000
Structures and Improvements/Furniture	\$11,000	\$11,000
	\$555,178	\$573,983

<sup>\*</sup>Reductions will be realized in a future period.

Transfer to plant was delayed into future years.

As discussed by the Company in its direct filed case (Exh. EMA-1T, starting at page 35), the Company incorporated O&M cost savings across the board for all capital projects that were not otherwise related to mandates or growth. Avista incorporated direct O&M offsets related to certain capital projects and for those projects where immediate hard cost savings could not otherwise be identified, the Company incorporated a 2% efficiency adjustment. In this manner, this would provide additional impetus to drive efficiencies out of our capital investments. With regard to the "2% efficiency" adjustment, for each Business Case where no direct offset was determined, the Company separately applied a "2% Efficiency Adjustment," calculated based on 2% of the "return on" the specific Business Case investment. The Company, however, included the full level of capital investment in its revenue requirement and provided a separate "offsets adjustment" to incorporate both the direct O&M offsets as well as the "2% Efficiency Adjustment," where



appropriate. These offsets (direct and 2% efficiency adjustments) were assumed to be in effect in Rate Year 1 for 2023 (RY1) and Rate Year 2 for 2024 (RY2). Based on the results shown in Table No. 2 above, there is no material change in <u>direct</u> O&M offsets to be reflected or adjusted at this time.<sup>4</sup>

In addition, it is important to note that although the Company included in its electric and natural gas Pro Forma Studies in Dockets UE-220053 et. al., total <u>direct</u> O&M offsets as noted in Table No. 2 above, as well as offsets associated with reduction in O&M by use of a 2% efficiency adjustment, the Company also included reductions in its overall Washington electric and natural gas revenue requirements over the Two-Year Rate Plan by adjusting other revenue related to growth plant, retirements on capital investment (reduced depreciation expense), and reduced net plant after ADFIT for the change in A/D and ADFIT on existing test period plant at 09.2021, adjusted to 12.2022 and further to AMA 2023 for RY1 and AMA 2024 for RY2. Overall, the total offsetting adjustments reduced the Company's as-filed revenue requirement in total by \$41.3 million for electric and \$11.4 million for natural gas, for RY1, and by \$23.5 million for electric and \$6.5 million for natural gas, for RY2, (or a total of \$64.8 million for electric and \$17.9 million for natural gas, over the Two-Year Rate plan). Values <u>for 2022 alone</u> are summarized as follows:

- Direct O&M expense and "Other Revenue" reductions Included in Pro From "Capital O&M Offsets & Revenues" Adjustments (4.03) for RY1 and (5.09) for RY2 are 1) direct O&M savings for certain capital Business Cases, 2) an incremental "2% O&M efficiency" adjustment, reducing O&M expense, for all remaining capital Business Cases (not required for regulatory purposes), and 3) offsetting revenue associated with the Growth Capital Business Case. Also included in Pro From "Power Supply" Adjustment (3.00P) for RY1, were incremental EIM benefits (revenues), as a result of the EIM Business Case. These direct O&M and "2% efficiency O&M" offsets and revenues were shown in detail in Exh. EMA-5. Incremental O&M savings related to AMI O&M offsets (per PF Adjustments 3.04 (RY1) & 5.01 (RY2)) and reduced O&M labor expense for retirements (see PF Adjustment 3.07), were also included. As shown in Table Nos. 6 and 7 (Line 1) of Exh. EMA-1T, pages 36 and 37, a combination of each of these O&M offsets and revenues total \$6.8 million for electric and \$2.2 million for natural gas, for 2022 alone, and in effect for 2023 (RY1).<sup>5</sup>
- Retirements Included reductions to electric and natural gas depreciation expense to reflect capital retirements through 2023 (RY1) and 2024 (RY2). As shown in Table Nos. 6 and 7 (Line 2) of Exh. EMA-1T, pages 36 and 37, this reduced the Company's proposed

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<sup>&</sup>lt;sup>4</sup> Per the Provisional Capital Review process requirements approved in Dockets UE-220053 et. al., offsetting factors considered in this context will be limited to offsets that might occur <u>directly</u> as a result of Avista's investment in the specified Business Cases and will not include offsets that do not directly result from the investment in the specific Business Cases. Where any efficiency adjustment is used by the Company in lieu of a direct benefit, that adjustment will continue for the 2022 – 2024 period.

<sup>&</sup>lt;sup>5</sup> This is prior to incremental <u>direct O&M and other revenue offsets</u> included related to 2023 in effect in Rate Year 1 and 2024 in effect in Rate Year 2. See Table Nos. 6 and 7 (Line 1) of Exh. EMA-1T, pages 36 and 37 for full detail over the Two-Year Rate Plan.



revenue requirement by approximately \$5.7 million for electric and \$1.5 million for natural gas for 2022 alone, and in effect for 2023 (RY1).

• Reduction to Net Plant after ADFIT – Included reductions to Net Plant after ADFIT\_for the change in A/D and ADFIT on existing plant at 09.2021, adjusted to EOP 12.2022 and further to AMA 2023 for RY1 and AMA 2024 for RY2. As shown in Table Nos. 6 and 7 (Line 3) of Exh. EMA-1T, pages 36 and 37, this reduced overall net rate base, resulting in a reduction to Company revenue requirements of \$10.5 million for electric and \$2.4 million for natural gas for 2022 alone, and in effect for 2023 (RY1).

Overall offsets assumed for 2022 alone, and included in effect during 2023 (RY1), therefore totaled \$23.0 million for electric and \$6.0 million for natural gas. No additional changes in offsets are applicable to be updated through the Provisional Capital Reporting review process at this time.

### INFLATION REDUCTION ACT AND INFRASTRUCTURE INVESTEMENT AND JOBS ACT REPORTING

In response to the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA), Avista has been very active in terms of seeking out potential grant opportunities. For example, late in 2022, Avista started the process for seeking grants under the Grid Resilience and Innovation Partnerships (GRIP) effort. More specifically, Avista provided concept papers under the "Grid Resilience" and the "Smart Grid" opportunity areas. The Grid Resilience concepts included \$100 million in funding for wildfire hardening efforts. The Smart Grid concept paper focused on areas of grid resiliency and Community Grid platforms, totaling \$32 million in potential funding. In February we were pleased to learn that our proposals were "encouraged," meaning that we were selected to proceed to submitting grant opportunities in those areas. Ultimate determination of whether or not we have been selected, and are able to negotiate a successful program, will take place by the end of the 2023.

In addition, we have team members watching for other potential grant opportunities under the IIJA and IRA, as applicable. Such other areas include funding for hydroelectric upgrades, and electric vehicle infrastructure. Attachment F provides a listing of the grant opportunities we are evaluating for applicability to Avista directly, or which might benefit Avista indirectly by partnering with other entities. In the end, we will substantially participate in any programs that make sense and provide value to our customers. That said, such opportunities are prospective, and therefore not included in any of the projects that were transferred to plant in 2022 (and subject of this compliance report).

<sup>&</sup>lt;sup>6</sup> This is prior to incremental <u>retirement offsets</u> included related to 2023 in effect in Rate Year 1 and 2024 in effect in Rate Year 2. See Table Nos. 6 and 7 (Line 1) of Exh. EMA-1T, pages 36 and 37 for full detail over the Two-Year Rate Plan.

<sup>&</sup>lt;sup>7</sup> This is prior to incremental <u>reduction of Net Plant After ADFIT offsets</u> included related to 2023 in effect in Rate Year 1 and 2024 in effect in Rate Year 2. See Table Nos. 6 and 7 (Line 1) of Exh. EMA-1T, pages 36 and 37 for full detail over the Two-Year Rate Plan.



Please direct any questions regarding this report to Tia Benjamin at 509-495-2225 or tia.benjamin@avistacorp.com, or Liz Andrews at 509-495-8601 or liz.andrews@avistacorp.com.

Sincerely,

/s/ Elizabeth Andrews

Elizabeth Andrews Sr. Manager, Revenue Requirements

### 2022 Capital Additions (System-Basis) - Summary by Business Case

Support of the 2022 capital pro forma and provisional additions were provided with the Company's direct filed case, including a description of each Business Case located within the respective direct testimony of Company witnesses Mr. Thackston (Exh. JRT-1T), Mr. Magalsky (Exh. KEM-1T), Ms. Rosentrater (Exh. HLR-1T), Mr. Kensok (Exh. JMK-1T), Mr. Howell (Exh. DRH-1T) and Mr. Kinney (Exh. SJK-1T). Additionally, an exhibit was filed with each witness's testimony including each full Business Case as noted in Column (F).

Additional support is provided as follows:

Attachment B - Detail actual transfer-to-plant by month amounts and in-service dates

Attachment C - Capital Variance Explanation Forms and supporting justification by Business Case

Attachment D - Business Cases not included in direct filing under threshold

Attachment E - Native Capital Adjustment excel file supporting transfers-to-plant and Net Plant After ADFIT balances

	•	(A) (B)				(C)	(D)	(E) \$500k &	(F)		(G)	
		2	022 As-Filed	:	2022 Actual		Variance \$	Variance %	+/- 10% TTP	Direct Filed Ex	xhibit	Attach-
			TTP (1)		TTP (1)		over/(under)	over/(under)	Threshold	Reference		ment C
Witness	Business Case	(	Gross Plánt	(	Gross Plant		Gross Plant		met?	Exh. #	Pg#	Pg#
Kensok	Basic Workplace Technology Delivery	\$	813,479	\$	2,094,785	\$	1,281,306	158%	yes	Exh. JMK-2	3	2
Thackston	Cabinet Gorge Station Service	\$	7,761,859	\$	-	\$	(7,761,859)	-100%	yes	Exh. JRT-4	178	12
Thackston	Cabinet Gorge Unit 4 Protection & Control Upgrade	\$	750,000	\$	3,312,748	\$	2,562,748	342%	yes	Exh. JRT-4	45	18
Thackston	Clark Fork Settlement Agreement	\$	4,839,609	\$	3,501,188	\$	(1,338,421)	-28%	yes	Exh. JRT-4	51	19
Magalsky	Customer Experience Platform Program	\$	5,999,915	\$	4,588,240	\$	(1,411,675)	-24%	yes	Exh. KEM-2	10	20
Magalsky	Customer Transactional Systems	\$	3,859,166	\$	2,824,043	\$	(1,035,123)	-27%	yes	Exh. KEM-2	31	21
Rosentrater	Distribution Grid Modernization	\$	2,165,010	\$	2,716,701	\$	551,691	25%	yes	Exh. HLR-2	18	22
Rosentrater	Distribution Minor Rebuild	\$	11,499,986	\$	15,056,011	\$	3,556,025	31%	yes	Exh. HLR-2	30	23
Rosentrater	Downtown Network - Performance & Capacity	\$	1,100,000	\$	358,877	\$	(741,123)	-67%	yes	Exh. HLR-2	77	28
Rosentrater	Elec Relocation and Replacement Program	\$	5,399,944	\$	8,595,275	\$	3,195,331	59%	yes	Exh. HLR-2	88	29
Magalsky	Electric Transportation	\$	2,775,000	\$	1,997,584	\$	(777,416)	-28%	yes	Exh. KEM-2	2	34
Kensok	Endpoint Compute and Productivity Systems	\$	3,498,321	\$	5,713,123	\$	2,214,802	63%	yes	Exh. JMK-2	32	35
Kensok	Energy Delivery Modernization & Operational Efficiency	\$	5,560,672	\$	8,762,727	\$	3,202,055	58%	yes	Exh. JMK-2	142	38
Kensok	Energy Resources Modernization & Operational Efficiency	\$	2,727,599	\$	2,205,670	\$	(521,929)	-19%	yes	Exh. JMK-2	153	45
Kensok	Enterprise & Control Network Infrastructure	\$	3,243,307	\$	3,904,831	\$	661,524	20%	yes	Exh. JMK-2	43	73
Kensok	Enterprise Communication Systems	\$	1,472,733	\$	4,267,360	\$	2,794,627	190%	yes	Exh. JMK-2	52	88
Kensok	Enterprise Network Infrastructure	\$	2,235,285	\$	363,051	\$	(1,872,234)	-84%	yes	Exh. JMK-2	236	98
Kensok	Enterprise Security	\$	972,340	\$	2,482,395	\$	1,510,055	155%	yes	Exh. JMK-2	202	112
Kensok	Fiber Network Lease Service Replacement	\$	1,392,970	\$	687,525	\$	(705,445)	-51%	yes	Exh. JMK-2	91	118
Rosentrater	Fleet Services Capital Plan	\$	7,904,640	\$	6,911,885	\$	(992,755)	-13%	yes	Exh. HLR-2	252	128
Rosentrater	Gas Above Grade Pipe Remediation Program	\$	682,000	\$	-	\$	(682,000)	-100%	yes	Exh. HLR-2	400	130
Rosentrater	Gas Airway Heights HP Reinforcement	\$	9,634,502	\$	7,867,781	\$	(1,766,721)	-18%	yes	Exh. HLR-2	420	131
Rosentrater	Gas ERT Replacement Program	\$	-	\$	778,042	\$	778,042	100%	yes			134
Rosentrater	Gas HP Pipeline Remediation Program	\$	599,998	\$	-	\$	(599,998)	-100%	yes	Exh. HLR-2	337	147
Rosentrater	Gas Isolated Steel Replacement Program	\$	862,754	\$	1,424,685	\$	561,931	65%	yes	Exh. HLR-2	340	148
Rosentrater	Gas Non-Revenue Program	\$	9,295,000	\$	10,657,765	\$	1,362,765	15%	yes	Exh. HLR-2	343	149
Rosentrater	Gas PMC Program	\$	3,500,004	\$	1,657,533	\$	(1,842,471)	-53%	yes	Exh. HLR-2	352	150
Rosentrater	Gas Reinforcement Program	\$	1,299,997	\$	1,892,133	\$	592,136	46%	yes	Exh. HLR-2	359	161
Rosentrater	Gas Replacement Street and Highway Program	\$	3,495,650	\$	4,847,700	\$	1,352,050	39%	yes	Exh. HLR-2	363	162
Rosentrater	Gas Transient Voltage Mitigation Program	\$	875,000	\$	-	\$	(875,000)	-100%	yes	Exh. HLR-2	407	163
Thackston	Generation DC Supplied System Update	\$	550,001	\$	18,486	\$	(531,515)	-97%	yes	Exh. JRT-4	74	166
Kensok	Identity and Access Governance (IAG)	\$	672,255	\$	-	\$	(672,255)	-100%	yes	Exh. JMK-2	264	167
Rosentrater	Joint Use	\$	2,749,992	\$	4,340,369	\$	1,590,377	58%	yes	Exh. HLR-2	102	173
Thackston	KF_Fuel Yard Equipment Replacement	\$	-	\$	31,118,690	\$	31,118,690	100%	yes	Exh. JRT-4	214	174
Kensok	Land Mobile Radio & Real Time Communication Systems	\$	3,569,746	\$	299,516	\$	(3,270,230)	-92%	yes	Exh. JMK-2	109	188
Rosentrater	N Lewiston Autotransformer - Failed Plant	\$	5,554,506	\$	4,394,085	\$	(1,160,421)	-21%	yes	Exh. HLR-2	381	194
Rosentrater	New Revenue - Growth	\$	73,429,598	\$	98,845,434	\$	25,415,836	35%	yes	Exh. HLR-2	124	195

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	•	(A) (B)				(C)	(D)	(E) \$500k &	(F)		(G)
		2	2022 As-Filed	:	2022 Actual	Variance \$	Variance %		Direct Filed E	xhibit	Attach-
		_	TTP (1)	_	TTP (1)	over/(under)	over/(under)	Threshold	Reference		ment C
Witness	Business Case		Gross Plant	(	Gross Plant	Gross Plant		met?	Exh. #	Pg#	Pg#
Thackston	Nine Mile HED Battery Building	\$	800,001	\$	-	\$ (800,001)	-100%	yes	Exh. JRT-4	234	196
Thackston	Nine Mile Powerhouse Crane Rehab	\$	1,699,988	\$	1,018,790	\$ (681,198)	-40%	yes	Exh. JRT-4	243	197
Rosentrater	Protection System Upgrade for PRC-002	\$	80,000	\$	2,772,398	\$ 2,692,398	3365%	yes	Exh. HLR-2	135	198
Rosentrater	Saddle Mountain 230/115kV Station (New) Integration Project Phase 2	\$	19,962,533	\$	13,416,440	\$ (6,546,093)	-33%	yes	Exh. HLR-2	144	199
Thackston	Spokane River License Implementation	\$	629,226	\$	107,452	\$ (521,774)	-83%	yes	Exh. JRT-4	135	200
Rosentrater	Spokane Valley Transmission Reinforcement Project	\$	2,000,000	\$	3,037,762	\$ 1,037,762	52%	yes	Exh. HLR-2	161	201
Rosentrater	Strategic Initiatives - Clean Energy Fund 2	\$	-	\$	555,858	\$ 555,858	100%	yes			204
Thackston	Strategic Initiatives - Upriver Park	\$	225,225	\$	3,823,802	\$ 3,598,577	1598%	yes	Exh. JRT-4	142	216
Rosentrater	Structures and Improvements/Furniture	\$	3,639,388	\$	6,384,231	\$ 2,744,843	75%	yes	Exh. HLR-2	281	217
Rosentrater	Substation - New Distribution Station Capacity Program	\$	5,765,300	\$	4,266,887	\$ (1,498,413)	-26%	yes	Exh. HLR-2	168	238
Rosentrater	Substation - Station Rebuilds Program	\$	12,998,326	\$	10,685,595	\$ (2,312,731)	-18%	yes	Exh. HLR-2	175	239
Rosentrater	Transmission Construction - Compliance	\$	2,111,069	\$	4,125,981	\$ 2,014,912	95%	yes	Exh. HLR-2	188	240
Rosentrater	Transmission Major Rebuild - Asset Condition	\$	5,680,751	\$	3,549,326	\$ (2,131,425)	-38%	yes	Exh. HLR-2	197	245
Rosentrater	Transmission NERC Low-Risk Priority Lines Mitigation	\$	2,554,255	\$	1,146,219	\$ (1,408,036)	-55%	yes	Exh. HLR-2	204	248
Rosentrater	Westside 230/115kV Station Brownfield Rebuild Project	\$	-	\$	3,292,230	\$ 3,292,230	100%	yes	Exh. HLR-2	210	249
Rosentrater	Apprentice/Craft Training	\$	-	\$	40,545	\$ 40,545	100%		Exh. HLR-2	236	
Kensok	Atlas	\$	1,452,641	\$	1,487,355	\$ 34,714	2%		Exh. JMK-2	133	
Thackston	Automation Replacement	\$	349,999	\$	273,451	\$ (76,548)	-22%		Exh. JRT-4	3	
Thackston	Base Load Hydro	\$	958,925	\$	639,176	\$ (319,749)	-33%		Exh. JRT-4	10	
Thackston	Base Load Thermal Program	\$	2,484,254	\$	2,119,962	\$ (364,292)	-15%		Exh. JRT-4	18	
Thackston	Cabinet Gorge 15 kV Bus Replacement	\$	-	\$	13,118	\$ 13,118	100%		Exh. JRT-4	26	
Thackston	Cabinet Gorge Dam Fishway	\$	63,475,101	\$	63,506,221	\$ 31,120	0%		Exh. JRT-4	30	
Thackston	Cabinet Gorge Unit 3 Protection & Control Upgrade	\$	-	\$	(844)	\$ (844)	100%		Exh. JRT-4	39	
Thackston	Cabinet Gorge Unwatering Pumps	\$	395,000	\$	-	\$ (395,000)	-100%		Exh. JRT-4	192	
Rosentrater	Capital Tools & Stores	\$	2,500,008	\$	2,268,241	\$ (231,767)	-9%		Exh. HLR-2	241	
Rosentrater	Colstrip Transmission	\$	325,001	\$	304,256	\$ (20,745)	-6%		Exh. HLR-2	10	
Kensok	Control and Safety Network Infrastructure	\$	1,324,039	\$	1,259,128	\$ (64,911)	-5%		Exh. JMK-2	227	
Thackston	CS2 Single Phase Transformer	\$	-	\$	(38,169)	\$ (38,169)	100%		Exh. JRT-4	64	
Magalsky	Customer Facing Technology Program	\$	4,078,651	\$	3,941,179	\$ (137,472)	-3%		Exh. KEM-2	19	
Kensok	Data Center Compute and Storage Systems	\$	1,260,205	\$	1,535,379	\$ 275,174	22%		Exh. JMK-2	12	
Kensok	Digital Grid Network	\$	2,801,323	\$	2,511,645	\$ (289,678)	-10%		Exh. JMK-2	22	
Rosentrater	Distribution System Enhancements	\$	6,930,025	\$	7,225,455	\$ 295,430	4%		Exh. HLR-2	39	
Rosentrater	Downtown Network - Asset Condition	\$	1,600,000	\$	1,826,049	\$ 226,049	14%		Exh. HLR-2	61	
Rosentrater	Electric Storm	\$	6,023,406	\$	6,418,007	\$ 394,601	7%		Exh. HLR-2	95	
Kinney	Energy Imbalance Market Modernization & Operational Efficiency	\$	-	\$	485,829	\$ 485,829	100%		Exh. SJK-2	14	
Kensok	Enterprise Business Continuity	\$	93,045	\$	-	\$ (93,045)	-100%		Exh. JMK-2	197	

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		(A)			(B)	(C)	(D)	(E) \$500k &	(F)		(G)
		2	2022 As-Filed TTP (1)		2022 Actual TTP (1)	Variance \$ over/(under)	Variance % over/(under)		Direct Filed E		Attach- ment C
Witness	Business Case		Gross Plant		Gross Plant	Gross Plant	, ,	met?	Exh. #	Pg#	Pg#
Kensok	Environmental Control & Monitoring Systems	\$	1,123,937	\$	840,878	\$ (283,059)	-25%		Exh. JMK-2	70	
Kensok	ET Modernization & Operational Efficiency - Technology	\$	1,564,548	\$	1,321,961	\$ (242,587)	-16%		Exh. JMK-2	80	
Kensok	Facilities and Storage Location Security	\$	210,919	\$	519,831	\$ 308,912	146%		Exh. JMK-2	208	
Kensok	Financial & Accounting Technology	\$	1,788,284	\$	1,342,581	\$ (445,703)	-25%		Exh. JMK-2	163	
Rosentrater	Gas Cathodic Protection Program	\$	715,000	\$	873,632	\$ 158,632	22%		Exh. HLR-2	315	
Rosentrater	Gas Facility Replacement Program (GFRP) Aldyl A Pipe Replacement	\$	25,687,251	\$	26,174,099	\$ 486,848	2%		Exh. HLR-2	323	
Rosentrater	Gas Operator Qualification Compliance	\$	-	\$	112,479	\$ 112,479	100%		Exh. HLR-2	264	
Rosentrater	Gas Overbuilt Pipe Replacement Program	\$	-	\$	353,521	\$ 353,521	100%		Exh. HLR-2	348	
Rosentrater	Gas Regulator Station Replacement Program	\$	985,579	\$	688,078	\$ (297,501)	-30%		Exh. HLR-2	355	
Rosentrater	Gas Telemetry Program	\$	303,256	\$	19,376	\$ (283,880)	-94%		Exh. HLR-2	366	
Rosentrater	Gas Warden HP Reinforcement	\$	-	\$	202,293	\$ 202,293	100%		Se	e Attac	hment D
Thackston	Generation Masonry Building Rehabilitation	\$	493,993	\$	-	\$ (493,993)	-100%		Exh. JRT-4	198	
Kensok	Generation, Substation & Gas Location Security	\$	332,159	\$	390,996	\$ 58,837	18%		Exh. JMK-2	213	
Kensok	High Voltage Protection (HVP) Refresh	\$	226,712		448,988	\$ 222,276	98%		Exh. JMK-2	100	
Thackston	HMI Control Software	\$	3,500,000	\$	3,597,119	\$ 97,119	3%		Exh. JRT-4	81	
Kensok	Human Resources Technology	\$	499,529	\$	384,846	\$ (114,683)	-23%		Exh. JMK-2	174	
Rosentrater	Jackson Prairie Joint Project	\$	2,378,977	\$	2,363,329	\$ (15,648)	-1%		Exh. HLR-2	270	
Rosentrater	LED Change-Out Program	\$	299,964	\$	259,501	\$ (40,463)	-13%		Exh. HLR-2	109	
Kensok	Legal & Compliance Technology	\$	400,015	\$	555,001	\$ 154,986	39%		Exh. JMK-2	187	
Thackston	Long Lake Plant Upgrade	\$	-	\$	17,125	\$ 17,125	100%		Exh. JRT-4	102	
Rosentrater	Meter Minor Blanket	\$	-	\$	344,294	\$ 344,294	100%		Exh. HLR-2	118	
Kensok	Network Backbone	\$	188,444	\$	-	\$ (188,444)	-100%		Exh. JMK-2	246	
Kensok	Payment Card Industry Compliance (PCI)	\$	-	\$	18,699	\$ 18,699	100%		Exh. JMK-2	224	
Thackston	Peaking Generation Business Case	\$	445,001	\$	262,829	\$ (182,172)	-41%		Exh. JRT-4	113	
Thackston	Post Falls Landing and Crane Pad Development	\$	-	\$	141,872	\$ 141,872	100%		Exh. JRT-4	121	
Rosentrater	Primary URD Cable Replacement	\$	-	\$	35,224	\$ 35,224	100%		Exh. HLR-2	131	
Thackston	Regulating Hydro	\$	2,947,845	\$	2,662,223	\$ (285,622)	-10%		Exh. JRT-4	127	
Rosentrater	Saddle Mountain 230/115kV Station (New) Integration Project Phase	\$	-	\$	61,087	\$ 61,087	100%		Exh. HLR-2	141	
Rosentrater	SCADA - SOO and BuCC	\$	1,026,882	\$	933,769	\$ (93,113)	-9%		Exh. HLR-2	151	
Kensok	Security Compliance	\$	250,001	\$	169,481	\$ (80,520)	-32%		Exh. JMK-2	272	
Rosentrater	Strategic Initiatives - Real Time Power System Simulator	\$	-	\$	2,529	\$ 2,529	100%				hment D
Rosentrater	Strategic Initiatives - South Landing (Catalyst) - Clean Energy Fund 3	\$	2,297,174	\$	1,958,548	\$ (338,626)	-15%		Exh. HLR-2	275?	
Kensok	Technology Failed Assets	\$	611,563	\$	877,151	\$ 265,588	43%		Exh. JMK-2	119	
Kensok	Telecommunication & Network Distribution location Security	\$	-	\$	120,514	\$ 120,514	100%				hment D
Rosentrater	Telematics 2025	\$	438,347	\$	156,155	\$ (282,192)	-64%		Exh. HLR-2	297	
Rosentrater	Transmission - Minor Rebuild	\$	3,400,375	\$	3,673,299	\$ 272,924	8%		Exh. HLR-2	182	

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		(A)		(B)		(C)	(D)	(E)	(F)		(G)
Witness	Business Case		2022 As-Filed TTP (1) Gross Plant	2022 Actual TTP (1) Gross Plant		Variance \$ over/(under) Gross Plant	Variance % over/(under)	\$500k & +/- 10% TTP Threshold met?	Direct Filed Ex Reference Exh. #		Attach- ment C Pg#
Rosentrater	Tribal Permits & Settlements	\$	259,776	\$ 88,164	\$	(171,612)	-66%		Exh. HLR-2	413	
Thackston	Use Permits	\$	150,012	\$ 265,549	\$	115,537	77%		Exh. JRT-4	151	
Rosentrater	Washington Advanced Metering Infrastructure Project	\$	-	\$ (25,381)	\$	(25,381)	100%		Exh. HLR-2	308	
Rosentrater	Wood Pole Management	\$	12,999,996	\$ 13,011,934	\$	11,938	0%		Exh. HLR-2	217	
Rosentrater	WSDOT Control Zone Mitigation	\$	749,998	\$ 929,099	\$	179,101	24%		Exh. HLR-2	229	
Thackston	WSDOT Franchises	\$	99,996	\$ 12,960	\$	(87,036)	-87%		Exh. JRT-4	157	
Howell	Wildfire Resiliency Plan	\$	24,544,986	\$ 25,603,735	\$	1,058,749	4%		Exh. DRH 2-4	-	
Rosentrater	Campus Repurposing Phase 2	\$	-	\$ 12	\$	12	100%		N/A Account cle	eanup	
Kinney	Energy Imbalance Market	\$	12,016,376	\$ 10,838,171	\$	(1,178,205)	-10%		(3)		
Rosentrater	T&D Reimbursable	\$	-	\$ 236,175	\$	236,175	100%		N/A Timing TTF	vs red	ceipt
	Total Capital (2)	\$	449,877,418	\$ 505,328,919	\$	55,451,501					
(1) Excludes	Check Colstrip Units 3 and 4 2022 transfers-to-plant.	neck		0	\$ \$	55,780,309 849,396	<b>99%</b> 1%	[Excludes EIM	/ Variance]		

<sup>(2)</sup> Excludes business cases with transfer-to-plant direct to Idaho and Oregon only.

<sup>(3)</sup> Energy Imbalance Market variance separately reported to the Commission in Dockets UE-200900, et., al. See Compliance filing dated July 15, 2022, which reported an understatement of net rate base per authorized in Docket UE-200900, and an annual revenue requirement owed customers of \$284,000. The Company, therefore, deferred approximately \$347,000 for amounts owed customers for the period October 1, 2021 through December 20, 2022.

									24,395,587	29,046,052	32,678,519	37,007,399	92,328,031	47,680,993	29,260,571	30,080,477	60,917,375
	Plant Group for	Primary			isdic Depreciation	Ser.Jur.Allocatio	WA - E -	WA - G -	Jan 2022 -	Feb 2022 -	Mar 2022 -	Apr 2022 -	May 2022 -	Jun 2022 -	Jul 2022 -	Aug 2022 -	Sep 2022 -
Witness Kensok	Short-Lived Assets	Asset Condition	Project (Business Case)	CD AA	on Category  3 Yr Software	n Category Software	Allocation %	Allocation %	System (182.588)	System 62.399	System 168.277	System 2.923	System 913	System 671	(1.153.994)	System 15.071	System 10.136
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD AA	5 Yr Software	Software	47.78%	15.09%	-	-	-	-	-	-	1,620,001	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	Atlas Atlas	CD AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	(3,508)	1,278	3,512	- 61	. 19	14	(15,882)	-	-
Thackston	Programs	Asset Condition	Base Load Hydro	CD AA	Hardware	Hardware	47.78%	15.09%	(3,506)	1,276	3,512	- 01	- 19	5.652	(15,002)	-	-
Thackston	Programs	Asset Condition	Base Load Hydro	ED AN	General	General	68.27%	0.00%	-	-	-	-	•	9,606	-	-	-
Thackston Thackston	Programs Large Distinct Projects	Asset Condition Asset Condition	Base Load Hydro Cabinet Gorge 15 kV Bus Replacement	ED AN ED AN	Production - Hydro Production - Hydro	Production - Hydro Production - Hydro	65.54% 65.54%	0.00%	5,926 1.050	11,361 2,713	9,721 1,535	4,153 5,492	346	280,364 1,857	2,703 125	1,491	41,561
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 3 Protection & Control Upgrade	ED AN	Production - Hydro	Production - Hydro	65.54%	0.00%	(844)	2,713	- 1,030		-	1,057	-		
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade		General	General	47.78%	15.09%	15,054	63	-	130	-	-	-	-	-
Thackston Thackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade Cabinet Gorge Unwatering Pumps	ED AN ED AN	Production - Hydro Production - Hydro	Production - Hydro Production - Hydro	65.54% 65.54%	0.00%	-	-	-	3,208,463	69,821	9,113	1,898	1,567	6,536
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	CD AA	General	General	47.78%	15.09%		33,560	8,242	37,990	(7,870)	231,327	49,413	78,229	174,299
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	CD AN	General	General	52.71%	16.61%	-	10,140	-	-	-	38,777	-	17,731	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD ID CD WA	General General	General General	0.00% 77.22%	0.00% 22.78%	700	-			-	-	1,221	-	8,203
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	ED AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	ED AN	General	General	68.27%	0.00%	46,498	(9)	4,775	1,091	42,744	65,791	54,057	5,260	32,810
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	ED ID ED WA	General General	General General	0.00%	0.00%	2.517	2,132 28.511	4,594 443	(1,447) 11,489	15,942 19,571	84,505 80.029	4,362 11.066	26,467 21,944	10,311 24,477
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD AA	General	General	0.00%	47.36%	2,517	20,511	-	- 11,407	17,371	- 00,027	11,000	21,744	24,477
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD AA	General	General	0.00%	50.19%	-	-	10,428	25,322	35,633	-	-	-	31,898
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD ID GD OR	General General	General General	0.00%	0.00%	1,724	(5.167)	- 80,177	1,440	24,622	24,888 13,086	976 16.310	13 620	5,566 13,068
Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD WA	General	General	0.00%	100.00%	480	4,316	80,177	15,821	13,571	13,086 50.801	2,436	39,071	27,337
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED AN	General	General	65.54%	0.00%	-	-	-			-	-	-	-
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED ID	E Distribution	E Distribution	0.00%	0.00%	(4,541)	1,964	239	-	-	-	-	-	502
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Distribution Grid Modernization Distribution Grid Modernization	ED ID ED WA	General E Distribution	General E Distribution	0.00% 100.00%	0.00%	6,365 183,866	229.807	62.152	616,135	129.597	173,050	162,322	59,605	54.034
Rosentrater	Programs	Asset Condition	Distribution Minor Rebuild	ED ID	E Distribution	E Distribution	0.00%	0.00%	334,962	489,821	358,506	1,004,842	378,787	493,916	445,554	664,743	413,520
Rosentrater	Programs	Asset Condition	Distribution Minor Rebuild	ED MT	E Distribution	E Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Large Distinct Projects	Asset Condition Asset Condition	Distribution Minor Rebuild Distribution Transformer Change Out Program	ED WA ED ID	E Distribution E Distribution	E Distribution E Distribution	100.00%	0.00%	625,949	597,530	689,939	1,587,222	808,311	936,934	528,819	600,022	660,148
Rosentrater	Large Distinct Projects	Asset Condition	Distribution Transformer Change Out Program  Distribution Transformer Change Out Program	ED WA	E Distribution	E Distribution	100.00%	0.00%		-	-	-	-	-	-	-	-
Rosentrater	Programs	Asset Condition	Downtown Network - Asset Condition	ED WA	E Distribution	E Distribution	100.00%	0.00%	78,153	109,788	114,315	51,281	55,373	32,075	157,003	195,985	652,565
Rosentrater	Programs	Asset Condition Asset Condition	Fleet Services Capital Plan	CD AA	General	General Transportation	47.78% 47.78%	15.09% 15.09%	-	-	-	-	(1,196)	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD AN	Transportation General	General General	47.78% 52.71%	16.61%		- :	2.003		(2,014)	26.040	- 1		
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD AN	Transportation	Transportation	52.71%	16.61%	-	-	189,639	621	-	28,580	93	112,281	10,588
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD ID	Transportation	Transportation	0.00%	0.00%	85,289	640	-	-	-	48,749	57,279	300	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD WA ED AN	Transportation General	Transportation General	77.22% 68.27%	22.78%	-	69.799			-	49,174	3,841	-	-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED AN	Transportation	Transportation	65.54%	0.00%		69,799			-	-	-		
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED AN	Transportation	Transportation	68.27%	0.00%	-	-	735,006	195,982	40,973	-	96,989	330,166	8,612
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED ID ED WA	Transportation Transportation	Transportation Transportation	0.00%	0.00%	206,679 277,744	492,481 769,268	827,162 359,569	4,203 625	117.618	14,545 102,856	(198)	-	-
Rosentrater	Programs Programs	Asset Condition	Fleet Services Capital Plan	GD AN	Transportation	Transportation	0.00%	68.81%	211,144	709,200	359,569	025	117,010	102,000	(190)		
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD AN	Transportation	Transportation	0.00%	72.92%		-				-	-	-	-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD ID	Transportation	Transportation	0.00%	0.00%	305	363	129,793	141,778	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD OR GD WA	Transportation Transportation	Transportation Transportation	0.00%	0.00%		- :					- 1		112,084 119,390
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD ID	G Distribution	G Distribution	0.00%	0.00%	-	1,386	217,785	21,100	-	-	517	255	1,592
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD OR	G Distribution	G Distribution	0.00%	0.00%	2,901	93,074	65,220	41,306	38,986	-	-	-	-
Rosentrater Rosentrater	NEW (Actuals) Programs	Asset Condition Asset Condition	Gas ERT Replacement Program Gas Regulator Station Replacement Program	GD WA GD ID	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%	79,613	37,065	16,377 1,899	116,292 3,820	161,250 3,086	147	187 789	14 016	-
Rosentrater	Programs	Asset Condition	Gas Regulator Station Replacement Program	GD OR	G Distribution	G Distribution	0.00%	0.00%	79,613	37,065	(6,918)	3,020	3,000	1,973	6,807	19,974	76,279
Rosentrater	Programs	Asset Condition	Gas Regulator Station Replacement Program	GD WA	G Distribution	G Distribution	0.00%	100.00%	2,094	14,662	560	6,971	6,166	25,752	49,303	105,042	1,056
Thackston Thackston	Large Distinct Projects Short-Lived Assets	Asset Condition Asset Condition	Generation DC Supplied System Update HMI Control Software	ED AN CD AA	Production - Hydro 5 Yr Software	Production - Hydro Software	65.54% 47.78%	0.00% 15.09%	3,961 1.090	9,585 1,129	1,865 1.014	1,746 491	811 563	353	279	218	155
Thackston	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	HMI Control Software HMI Control Software	CD AA	5 Yr Sortware General	General	47.78%	15.09%	3.655	3.784	3.399	1.648	1.887	1.182	937	732	518
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	CD AA	Hardware	Hardware	47.78%	15.09%	10,720	11,100	9,971	4,833	5,533	3,468	2,747	2,147	1,521
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED AN	5 Yr Software	Software	68.27%	0.00%		-	-		-	-	-	-	-
Thackston Thackston	Short-Lived Assets Large Distinct Projects	Asset Condition Asset Condition	HMI Control Software KF_Fuel Yard Equipment Replacement	ED AN	Production - Hydro General	Production - Hydro General	65.54% 68.27%	0.00%	-	-	-	-	-	-	-	-	246.052
Thackston	Large Distinct Projects	Asset Condition	KF_Fuel Yard Equipment Replacement	ED AN	Production - Therm		65.54%	0.00%	-	-			-	-	-	-	29,573,962
Rosentrater	Programs	Asset Condition	LED Change-Out Program	ED ID	E Distribution	E Distribution	0.00%	0.00%	11,910	10,636	7,169	10,814	6,642	6,307	4,841	9,272	10,774
Rosentrater Thackston	Programs Large Distinct Projects	Asset Condition Asset Condition	LED Change-Out Program Little Falls Plant Upgrade	ED WA ED AN	E Distribution Production - Hydro	E Distribution Production - Hydro	100.00% 65.54%	0.00%	14,693	14,854	15,661	13,425	7,160	8,684	6,565	7,550	16,496
Thackston	Large Distinct Projects	Asset Condition	Long Lake Plant Upgrade	ED AN	Production - Hydro	Production - Hydro	65.54%	0.00%	6,171	9,921	1,032	-					-
Rosentrater	Other	Asset Condition	New Dollar Road Service Center	GD WA	General	General	0.00%	100.00%	-	-				-	0		-
Thackston Thackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Nine Mile Powerhouse Crane Rehab Post Falls Landing and Crane Pad Development	ED AN ED AN	Production - Hydro Production - Hydro	Production - Hydro Production - Hydro	65.54% 65.54%	0.00%	4.758	6.811	130.304	-	-	-	-	-	-
Rosentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED ID	E Distribution	E Distribution	0.00%	0.00%	4,750	0,011	130,304		-	2,714	1,253		1,384
Rosentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED WA	E Distribution	E Distribution	100.00%	0.00%	742	718	1,426	2,257	3,810	1,501	3,403	4,422	1,778
Thackston	Programs	Asset Condition	Regulating Hydro	CD AA	General	General	47.78%	15.09%	-	-	-	-	-	-	-	-	-
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	CD AA ED AN	Hardware General	Hardware General	47.78% 65.54%	15.09% 0.00%	-								
Thackston	Programs	Asset Condition	Regulating Hydro	ED AN	General	General	68.27%	0.00%						12,685		2,258	-
Thackston	Programs	Asset Condition	Regulating Hydro	ED AN	Production - Hydro	Production - Hydro	65.54%	0.00%	54,017	52,547	65,760	272,832	169,382	17,961	(83,847)	(48,021)	138,200
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	ED AN ED AN	Transmission Transportation	Transmission Transportation	65.54% 68.27%	0.00%	41,663	42,215	1,846	-	-	-	-	-	-
Rosentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC	CD AA	3 Yr Software	Software Software	47.78%	15.09%	-	-	77,647	-			(2,841)		
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD AA	5 Yr Software	Software	47.78%	15.09%	-	-	62,342	5,723	16,285	6,871	-	17,275	-
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD AA	General	General	47.78%	15.09%		-				-		58,055	439
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC SCADA - SOO and BuCC	CD AA ED AN	Hardware 5 Yr Software	Hardware Software	47.78% 68.27%	15.09%	933	-	34,187	6,424	(3,155) 246.063	13,119 8.481	5,940 4,373	17,274 3,944	3,717 2.599
Rosentrater	Programs	Asset Condition	SCADA - SOO and Bucc	ED AN	Hardware	Hardware	68.27%	0.00%		-	-	-	137,012	4,722	2,435	2,196	1,447
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD AA	General	General	47.78%	15.09%	1,823,861	198,616	4,868	1,527	4,527	7,646	(0)		58,932
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD AA CD AN	Hardware General	Hardware General	47.78% 52.71%	15.09% 16.61%	2,448	19,483	48	11,125	47,321	339,570	166,790 411	7,855 335	9,033 4,470
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD AN	General General	General General	52.71% 0.00%	16.61% 0.00%	-	-	-	-		-	411 26,660	335 558	4,470 414
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD WA	General	General	77.22%	22.78%	19,270	-	-	-	-	-		-	17,710
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-

						1				24,395,587	29,046,052	32,678,519	37,007,399	92,328,031	47,680,993	29,260,571	30,080,477	60,917,375
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case) Structures and Improvements/Furniture	Service FD	Jurisdic tion	Depreciation Category	Ser.Jur.Allocation Category	WA - E - Allocation % 68.27%	WA - G - Allocation %	Jan 2022 - System	Feb 2022 - System	Mar 2022 - System 4.847	Apr 2022 - System 5.643	May 2022 - System	Jun 2022 - System	Jul 2022 - System	Aug 2022 - System	Sep 2022 - System
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED	AN ID	General General	General General	0.00%	0.00%	7,671	36,771	4,847	49,081	1,587			-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED ED	WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	GD	OR	General	General	0.00%	0.00%	-	-	-	-	-		-	-	-
Rosentrater	Programs	Asset Condition		GD	WA	General	General	0.00%	100.00%	22,915	-	•	-	-	87,610	27,753	22,351	1,216
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	- :	7.445	43,996	866	727	-	-	62 061	
Rosentrater	Programs	Asset Condition		ED	AN	Transmission	Transmission	65.54%	0.00%	5,082	-	43,770	418,776	889	131,448	199,430	507,035	62,778
Rosentrater	Programs	Asset Condition		ED	ID	E Distribution	E Distribution	0.00%	0.00%	286,092	191,576	19,363	63,296	75,212	146,885	1,044	53,643	
Rosentrater Kensok	Programs Short-Lived Assets	Asset Condition Asset Condition		ED CD	WA AA	E Distribution General	E Distribution General	100.00% 47.78%	0.00% 15.09%	3,423,012	34,928	-	95,798	-	99,497	89,441	368,307	13,898
Rosentrater	Large Distinct Projects	Asset Condition	Telematics 2025	CD	AA	3 Yr Software	Software	47.78%	15.09%	55,056	1,449	929	1	-	409	107	-	-
Rosentrater Rosentrater	Large Distinct Projects Programs	Asset Condition Asset Condition	Telematics 2025 Transmission - Minor Rebuild	CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09%	114,841	(205,317) 42,280	6,481 10.881	13,732 5.064	3,106 39,946	315.053	4,714	323.610	9,732
Rosentrater	Large Distinct Projects	Asset Condition		ED	AN	Transmission Transmission	Transmission	65.54%	0.00%	(59,734)	42,280	10,881	3,541,251	39,946 84,682	3,363	2,276	1,677	(150,226)
Rosentrater	Large Distinct Projects	Asset Condition	Transmission Major Rebuild - Asset Condition	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-	-	•	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	159,441 309,878	489,797 942 401	304,935 1 877 267	350,915 152 908	56,206 2 010 456	194,139 1 997 695	101,090	94,385 957 703	94,090 1.457.248
Rosentrater	Programs			ED	ID	E Distribution	E Distribution	0.00%	0.00%	1,169,747	1,584,847	864,416	1,855,219	1,659,658	1,748,223	2,235,173	3,206,214	2,481,169
Rosentrater	Programs		New Revenue - Growth	ED	WA	E Distribution	E Distribution	100.00%	0.00%	2,144,710	2,692,716	2,394,177	3,009,496	2,807,940	2,695,553	1,938,854	3,563,873	3,087,908
Rosentrater Rosentrater	Programs Programs			ED GD	WA ID	Transmission G Distribution	Transmission G Distribution	100.00%	0.00%	34 457.290	147 402.566	436 474.804	126 777,817	156 714.846	53 776.235	44 695.639	141 923.159	59 1.104.684
Rosentrater	Programs		New Revenue - Growth	GD	OR	G Distribution	G Distribution	0.00%	0.00%	487,557	650,681	749,155	747,415	883,194	694,497	466,735	941,309	617,222
Rosentrater	Programs		New Revenue - Growth	GD	WA	G Distribution	G Distribution	0.00%	100.00%	1,011,193	1,001,136	1,103,350	1,578,763	1,782,851	2,202,793	2,745,119	1,728,424	1,329,751
Rosentrater Rosentrater	Other Other		Rattlesnake Flat Wind Farm Project 115kV Integratio Rattlesnake Flat Wind Farm Project 115kV Integratio		AA AN	General General	General General	47.78% 65.54%	15.09% 0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Other	Customer Requested	Rattlesnake Flat Wind Farm Project 115kV Integratio	ED	AN	General	General	68.27%	0.00%	0	-	-	-	-	-	-	-	-
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integratio	ED	AN	Transmission	Transmission	65.54% 65.54%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Other Other	Customer Requested Customer Requested		ED	AN WA	Transmission General	Transmission General	100.00%	0.00%	-		(0)	-	-		-	- :	-
Thackston	Programs	Customer Service Qual	Automation Replacement	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	270,946	2,505	-	-	-	-	-	-	-
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets			CD FD	AA WA	5 Yr Software 5 Yr Software	Software Software	47.78% 100.00%	15.09%	102,868	25,833	8,322	(136,934)	6,552	1,524,694	116,592 734.860	27,875 110,969	9,497 103 135
Magaisky	Short-Lived Assets Short-Lived Assets			CD	AA	2 Yr Software	Software Software	47.78%	15.09%			-	-	-	2,162,784	734,860 31,484	79,101	18,144
Magalsky	Short-Lived Assets	Customer Service Qual	Customer Facing Technology Program	CD	AA	3 Yr Software	Software	47.78%	15.09%	32,794	41,254	5,338	10,503	19,755	2,815	(870)	-	-
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets			CD	AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09% 15.09%	- 85	109	- 9	- 26	51	3.841	891	108	241,077
Magalsky	Short-Lived Assets			CD	AA	3 Yr Software	Software	47.78%	15.09%	-	- 109	- 4	- 20	-	3,041	- 091	-	177,692
Magalsky	Short-Lived Assets			CD	AA	5 Yr Software	Software	47.78%	15.09%	19,170	16,385	7,036	8,492	3,537	1,198,897	10,911	49,946	2,194
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		Customer Transactional Systems Customer Transactional Systems	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	-	-	-		-	1,844	17	77	- 3
Magalsky	Short-Lived Assets		Customer Transactional Systems	CD	WA	5 Yr Software	Software	77.22%	22.78%	(1,163)	1,531	(30)	-	-	1,044	- '	- ''	-
Magalsky	Short-Lived Assets			ED	WA	5 Yr Software	Software	100.00%	0.00%	-	-	-	-	-	-	-	-	-
Magalsky Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		GD CD	OR AA	5 Yr Software 2 Yr Software	Software Software	0.00% 47.78%	0.00% 15.09%	(239)	4.664	9.475	741	3.179	4.078	1.033	3.525	245,431 665
Kensok	Short-Lived Assets	Customer Service Qual	Enterprise Security	CD	AA	3 Yr Software	Software	47.78%	15.09%	(248)	-	-	-		-	37,009		(37,009)
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA AA	5 Yr Software	Software	47.78% 47.78%	15.09% 15.09%	(24,612)	154,045	52,166	33,627	36,065	98,137	(45,694)	52,616	116,363 235.261
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		CD	AA AA	General Hardware	General Hardware	47.78%	15.09%	(4.854)	33.333	14.761	10.283	11.792	24.690	(4.446)	43.368	199,217
Kensok	Short-Lived Assets	Customer Service Qual		ED	AN	5 Yr Software	Software	65.54%	0.00%	-	-	-	-	-	-	-	-	
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		ED ED	AN AN	5 Yr Software Transmission	Software Transmission	68.27% 65.54%	0.00%	963	540	873	845	572 413,208	904	(51)	1,197	2,293
Kensok	Short-Lived Assets			CD	AA	5 Yr Software	Software	47.78%	15.09%	-		-		413,206	904	(51)	1,197	2,293
Kensok	Short-Lived Assets			CD	AA	General	General	47.78%	15.09%	-	-	•	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AN	Hardware General	Hardware General	47.78% 52.71%	15.09% 16.61%	2,471	3,029	18,980	945	-	2,084	(289)	121.641	47,589
Kensok	Short-Lived Assets		Facilities and Storage Location Security	GD	OR	General	General	0.00%	0.00%	-	-		167,007	15,696	2,775	110	89	1,533
Kensok	Short-Lived Assets			ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED FD	AN AN	General General	General General	65.54% 68.27%	0.00%	370	3.672	-	-	-		-	-	
Kensok	Short-Lived Assets	Customer Service Qual	Generation, Substation & Gas Location Security	ED	AN	Hardware	Hardware	68.27%	0.00%			-	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED ED	AN AN	Production - Hydro Production - Other	Production - Hydro Production - Other	65.54% 65.54%	0.00%	10,345	1,502	849	339	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED	WA	E Distribution	E Distribution	100.00%	0.00%				-	-	-	-	-	-
Kensok	Other		Telecommunication & Network Distribution location		AA	General	General	47.78%	15.09%	-	-	-	-	-	-	-	-	-
Kensok Rosentrater	Other Large Distinct Projects		Telecommunication & Network Distribution location : Washington Advanced Metering Infrastructure Project		AA WA	Hardware General	Hardware General	47.78% 77.22%	15.09% 22.78%						-			
Rosentrater	Large Distinct Projects  Large Distinct Projects		i Washington Advanced Metering Infrastructure Project i Washington Advanced Metering Infrastructure Projec		WA WA	Hardware	Hardware	77.22% 77.22%	22.78%	-		-	-	-	- :	-	-	-
Rosentrater	Large Distinct Projects		Washington Advanced Metering Infrastructure Project		WA	5 Yr Software	Software	100.00%	0.00%	-	-	-	-	-	-		-	-
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec		WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	3,019	-	-	-	-		1,040		-
Rosentrater	Large Distinct Projects	Customer Service Qual	Washington Advanced Metering Infrastructure Projec	ED	WA	Hardware	Hardware	100.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects		Washington Advanced Metering Infrastructure Project		WA WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-	-	-	-	-	-
Rosentrater Howell	Large Distinct Projects Wildfire		i Washington Advanced Metering Infrastructure Projec i Wildfire Resiliency Plan	CD CD	AA .	General General	General General	0.00% 47.78%	100.00% 15.09%	155	377	(1,919)	122	149		-	-	-
Howell	Wildfire			ED	AN	3 Yr Software	Software	68.27%	0.00%		-		-		450,664	-	-	-
Howell Howell	Wildfire Wildfire		Wildfire Resiliency Plan Wildfire Resiliency Plan	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	3,968 268,558	141,710 402.058	23,551 1,732,337	282,927 124,270	8,698 111.564	657,267 124.831	1,372,337 347.018	618,507 1.683.730	349,382 1.580.582
Howell	Wildfire			ED	ID ID	General	General	0.00%	0.00%	268,558 1,589	4,144	39,081	4,762	4,411	4,464	347,018	23,062	1,580,582 8,841
Howell	Wildfire			ED	WA	E Distribution	E Distribution	100.00%	0.00%	432,096	344,937	1,225,623	818,070	1,206,841	1,907,382	630,049	1,696,708	1,502,554
Howell Thackston	Wildfire Programs			ED CD	WA AA	General General	General General	100.00% 47.78%	0.00% 15.09%	8,132	2,977 19,260	10,613 2,273	3,757 1,886	1,074 1,782	1,252	761	2,156	4,859
Thackston	Programs	Failed Plant & Operation	Base Load Thermal Program	CD	AA	Hardware	Hardware	47.78%	15.09%	-	. ,,200	/3	-	-,,62	-	-	-	-
Thackston	Programs		Base Load Thermal Program	ED	AN	General	General	68.27%	0.00%			-	-	-	-	-	-	-
Thackston Thackston	Programs Programs			ED ED	AN AN	Production - Other Production - Thermal	Production - Other Production - Therm	65.54% 65.54%	0.00%	4,736 48,948	1,918 40	77,127 2,263	8,514 16.500	(5,342) 31.222	386,255 95.208	381,859	(321,383)	6,801 111.253
Thackston	Programs			ED	AN	Transmission	Transmission	65.54%	0.00%		-	26,004	-			-	-	-

										24,395,587	29,046,052	32,678,519	37,007,399	92,328,031	47,680,993	29,260,571	30,080,477	60,917,375
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Jan 2022 - System	Feb 2022 - System	Mar 2022 - System	Apr 2022 - System	May 2022 - System	Jun 2022 - System	Jul 2022 - System	Aug 2022 - System	Sep 2022 - System
Thackston	Large Distinct Projects	Failed Plant & Operation	CS2 Single Phase Transformer	ED	AN	Transmission	Transmission	65.54%	0.00%	(48,722)	-	10,553		-		- '		-
Rosentrater Rosentrater	Programs Programs	Failed Plant & Operation		ED FD	AN ID	Transmission F Distribution	Transmission F Distribution	65.54%	0.00%	1,971 147 905	29,118 98 304	(106,669) 11 544	788,145 177,828	67,546 41,028	5,835 67,351	33,194 40,635	272,340	760,880 46,137
Rosentrater	Programs	Failed Plant & Operation	Electric Storm	ED	WA	E Distribution	E Distribution	100.00%	0.00%	120,586	25,402	29,409	299,689	46,989	92,968	57,665	252,062	217,746
Rosentrater	Programs		Gas Non-Revenue Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	42,656	209,537	37,826	165,926	59,613	89,193	66,351	63,375	190,466
Rosentrater Rosentrater	Programs Programs		: Gas Non-Revenue Program : Gas Non-Revenue Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00% 100.00%	1,051,830 230,226	287,863 194,646	239,902 215.421	293,141 661,141	273,812 414,124	488,107 410.689	365,730 419,450	402,984 411,122	206,213 372.841
Rosentrater	Programs	Failed Plant & Operation		ED	ID	E Distribution	E Distribution	0.00%	0.00%	10,319	7,541	19,665	28,562	22,333	22,646	13,061	15,985	19,732
Rosentrater	Programs	Failed Plant & Operation		ED	WA	E Distribution	E Distribution	100.00%	0.00%	15,670	2,646	5,334	9,256	6,994	10,816	13,962	13,433	8,691
Rosentrater Thackston	Large Distinct Projects Large Distinct Projects		: N Lewiston Autotransformer - Failed Plant : Peaking Generation Business Case	ED CD	AN AA	Transmission Hardware	Transmission Hardware	65.54% 47.78%	0.00% 15.09%	-	-		-	23,017	4,313,018	67,311	3,213	3,153
Thackston	Large Distinct Projects		Peaking Generation Business Case	ED	AN	Production - Other	Production - Other	65.54%	0.00%	-	-	1,234	87,580	25,214	-	95,974	2,565	215
Kensok	Programs		Technology Failed Assets	CD	AA	General	General	47.78%	15.09%	(847)	62,415	36,157	56,876	61,507	8,332	2,278	19,990	19,905
Kensok Kensok	Programs Programs		: Technology Failed Assets : Technology Failed Assets	CD ED	AA AN	Hardware Transmission	Hardware Transmission	47.78% 65.54%	15.09%	(43)	17,263	7,810 91.652	958 (416)	25,796 (248)	7,928 476	2,223 120	21,128 355	9,491 354
Rosentrater	Mandatory & Compliance			CD	AA	General	General	47.78%	15.09%	-			-	(240)	40,545	-	-	-
Thackston			Cabinet Gorge Dam Fishway	ED	AN	General	General	68.27%	0.00%	-	-	-	-	-	267,274	469	33,941	12,655
Thackston Thackston			Cabinet Gorge Dam Fishway Cabinet Gorge Dam Fishway	ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%	-	-	-	-	60,489,428	10,691 679.047	19 219,307	1,358 422.639	506 199.893
Thackston			Cabinet Gorge Dam Fishway	ED	AN	Transportation	Transportation	68.27%	0.00%	61,705				-	0/7,04/	217,307	422,037	177,073
Thackston			Cabinet Gorge Dam Fishway	ED	ID	Transportation	Transportation	0.00%	0.00%	(0)				-	-	-		-
Thackston			Clark Fork Settlement Agreement	ED	AN AN	General	General	65.54% 68.27%	0.00%	-	-	-	-	-	2.920	22,855	-	-
Thackston Thackston			Clark Fork Settlement Agreement Clark Fork Settlement Agreement	ED FD	AN AN	General Production - Hydro	General Production - Hydro	65.27%	0.00%	2,180	2,434,265	12,860	3,224	55,412	2,920 806,652	19.313	9,348	115,694
Rosentrater			Clearwater Wind Generation Interconnection	ED	AN	Transmission	Transmission	65.54%	0.00%	2,100	2,404,200	-	5,22.4	-	-		-	110,074
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Colstrip Transmission	ED	AN	5 Yr Software	Software	68.27%	0.00%	22				-	-	-		
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED FD	AN AN	General General	General General	65.54% 68.27%	0.00%	-	- 1	2.059	-	-	-	631		1.019
Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED	AN	General Hardware	General Hardware	65.54%	0.00%	(51,719)		2,059	1,447	1,400	8,406	631	1,765	1,019
Rosentrater	Mandatory & Compliance			ED	AN	Hardware	Hardware	68.27%	0.00%	61,146	0	1,029	724	700	4,203	315	882	509
Rosentrater	Mandatory & Compliance			ED	ID	Transmission	Transmission	0.00%	0.00%	2,445	6,710	7,230	7,671	10,430	5,075	9,382	5,331	7,872
Rosentrater Rosentrater	Mandatory & Compliance		Colstrip Transmission Elec Relocation and Replacement Program	ED ED	WA AN	Transmission Transmission	Transmission Transmission	100.00% 65.54%	0.00%	4,649 43.703	12,757	13,744	14,583 972,637	19,828 54,731	9,649 820.691	17,836 353	10,134	14,965 698
Rosentrater			Elec Relocation and Replacement Program	ED	ID	E Distribution	E Distribution	0.00%	0.00%	92.192	103.683	173.336	316.672	36.167	(11.531)	43.772	22.742	58.808
Rosentrater			Elec Relocation and Replacement Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%	226,744	374,574	364,130	440,275	267,348	520,945	578,014	489,093	1,691,786
Rosentrater			Gas Cathodic Protection Program	GD GD	ID	G Distribution	G Distribution	0.00%	0.00%	62	68,832	67	69	68	75	60	1,306	70
Rosentrater Rosentrater			Gas Cathodic Protection Program Gas Cathodic Protection Program	GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	141	70,993 246.133	1 694	5 658	2 112	654	2 849	3 118	- :
Rosentrater			Gas Facility Replacement Program (GFRP) Aldyl A P		ID	G Distribution	G Distribution	0.00%	0.00%	113,691	24,146	24,150	24,943	98,054	12,436	8,347	21,008	20,637
Rosentrater			Gas Facility Replacement Program (GFRP) Aldyl A P		OR	G Distribution	G Distribution	0.00%	0.00%	84,826	421,220	908,143	581,292	741,278	739,198	479,509	924,697	1,298,331
Rosentrater Rosentrater			o Gas Facility Replacement Program (GFRP) Aldyl A P o Gas HP Pipeline Remediation Program	ir GD CD	WA AA	G Distribution 3 Yr Software	G Distribution Software	0.00% 47.78%	100.00% 15.09%	229,123	247,267	1,444,623	593,827	2,700,035	2,604,037	1,254,793	2,590,791	2,815,091
Rosentrater			Gas HP Pipeline Remediation Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%				-			-		
Rosentrater			Gas Isolated Steel Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	1,175	5,671	2,173	3,270	2,548	8,524	7,820	3,525	1,387
Rosentrater Rosentrater			Gas Isolated Steel Replacement Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	61,677 1.841	40,847 4.838	12,627	18,854 2,710	32,300 2.015	110,491 4.078	25,631	76,667 35,449	59,273 22.664
Rosentrater			Gas Isolated Steel Replacement Program Gas Overbuilt Pipe Replacement Program	GD	ID.	G Distribution G Distribution	G Distribution  G Distribution	0.00%	0.00%	1,841	4,838 1,811	3,826	1,317	2,015	4,078 7,013	14,643	35,449 7,580	22,664
Rosentrater			Gas Overbuilt Pipe Replacement Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%	470	431	304	1,960	4,483	6,944	107,749	73,019	8,021
Rosentrater			Gas Overbuilt Pipe Replacement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	7,349	4,417	244	96	12,750	1,490		2,959	8,556
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	26,854 55.620	72,975 84,710	40,699 148.445	39,709 49,310	20,284 31.519	8,781 27.759	14,429 35,721	8,443 40.996	14,997 126.053
Rosentrater	Mandatory & Compliance			GD	WA	G Distribution	G Distribution	0.00%	100.00%	157,352	162,506	115,747	78,414	36,970	19,101	17,616	20,412	32,345
Rosentrater			Gas Replacement Street and Highway Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	1,920,927	14,659	(14,043)	43,768	10,757	38,754	28,206	71,402	307,902
Rosentrater Rosentrater			Gas Replacement Street and Highway Program Gas Replacement Street and Highway Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	15,122	42,969	77,819	107,805	272,887	348,075	136,782	62,358	7,244
Rosentrater			Gas Replacement Street and Highway Program Gas Transient Voltage Mitigation Program	GD	WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%	13,125	12,933	38,055	85,796	81,282	146,610	119,669	137,642	244,926
Kensok			High Voltage Protection (HVP) Refresh	ED	WA	General	General	100.00%	0.00%	-	-	-	-	-	-	-	-	-
Thackston			Hydro Safety Minor Blanket	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%									
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	(64,453) 505.423	537,834 556,228	(27,626) 230.342	189,531 692.006	207,201 308,100	261,711 481.769	227,925 (485.013)	117,685 373,501	(62,527) 168.499
Kensok			Payment Card Industry Compliance (PCI)	CD	AA	5 Yr Software	Software	47.78%	15.09%	,	,	997	1,219	1,504	205	-	793	2,101
Kensok			Payment Card Industry Compliance (PCI)	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	1,211	1,481	1,827	249	-	963	2,553
Rosentrater Rosentrater			Protection System Upgrade for PRC-002 Protection System Upgrade for PRC-002	ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater			Protection System Upgrade for PRC-002	FD	AN	Transmission	Transmission	65.54%	0.00%	8 683	25.860	211	3.815	1 622	580 394	714 768	1.837	489
Thackston	Mandatory & Compliance	Mandatory & Complian	Use Permits	ED	AN	Transmission	Transmission	65.54%	0.00%	34,228	(877)	2,602	1,714	2,932	920	6,501	1,366	2,940
Thackston	Mandatory & Compliance			ED	ID	E Distribution	E Distribution	0.00%	0.00%	24,120	17,294	241	241	144	1,311	14,227	208	-
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance			ED GD	WA ID	E Distribution G Distribution	E Distribution G Distribution	100.00%	0.00%	17,517 2 245		6,367	839	982	2,105 202	2,634 3,828	333	822
Thackston	Mandatory & Compliance			GD	OR	G Distribution	G Distribution	0.00%	0.00%	1,123		4,946	319	4,862	2,083	7,190	2,080	
Thackston	Mandatory & Compliance	Mandatory & Complian	Use Permits	GD	WA	G Distribution	G Distribution	0.00%	100.00%	1,775		-	66	940	671	919	3,474	557
Rosentrater Rosentrater			Saddle Mountain 230/115kV Station (New) Integral		AA WA	General General	General General	47.78% 77.22%	15.09% 22.78%	84,826	3,421	6,052	664	1,000,566	1,079,254	1,530	2,119	1,087,130
Rosentrater			Saddle Mountain 230/115kV Station (New) Integral Saddle Mountain 230/115kV Station (New) Integral		AN	General	General	65.54%	0.00%	(431)	6,242	6,052	004	391				(1,087,130)
Rosentrater			Saddle Mountain 230/115kV Station (New) Integral		AN	General	General	68.27%	0.00%	(85,733)	7,014	9,563	21,492	(1,000,090)	(1,076,033)	24	(539)	-
Rosentrater			Saddle Mountain 230/115kV Station (New) Integral		AN	Transmission	Transmission	65.54%	0.00%	- 1	(208)	184	336	- 1	335	-	- 1	-
Rosentrater			Saddle Mountain 230/115kV Station (New) Integral		AN	General	General	68.27% 65.54%	0.00%	-	- 715	-	-	7 700 04/	-	-	-	-
Rosentrater Rosentrater			Saddle Mountain 230/115kV Station (New) Integral Saddle Mountain 230/115kV Station (New) Integral		AN WA	Transmission E Distribution	Transmission E Distribution	65.54% 100.00%	0.00%	551,338 56,793	715 3.691.488	42,732	8.976	7,793,016 429	10,871	-	8,194	753,722
Rosentrater			Saddle Mountain 230/115kV Station (New) Integral		WA	General	General	100.00%	0.00%	-			-	- 427	-	-	5,174	
Kensok	Mandatory & Compliance	Mandatory & Complian	Security Compliance	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-	-
Thackston Rosentrater			Spokane River License Implementation	ED	AN AN	Production - Hydro General	Production - Hydro General	65.54% 65.54%	0.00%	24,470	-	-	-	-	-	-	-	-
Rosentrater Rosentrater			Spokane Valley Transmission Reinforcement Project Spokane Valley Transmission Reinforcement Project		AN AN	General Transmission	General Transmission	65.54% 65.54%	0.00%	27.671	8.960	1.588	6.170	226	2,477,451	(31.300)	12,697	186.687
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Spokane Valley Transmission Reinforcement Project	: ED	WA	E Distribution	E Distribution	100.00%	0.00%		-,700	,500	-,	-	446,770	38,583		-
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Spokane Valley Transmission Reinforcement Project	: ED	WA	General	General	100.00%	0.00%	-				-	-	-		

		_								24,395,587	29,046,052	32,678,519	37,007,399	92,328,031	47,680,993	29,260,571	30,080,477	60,917,375
Witness	Plant Group for Testimony Purposes		Project (Business Case)	Service	Jurisdic tion	Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Jan 2022 - System	Feb 2022 - System	Mar 2022 - System	Apr 2022 - System	May 2022 - System	Jun 2022 - System	Jul 2022 - System	Aug 2022 - System	Sep 2022 - System
Rosentrater Rosentrater	Mandatory & Compliance	Mandatory & Complian		CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09%	(1,058) 37,517	129.434	1.863	3.136	(85,736)	3,247	2.758	2.379	2.327
Rosentrater					WA	E Distribution	E Distribution	100.00%	0.00%		127,434	329,643	8,318	(65,736)	3,247	2,750	2,377	2,321
Rosentrater			Transmission NERC Low-Risk Priority Lines Mitigation		AN	Transmission	Transmission	65.54%	0.00%	-	-	-	-	-	-	-	2,160,792	(1,033,769)
Rosentrater Rosentrater				ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	1.269	1,397	399	91,902 (6,802)	-	-	-	-	-
Rosentrater			Westside 230/115kV Station Brownfield Rebuild Proj		AN	General	General	65.54%	0.00%	1,209	1,377	-	(0,002)	-	-			
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Westside 230/115kV Station Brownfield Rebuild Proj	ED	AN	Transmission	Transmission	65.54%	0.00%	23,727	-	83,253	107,527	2,837	(227,729)	-	3,099	7,081
Rosentrater Thackston	Mandatory & Compliance Mandatory & Compliance				WA WA	E Distribution Intangible	E Distribution Intangible	100.00% 100.00%	0.00%	22,123 1,200	2,070	24,983	13,983	100,527	212,430	175,195 3,077	80,607	132,524 7,857
Rosentrater	Large Distinct Projects				WA	E Distribution	E Distribution	100.00%	0.00%	1,200	-	-	-		-	3,077	-	7,057
Kensok	Short-Lived Assets			CD	AA	5 Yr Software	Software	47.78%	15.09%	1,556	25,075	26,037	26,071	36,963	57,302	21,298	59,589	40,803
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	1,556 3,321	25,075 52,240	26,038 55,354	26,071 52,129	36,963 74,778	57,303 114,667	21,298 42,596	59,589 119,178	40,803 81,606
Rosentrater	Other				AA	General	General	47.76%	15.09%	3,321	52,240	35,354	52,129	74,770	114,007	42,596	119,176	01,000
Kensok	Short-Lived Assets	Performance & Capacit	Control and Safety Network Infrastructure		AA	General	General	47.78%	15.09%	-	-	-	17,303	89,103	1,246	-	-	-
Thackston Kensok	Large Distinct Projects Short-Lived Assets	Performance & Capacit		ED CD	AN AA	Production - Other 5 Yr Software	Production - Other Software	65.54% 47.78%	0.00% 15.09%	6 985	22 657	- 27 185	18 936	36 396	130 203	11 168	56.592	59 000
Kensok Kensok	Short-Lived Assets Short-Lived Assets				AA AA	5 Yr Sortware Hardware	Software Hardware	47.78%	15.09%	1,546	10.031	10.606	8.667	36,396 776	1,881	(14)	13	59,000
Kensok	Short-Lived Assets	Performance & Capacit	Data Center Compute and Storage Systems	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	151,547	15,991	12,748	10,708	57	-	-	-
Kensok	Large Distinct Projects	Performance & Capacit			AA	5 Yr Software	Software	47.78%	15.09%	497	430	(1,316)	258	277	75	109	95	82
Kensok Kensok	Large Distinct Projects Large Distinct Projects	Performance & Capacit Performance & Capacit	Digital Grid Network Digital Grid Network	CD	AA AN	General General	General General	47.78% 52.71%	15.09% 16.61%	5,154	142,398	(1,640)	3,549	7,953	8,088	616	4,115	855
Kensok	Large Distinct Projects	Performance & Capacit	Digital Grid Network		WA	General	General	77.22%	22.78%	-	-				-	-	-	-
Kensok	Large Distinct Projects	Performance & Capacit	Digital Grid Network		WA	Hardware	Hardware	77.22%	22.78%	-	-	-	-		-	-	-	-
Kensok Rosentrater	Large Distinct Projects Programs	Performance & Capacit	Digital Grid Network Distribution System Enhancements	ED ED	WA AN	E Distribution Transmission	E Distribution Transmission	100.00% 65.54%	0.00%	(0)	-	-		-	-	-	-	-
Rosentrater	Programs				ID	E Distribution	E Distribution	0.00%	0.00%	90,672	559,118	208,471	185,706	366,357	442,970	142,829	92,803	291,162
Rosentrater	Programs		Distribution System Enhancements	ED	WA	E Distribution	E Distribution	100.00%	0.00%	44,962	1,586,770	260,628	251,439	30,507	713,893	180,616	47,492	397,752
Rosentrater Kensok	Programs Short-Lived Assets				WA AA	E Distribution 3 Yr Software	E Distribution Software	100.00% 47.78%	0.00% 15.09%	11,426	65,961 1.848.916	23,014	31,693	6,669 156.636	6,539	2,624 272 997	4,501 55.091	82,963 73,911
Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	5 Yr Software 5 Yr Software	Software	47.78%	15.09%	1,804)	1,848,916	12.074	(35,240) 4,227	9,770	176,191	16.545	24.875	73,911 50.018
Kensok	Short-Lived Assets				AA	Hardware	Hardware	47.78%	15.09%	(8,432)	96,380	5,559	6,341	(196,620)	3,691	2,279,117	82,917	152,779
Kensok	Short-Lived Assets				AN	3 Yr Software	Software	68.27%	0.00%	112,275	2,827	2,648	1,098	11,641	3,567	4,017	5,098	6,595
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Endpoint Compute and Productivity Systems  Energy Delivery Modernization & Operational Efficien	ED	AN AA	Hardware 3 Yr Software	Hardware Software	68.27% 47.78%	0.00% 15.09%	137,225 1 858 741	3,456 8 100	3,236 7,379	1,342 3.587	14,228 2 119	4,360 1.190	4,910 1 793 120	6,231 72 114	8,060 25,247
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AA	5 Yr Software	Software	47.78%	15.09%	269,893	20,141	7,638	15,809	12.471	4,448	17.260	259	1,053,479
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	2,228	-	-	45,981
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AN	5 Yr Software	Software	65.54%	0.00%							-		
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Delivery Modernization & Operational Efficien Energy Delivery Modernization & Operational Efficien		AN AN	5 Yr Software Hardware	Software Hardware	68.27% 68.27%	0.00%	18,094	11,950	115,013 24,419	26,902 6,539	3,971 654	(18,039)		366,307 75,222	53,963 6,612
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		WA	5 Yr Software	Software	100.00%	0.00%	115,279	136,202	76	76	-	(73,183)	269,574	2,212	
Kensok	Short-Lived Assets	Performance & Capacit	Energy Delivery Modernization & Operational Efficien	ED	WA	Hardware	Hardware	100.00%	0.00%	57,063	67,420	37	38	-	73,183	269,574	2,212	-
Kinney Kinney	EIM EIM		Energy Imbalance Market Energy Imbalance Market	CD ED	AA AN	General 5 Yr Software	General Software	47.78% 65.54%	15.09%	2,546	2,806	5,536	9,041	3,016	1,772	2,367	3,266	555
Kinney	EIM				AN	5 Yr Software	Software	68.27%	0.00%	-	-	9,352,659	477,375	404,809	201,324	142,403	8,562	7,960
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	AN	General	General	65.54%	0.00%	-	-	-		-	-	-		-
Kinney	EIM			ED ED	AN AN	General Hardware	General Hardware	68.27% 68.27%	0.00%	-	-	2,497	174	193	58	33 397	4	-
Kinney Kinney	FIM	Performance & Capacit Performance & Capacit	Energy Imbalance Market Energy Imbalance Market	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-		119,694	5,713	9,089	67,085	397	41	-
Kinney	EIM			ED	AN	Production - Other	Production - Other	65.54%	0.00%	-	-				-	-	-	-
Kinney	EIM				AN	Transmission	Transmission	65.54%	0.00%	-	7,326	1,996	130		-	-	-	-
Kinney Kinney	EIM EIM			ED ED	ID ID	E Distribution General	E Distribution General	0.00%	0.00%	-	-	-		-	-	-	-	-
Kinney	EIM				MT	E Distribution	E Distribution	0.00%	0.00%		-	-	-	-	-			
Kinney	EIM	Performance & Capacit	Energy Imbalance Market		MT	General	General	0.00%	0.00%	-	-					-	-	-
Kinney Kinney	EIM EIM				WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	-	2,231	580	-	-	-	-	-	-
Kinney	NEW (Actuals)		Energy Imbalance Market Energy Imbalance Market Modernization & Operation		AN	5 Yr Software	General Software	68.27%	0.00%	- :								- :
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effici	CD	AA	3 Yr Software	Software	47.78%	15.09%	1,351	(2,010)	-	-	-	-	-	-	-
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effici	CD	AA	5 Yr Software	Software	47.78%	15.09%	197,105	56,926	89,500	66,814	62,420	81,573	33,713	63,467	97,650
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AA AN	Hardware 2 Yr Software	Hardware Software	47.78% 68.27%	15.09%	7,324	23	•	-	•	-	-	•	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	3 Yr Software	Software	65.54%	0.00%	-	-	-	-	-				
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	3 Yr Software	Software	68.27%	0.00%	700	1,195					-	-	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	5 Yr Software	Software	65.54%	0.00%	-	-	-	-		-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Performance & Capacit	Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici	FD	AN AN	5 Yr Software Hardware	Software Hardware	68.27% 65.54%	0.00%	62		1,218		65,554		-	-	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	Hardware	Hardware	68.27%	0.00%	15	-	299	-	(65,554)	-	-	-	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AA	5 Yr Software	Software	0.00%	47.36%	-	-	-	-		-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AA AA	5 Yr Software Hardware	Software Hardware	0.00%	50.19% 47.36%	-	-	•	-	•	-	-	•	-
Kensok	Programs				AA	3 Yr Software	Software	47.78%	15.09%					109.830			-	
Kensok	Programs	Performance & Capacit		CD	AA	5 Yr Software	Software	47.78%	15.09%	2,833	1,617	1,265	1,571	(107,723)	67	929	1,075	609
Kensok	Programs			CD	AA	General	General	47.78%	15.09%	46,026	48,361	313,500	421,563	42,531	1,489,883	410,809	91,821	390,432
Kensok Kensok	Programs Programs			CD ED	AA AN	Hardware Transmission	Hardware Transmission	47.78% 65.54%	15.09% 0.00%	9,919 (26)	21,450 572	18,140 610	7,565 171	13,541	7,179	2,756	7,207	4,537
Kensok	Short-Lived Assets				AA	1 Yr Software	Software	47.78%	15.09%	374,595	45,482	52,166	83,484	13,074	36,073	3,677	5,142	5,144
Kensok	Short-Lived Assets		Enterprise Communication Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%	121	865	92	-	1,359	184,198	449,873	427,310	156,324
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	5 Yr Software	Software	47.78% 47.78%	15.09% 15.09%	(154,001) 171,712	50,817 2.286	79,703 19,494	17,462 12,027	16,516 13.394	2,084 1,373	7,003 416,744	1,749 40,996	727 15,750
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	General Hardware	General Hardware	47.78%	15.09%	(6,491)	2,286	19,494	12,027	4.600	408.559	416,744	(215,276)	133.239
Kensok	Short-Lived Assets	Performance & Capacit	Enterprise Network Infrastructure	CD	AA	General	General	47.78%	15.09%	-	-	-	-	276,291	9,037	4,545	10,705	26,604
Kensok	Programs			CD	AA	General	General	47.78%	15.09%	1,605	5,463	13,178	47,163	8,296	77,051	3,765	155,731	286,411
Kensok	Programs	иеттогтапсе & Capacit	Environmental Control & Monitoring Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-	-

										24,395,587	29,046,052	32,678,519	37,007,399	92,328,031	47,680,993	29,260,571	30,080,477	60,917,375
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Servi	Jurisdic	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Jan 2022 - System	Feb 2022 - System	Mar 2022 - System	Apr 2022 - System	May 2022 - System	Jun 2022 - System	Jul 2022 - System	Aug 2022 - System	Sep 2022 - System
Kensok	Short-Lived Assets		ET Modernization & Operational Efficiency -		AA	2 Yr Software	Software	47.78%	15.09%					- Jacon		- Jystem		67.003
Kensok	Short-Lived Assets		ET Modernization & Operational Efficiency -		AA	3 Yr Software	Software	47.78%	15.09%	471	545	164	94					
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency -	- Technok CD	AA	5 Yr Software	Software	47.78%	15.09%	4,215	38,881	8,642	1,251	105,780	155,058	123,476	28,539	17,161
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency -	- Technok CD	AA	Hardware	Hardware	47.78%	15.09%	1,324	8,026	1,897	167	(105,780)	83	-	-	-
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency -	- Technok ED	AN	5 Yr Software	Software	68.27%	0.00%	-	7,721	-	-	-	-	-	-	-
Kensok	Programs	Performance & Capacit	Fiber Network Lease Service Replacement	CD	AA	General	General	47.78%	15.09%	-	-			-	-	-	-	-
Kensok	Programs	Performance & Capacit	Fiber Network Lease Service Replacement	ED	AN	Transmission	Transmission	65.54%	0.00%	403	1,246	98,074	11,797	1,195	246,094	37,486	2,554	5,438
Kensok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	(102)	2,991	2,533	-	16,605	-	-	-	-
Kensok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	35,841	66,079	63,482	(26,736)	10,869	396,700	28,885	38,011	900
Kensok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	572	1,230	1,157	(596)	(10,869)	-	-	-	-
Rosentrater	Programs		Gas Airway Heights HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-		-	-	-	-	-
Rosentrater	Large Distinct Projects		Gas Cheney HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	CD	WA	Transportation	Transportation	77.22%	22.78%	-	-	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	47.36%	-	-		-	-		-	-	-
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	50.19%	-	-	-	-	-	5,750			-
Rosentrater			Gas Operator Qualification Compliance	GD	AN	Transportation	Transportation	0.00%	72.92%	i		-				106,067	662	
Rosentrater	Programs		Gas Reinforcement Program Gas Reinforcement Program	GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	591 930	767 893.396	960 12.379	123.197	18.509	2,907 1.254	6,512 33,441	730 10.113	528 95.366
Rosentrater Rosentrater	Programs Programs		Gas Reinforcement Program  Gas Reinforcement Program	GD	WA	G Distribution	G Distribution  G Distribution	0.00%	100.00%	77,906	6,496	26,303	91,773	73,128	119,868	33,441 42.159	20,294	95,366 25,402
Rosentrater	Programs		Gas Telemetry Program	GD	AN	General	General	0.00%	72.92%	77,900	0,490	20,303	91,773	/3,120	119,000	42,159	20,294	25,402
Rosentrater	Programs	Performance & Capacit		GD	ID.	G Distribution	G Distribution	0.00%	0.00%		-		-		-		-	-
Rosentrater	Programs		Gas Telemetry Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%		-	-	1.650	-	-	-	-	-
Rosentrater	Programs		Gas Telemetry Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%				1,000			1,604	326	
Rosentrater	NEW (Actuals)		Gas Warden HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%		-	-	-	-	-	186,302	3.034	300
Kensok	Short-Lived Assets		Human Resources Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	2.736	3.537	13.808	- 6			100,302	6.034	91.720
Kensok	Short-Lived Assets		Human Resources Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	(412)	2.681	15,000	82	205			0,004	71,720
Rosentrater	Large Distinct Projects		Jackson Prairie Joint Project	GD	AN	Gas Storage	Gas Storage	0.00%	68.81%	202.354	(173.058)	235.997	219.910	150.580	426.785	117.022	113.150	117.406
Rosentrater	Large Distinct Projects		Jackson Prairie Joint Project	GD	OR	Gas Storage	Gas Storage	0.00%	0.00%	21,613	(18.484)	25,206	23.488	16.083	45.584	12,499	12.085	12.540
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communica		AA	5 Yr Software	Software	47.78%	15.09%			,	,		36	(2)	14.847	1.432
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communica	ation Systi CD	AA	General	General	47.78%	15.09%	2.521	8.904	13.066	5.923	7.432	2.750	4.243	137.186	34.981
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communica		AA	Hardware	Hardware	47.78%	15.09%	-,	-,	-	-,	.,	-,			
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communica	ation Systi CD	AA	Transportation	Transportation	47.78%	15.09%	-	22.754	3.572	6		-			
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	63	593		-	-	348,290	(1,026)	2,342	717
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-			-	-		-	-
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	WA	5 Yr Software	Software	77.22%	22.78%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit	Substation - New Distribution Station Capac	city Progr CD	AA	General	General	47.78%	15.09%	1	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit	Substation - New Distribution Station Capac	city Progr ED	AN	E Distribution	E Distribution	63.66%	0.00%	-	35			217	-	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capac		AN	E Distribution	E Distribution	65.54%	0.00%	-	-			-	-	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capac		AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capac		AN	General	General	68.27%	0.00%	-	140	1,153		870	-	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capac		AN	Transmission	Transmission	65.54%	0.00%	-	-	27,681		-	1,227,289	2,187	4,309	5,985
Rosentrater	Programs		Substation - New Distribution Station Capac		ID	E Distribution	E Distribution	0.00%	0.00%	-	-	809,353	364,629	5,561	112	56	492	200
Rosentrater	Programs		Substation - New Distribution Station Capac		ID	General	General	0.00%	0.00%	-	-	-		-	-	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capac		WA	E Distribution	E Distribution	100.00%	0.00%	12,101	64	(560)	52,688	1,439	136,171	840,102	161,420	59
Rosentrater	Programs		Substation - New Distribution Station Capac		WA	General	General	100.00%	0.00%	132	1	6	10		14			
Magalsky	Programs	Performance & Capacit		ED	WA	E Distribution	E Distribution	100.00%	0.00%	37,876	190,392	92,945	56,587	123,738	97,794	201,321	66,758	52,231
Rosentrater	Large Distinct Projects		Strategic Initiatives - Clean Energy Fund 2	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	(68,524)	57,533	7,752	2,683		-	-	-
Rosentrater	Large Distinct Projects		Strategic Initiatives - Clean Energy Fund 2	ED	WA	E Distribution	E Distribution	100.00%	0.00%	92,285	11,026	916	334,120	700,000	114,159	-	(692,862)	-
Rosentrater	Large Distinct Projects		Strategic Initiatives - Clean Energy Fund 2	ED CI ED	WA	General	General	100.00%	0.00%	(3,230)	-	-	1 055 705	274 225	10.710	10.007	(224 (22)	27.101
Rosentrater	Large Distinct Projects		Strategic Initiatives - South Landing (Cataly		WA	E Distribution	E Distribution	100.00%	0.00%	451	-		1,855,735	374,325	19,718	12,837	(334,680)	27,194
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		Strategic Initiatives - Real Time Power Syste Strategic Initiatives - Real Time Power Syste		AN AN	General General	General General	65.54% 68.27%	0.00%	2.529				-		-	-	-
	Mandatory & Compliance		Strategic Initiatives - Real Time Power Systi Strategic Initiatives - Upriver Park	em Simul ED ED	AN AN	Production - Hydro			0.00%	2,529	-	-	3.494.194	265.925	17.851	2.952	1.614	40.260
Thackston	mandatory & compliance	INO PLIAGE	Strategic initiatives - Upriver Park	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%				3,494,194	265,925	17,851	2,952	1,614	40,260

### ATTACHMENT B

Actual Gross Transfer-to-Plant Detail
October 1, 2021 - December 31, 2022

										34,417,983	32.090.208	55.425.725	505,328,919	12.135.677	16.135.120	16.506.773	20.115.706	55.611.144	24.469.623
Witness	Plant Group for	Primary	Project (Business Case)	Service	Jurisdic	Depreciation	Ser.Jur.Allocatio n Category	WA - E -	WA - G - Allocation %	Oct 2022 -	Nov 2022 -	Dec 2022 -	2022 TOTAL -			WA - Electric Mar	WA - Electric Apr 2022		WA - Electric Jun
Kensok	Testimony Purposes Short-Lived Assets	Asset Condition	Atlas	CD	AA AA	Category 3 Yr Software	Software	47.78%	15.09%	<b>System</b> 9,955	System 289,890	System 658,209	System (118,139)	(87,249)	2022 29,817	80,411	1,397	436	<b>2022</b> 320
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	Atlas Atlas	CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	-	-	-	1,620,001	-	-	-	-	-	-
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-		(14,507)	(1,676)	610	1,678	29	9	7
	Programs	Asset Condition Asset Condition	Base Load Hydro Base Load Hydro	CD ED	AA AN	Hardware General	Hardware	47.78% 68.27%	15.09%	-	-	-	5,652 9,606	-	-	-	-	-	2,701 6.557
	Programs Programs	Asset Condition Asset Condition	Base Load Hydro	ED	AN	Production - Hydro	General Production - Hydro	65.54%	0.00%	63,880	1,348	201,411	623,919	3,884	7,446	6,371	2,722		183,751
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge 15 kV Bus Replacement	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	13,118	688	1,778	1,006	3,599	227	1,217
	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Cabinet Gorge Unit 3 Protection & Control Upgrade Cabinet Gorge Unit 4 Protection & Control Upgrade		AN AA	Production - Hydro General	Production - Hydro General	65.54% 47.78%	0.00% 15.09%		-	-	(844) 15,247	(553) 7.194	30	-	62	-	-
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	103	-	-	3,297,501	-	-	-	2,102,827	45,761	5,973
	Large Distinct Projects Programs	Asset Condition Asset Condition	Cabinet Gorge Unwatering Pumps Capital Tools & Stores	CD	AN AA	Production - Hydro General	Production - Hydro General	65.54% 47.78%	0.00% 15.09%	17.727	22.917	60.659	706.493	-	16.037	3.938	18.154	(3.761)	110.539
	Programs	Asset Condition	Capital Tools & Stores	CD	AN	General	General	52.71%	16.61%		40,156	74,691	181,496	-	5,345	-	-	-	20,441
	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	3,235	314 37.749	62.428	3,549 110.300	540	-	-	-	-	-
	Programs	Asset Condition	Capital Tools & Stores	ED	AN	General	General	65.54%	0.00%	-	-	02,420	-	-	-	-	-	-	-
	Programs	Asset Condition	Capital Tools & Stores	ED ED	AN ID	General	General	68.27%	0.00%	13,605	58,827	-	325,449 170,053	31,742	(6)	3,259	745	29,180	44,913
	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	ED	WA	General General	General General	0.00%	0.00%	2,161 36,794	21,025 25.464	10.767	273.073	2.517	28.511	443	11.489	19.571	80.029
	Programs	Asset Condition	Capital Tools & Stores	GD	AA	General	General	0.00%	47.36%	-	-	-	-		-	-	-		-
	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD GD	AA ID	General General	General General	0.00%	50.19% 0.00%	4.236	457	7,834 17.498	111,115 79.683		-	-		1	
	Programs	Asset Condition	Capital Tools & Stores	GD	OR	General	General	0.00%	0.00%	2,175	9,324	17,470	145,992	-	-	-	-	-	-
	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Distribution Grid Modernization	GD FD	WA AN	General General	General General	0.00% 65.54%	100.00%	4,291	2,915	-	161,038	-	-	-	-	-	-
	Programs Programs	Asset Condition Asset Condition	Distribution Grid Modernization Distribution Grid Modernization	ED	ID	General E Distribution	E Distribution	0.00%	0.00%	16.532	28.524		43.220					-	
	Programs	Asset Condition	Distribution Grid Modernization	ED	ID	General	General	0.00%	0.00%	-	-	-	6,365	-	-	-	-	-	-
	Programs Programs	Asset Condition Asset Condition	Distribution Grid Modernization Distribution Minor Rebuild	ED ED	WA ID	E Distribution  E Distribution	E Distribution  E Distribution	100.00%	0.00%	398,708 442.007	226,308 491.662	371,530 487.613	2,667,115 6,005,933	183,866	229,807	62,152	616,135	129,597	173,050
	Programs	Asset Condition	Distribution Minor Rebuild	ED	MT	E Distribution	E Distribution	0.00%	0.00%	442,007	77	51	129	-	-	-	-	-	-
	Programs Large Distinct Projects	Asset Condition Asset Condition	Distribution Minor Rebuild Distribution Transformer Change Out Program	ED ED	WA ID	E Distribution E Distribution	E Distribution  E Distribution	100.00%	0.00%	645,385	636,657	733,033	9,049,949	625,949	597,530	689,939	1,587,222	808,311	936,934
	Large Distinct Projects	Asset Condition	Distribution Transformer Change Out Program  Distribution Transformer Change Out Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-		-	-		-	-		-	
Rosentrater	Programs	Asset Condition	Downtown Network - Asset Condition	ED	WA	E Distribution	E Distribution	100.00%	0.00%	232,974	89,658	56,878	1,826,049	78,153	109,788	114,315	51,281	55,373	32,075
	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD	AA AA	General Transportation	General Transportation	47.78% 47.78%	15.09% 15.09%	-		-	(1,196)			-	-	(571) (962)	
	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN	General	General	52.71%	16.61%	-	-	-	28,043	-	-	1,056	-	- (702)	13,727
	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN ID	Transportation	Transportation	52.71% 0.00%	16.61%	6,773	2,082	-	350,657 192,257	-	-	99,966	327	-	15,066
	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD	WA	Transportation Transportation	Transportation Transportation	77.22%	22.78%	-	- :		53,016	:	-				37,972
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	AN	General	General	68.27%	0.00%	-	-	-	69,799	-	47,649	-	-	-	-
	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED ED	AN AN	Transportation Transportation	Transportation Transportation	65.54% 68.27%	0.00%	53,656	-	-	1 461 384	-	-	501.759	133,789	27.971	-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	ID	Transportation	Transportation	0.00%	0.00%	-		450,965	1,996,036	-	-	-	-		-
	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED GD	WA AN	Transportation Transportation	Transportation Transportation	100.00%	0.00% 68.81%	7,974	153,605	-	1,789,060	277,744	769,268	359,569	625	117,618	102,856
	Programs	Asset Condition	Fleet Services Capital Plan	GD	AN	Transportation	Transportation	0.00%	72.92%	-		-	-		-	-		-	
	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD GD	ID OR	Transportation Transportation	Transportation Transportation	0.00%	0.00%	231,155 108 597	1,398 5,273	-	504,790 225,954	-	-	-	-	-	-
Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD	WA	Transportation	Transportation Transportation	0.00%	100.00%	108,597	5,2/3	1,948	244,099		-	-	-	-	
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	242,635	-	-	-	-	-	-
	NEW (Actuals) NEW (Actuals)	Asset Condition Asset Condition	Gas ERT Replacement Program Gas ERT Replacement Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00% 100.00%	-	-	-	241,487 293.920	-	-	-	-	-	-
Rosentrater	Programs	Asset Condition	Gas Regulator Station Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	327,437	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Gas Regulator Station Replacement Program Gas Regulator Station Replacement Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	339 2,555	33,428 5.510	6,509 2,542	138,428 222,214	-	-	-	-	-	-
Thackston	Large Distinct Projects	Asset Condition	Generation DC Supplied System Update	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	2,555	5,510	518	18,486	2,596	6,282	1,222	1,145	532	-
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	CD	AA	5 Yr Software	Software	47.78%	15.09%	68	341,393	7,247	354,000	521	539	484	235	269	169
Thackston Thackston	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	HMI Control Software HMI Control Software	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	229 672	336,841 341,393	8,226 11.263	363,039 405.369	1,747 5.123	1,808 5,304	1,624 4,765	787 2,309	901 2,644	565 1,657
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	5 Yr Software	Software	68.27%	0.00%	-		2,425,975	2,425,975		-	-	-,		-
	Short-Lived Assets Large Distinct Projects	Asset Condition Asset Condition	HMI Control Software KF_Fuel Yard Equipment Replacement	ED ED	AN AN	Production - Hydro General	Production - Hydro General	65.54% 68.27%	0.00%	15.081	64.491	48,736 26,971	48,736 352,595		-	-		1	
	Large Distinct Projects	Asset Condition	KF_Fuel Yard Equipment Replacement	ED	AN	Production - Thermal	Production - Therm	65.54%	0.00%	(44,296)	698,293	538,136	30,766,095	-	-	-	-	-	-
	Programs	Asset Condition Asset Condition	LED Change-Out Program	ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	11,690 13,800	9,704 13.658	14,681 12.516	114,438	14,693	14.854	15.661	13.425	7.160	8.684
Thackston	Programs Large Distinct Projects	Asset Condition	LED Change-Out Program Little Falls Plant Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	13,000	13,058	12,516	145,063		-	-	13,425	7,160	0,084
	Large Distinct Projects	Asset Condition	Long Lake Plant Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	17,125	4,045	6,503	677	-	-	-
	Other Large Distinct Projects	Asset Condition Asset Condition	New Dollar Road Service Center Nine Mile Powerhouse Crane Rehab	GD ED	WA AN	General Production - Hydro	General Production - Hydro	0.00% 65.54%	100.00%		993,263	25,527	0 1,018,790		-	-	-	-	-
Thackston	Large Distinct Projects	Asset Condition	Post Falls Landing and Crane Pad Development	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-			141,872	3,118	4,464	85,401	-	-	-
	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Primary URD Cable Replacement Primary URD Cable Replacement	ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	2,515 1.899	1,772	1,525 1,118	11,162 24.062	742	718	1.426	2.257	3.810	1.501
	Programs	Asset Condition	Regulating Hydro	CD	AA	General	General	47.78%	15.09%	1,077	3,153	1,110	3,153	- 142	-	1,420	2,257	3,010	1,501
	Programs	Asset Condition	Regulating Hydro	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-	-	-
	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	-	-	-	14.943	-	-	-	-	-	8.660
Thackston	Programs	Asset Condition	Regulating Hydro	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	176,080	315,796	1,378,430	2,509,137	35,402	34,440	43,099	178,814	111,013	11,771
	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	ED ED	AN AN	Transmission Transportation	Transmission Transportation	65.54% 68.27%	0.00%		-	49.265	85,724 49,265	27,306	27,668	1,210	=		-
	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC	CD	AA AA	3 Yr Software	Software	47.78%	15.09%		-	49,205	74,806		-	37,103	-	-	
	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	5 Yr Software	Software	47.78%	15.09%		821	8,114	117,431	-	-	29,790	2,735	7,782	3,283
	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC SCADA - SOO and BuCC	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	2,550 10.265	155,154 3.980	321 19.056	216,519 111,741	446	-	16.336	3.070	(1.508)	6.269
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	ED	AN	5 Yr Software	Software	68.27%	0.00%		-	,	265,459	-	-	.0,330	5,070	167,977	5,789
	Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC	ED CD	AN AA	Hardware General	Hardware General	68.27% 47.78%	0.00% 15.09%	42 155	1 728 589	- 322 180	147,813 4 192 901	- 871 529	94 908	2 326	730	93,533	3,224 3,653
	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	42,155 12,050	1,728,589 48,484	322,180 118,346	4,192,901 782,551	871,529 1,170	94,908 9,310	2,326 23	730 5,316	2,163 22,612	3,653 162,263
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD	AN	General	General	52.71%	16.61%		-	343,233	348,448		-	-			-
	Programs	Asset Condition	Structures and Improvements/Furniture	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	147	-	280,374 14,881	308,005 52,007	14,880	-	-	-	-	-
	Programs	Asset Condition	Structures and Improvements/Furniture	CD															

										34,417,983	32,090,208	55,425,725	505,328,919	12,135,677	16,135,120	16,506,773	20,115,706	55,611,144	24,469,623
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Oct 2022 - System	Nov 2022 - System	Dec 2022 - System	2022 TOTAL - System	2022	WA - Electric Feb 2022	2022	2022	WA - Electric May 2022	WA - Electric Jun 2022
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	ED ED	AN ID	General General	General General	68.27% 0.00%	0.00%	97,611	174.407	2,430	54,944 325,116	5,237	25,102	3,309	3,852	. 8	-
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-			-	-	-	-	-
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED	WA	General	General	100.00%	0.00%	-	70,207	88,206	158,413	-		-	-	-	
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	GD GD	OR WA	General General	General General	0.00%	0.00%				161 844						
Rosentrater	Programs	Asset Condition	Substation - Station Rebuilds Program	ED	AN	General	General	65.54%	0.00%				-						
Rosentrater	Programs	Asset Condition	Substation - Station Rebuilds Program	ED	AN	General	General	68.27%	0.00%	-	-	-	115,095	-	5,082	30,034	591	496	
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Substation - Station Rebuilds Program Substation - Station Rebuilds Program	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	67,193	8,411	4,093,080 26,230	5,494,122 863.341	3,331	-	-	274,466	582	86,151
Rosentrater	Programs Programs	Asset Condition Asset Condition	Substation - Station Rebuilds Program Substation - Station Rebuilds Program	FD	WA	E Distribution  E Distribution	E Distribution F Distribution	100.00%	0.00%	20.772		26,230 67,384	4,213,037	3.423.012	34.928	- :	95.798		99.497
Kensok	Short-Lived Assets	Asset Condition		CD	AA	General	General	47.78%	15.09%	20,772	-	-	4,210,007	5,425,012	-	-	-	-	
Rosentrater	Large Distinct Projects	Asset Condition	Telematics 2025	CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	-	57,951	26,308	693	444	0	-	196
Rosentrater Rosentrater	Large Distinct Projects	Asset Condition Asset Condition	Telematics 2025 Transmission - Minor Rebuild	CD FD	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09%	161,030	3,708	623	98,204	54,877	(98,110)	3,097	6,562 3 319	1,484 26,181	206 486
Rosentrater	Programs Large Distinct Projects	Asset Condition Asset Condition	Transmission - Minor Rebuild - Asset Condition	ED	AN AN	Transmission Transmission	Transmission Transmission	65.54%	0.00%	1,333,738	137,710	1,510,305	3,673,299 3.483.023	(39,150)	27,710	7,132	2.320.936	26,181 55.500	2,204
Rosentrater	Large Distinct Projects	Asset Condition	Transmission Major Rebuild - Asset Condition	ED	ID	E Distribution	E Distribution	0.00%	0.00%			66,303	66,303				-,,	-	-
Rosentrater	Programs	Asset Condition	Wood Pole Management	ED	ID	E Distribution	E Distribution	0.00%	0.00%	14,867	23,801	1,320	1,884,985		-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition	Wood Pole Management New Revenue - Growth	ED ED	WA ID	E Distribution F Distribution	E Distribution E Distribution	100.00%	0.00%	130,091	199,060 2 693 452	1,527	11,126,949 23,252,924	309,878	942,401	1,877,267	152,908	2,010,456	1,997,695
Rosentrater	Programs Programs		New Revenue - Growth	ED	WA	E Distribution  E Distribution	E Distribution E Distribution	100.00%	0.00%	4,275,073	2,693,452 4,960,036	2,959,731	23,252,924 36.530.067	2.144.710	2,692,716	2.394.177	3.009.496	2.807.940	2,695,553
Rosentrater	Programs		New Revenue - Growth	ED	WA	Transmission	Transmission	100.00%	0.00%	42	4,700,000	(31)	1,273	34	147	436	126	156	53
Rosentrater	Programs	Customer Requested	New Revenue - Growth	GD	ID	G Distribution	G Distribution	0.00%	0.00%	1,024,017	1,151,487	693,170	9,195,715			-	-	-	-
Rosentrater	Programs		New Revenue - Growth	GD	OR	G Distribution	G Distribution	0.00%	0.00%	1,122,198	729,416	1,667,684	9,757,063	-		-		-	
Rosentrater Rosentrater	Programs Other		New Revenue - Growth Rattlesnake Flat Wind Farm Project 115kV Integratio	GD	WA AA	G Distribution General	G Distribution General	0.00% 47.78%	100.00% 15.09%	1,374,235	1,905,929	2,344,849	20,108,393	•	-	-	-	•	•
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integratio		AN	General	General	65.54%	0.00%		-				-			-	-
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integration		AN	General	General	68.27%	0.00%				0	0					
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integration	ED	AN	Transmission	Transmission	65.54%	0.00%	-	-	-	-		-	-	-	-	-
Rosentrater	Other	Customer Requested		ED	AN WA	Transmission	Transmission	65.54%	0.00%	-	-	236,175	236,175	-	-	(0)	-	-	-
Rosentrater Thackston	Other Programs	Customer Requested	i Automation Replacement	ED ED	AN	General Production - Hydro	General Production - Hydro	100.00% 65.54%	0.00%	-	-	-	273,451	177 578	1,642	-	-	-	-
Magalsky	Short-Lived Assets		i Customer Experience Platform Program	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,999	4,455	1,871,336	3,565,090	49,155	12,344	3,977	(65,434)	3,131	728,572
Magalsky	Short-Lived Assets			ED		5 Yr Software	Software	100.00%	0.00%	26,478	25,284	22,425	1,023,150	-	-		-		-
Magalsky	Short-Lived Assets		i Customer Facing Technology Program	CD	AA	2 Yr Software	Software	47.78%	15.09%	2,228	9,895	8,486	2,312,122	-		-		-	1,033,483
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		i Customer Facing Technology Program i Customer Facing Technology Program	CD	AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	14,636	8,336	1,245,908	111,589 1,509,958	15,671	19,713	2,551	5,019	9,440	1,345
Magaisky	Short-Lived Assets		i Customer Facing Technology Program	CD	AA	Hardware	Hardware	47.78%	15.09%	14,030	19	2 344	7.510	41	52	5	13	24	1.835
Magalsky	Short-Lived Assets		Customer Transactional Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%	87,656	4,838	7,879	278,065		-			-	-
Magalsky	Short-Lived Assets		i Customer Transactional Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,625	64	843,902	2,164,159	9,160	7,829	3,362	4,058	1,690	572,891
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		i Customer Transactional Systems	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	- 6	- 0	26,026	26,026 65,777	-	-	-	-	-	- 881
Magaisky	Short-Lived Assets Short-Lived Assets		i Customer Transactional Systems	CD	WA	5 Yr Software	Software	47.78% 77.22%	15.09%			63,830	338	(898)	1 182	(23)	-	-	881
Magalsky	Short-Lived Assets	Customer Service Qual	Customer Transactional Systems	ED	WA	5 Yr Software	Software	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
Magalsky	Short-Lived Assets		i Customer Transactional Systems	GD	OR	5 Yr Software	Software	0.00%	0.00%	7,897	33,771	2,579	289,678			-		-	
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	2 Yr Software	Software	47.78%	15.09%	-	-	129,786	156,906	(114)	2,229	4,528	354	1,519	1,949
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		CD	AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	11 907	60 562	490,927 243.074	490,679 788 257	(118) (11,761)	73 610	24 928	16,069	17 234	46 895
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	General	General	47.78%	15.09%	2,860		243,074	238,121	(11,701)	73,010	24,720	10,007	17,234	40,075
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	Hardware	Hardware	47.78%	15.09%	6,483	18,348	32,038	385,013	(2,319)	15,928	7,053	4,914	5,635	11,798
Kensok	Short-Lived Assets	Customer Service Qual		ED	AN	5 Yr Software	Software	65.54%	0.00%	-	-	-		1	1	i	-	1	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		ED ED	AN	5 Yr Software Transmission	Software Transmission	68.27% 65.54%	0.00%	204	1,661	211	3,793 419,626	658	369	596	577	390 270,817	- 592
Kensok	Short-Lived Assets		i Facilities and Storage Location Security	CD	AA	5 Yr Software	Software	47.78%	15.09%	204	1,001	211	419,020					2/0,617	592
Kensok	Short-Lived Assets		Facilities and Storage Location Security	CD	AA	General	General	47.78%	15.09%	-	-	121,397	121,397		-	-	-	-	
Kensok	Short-Lived Assets		Facilities and Storage Location Security	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	27,221	1,181	1,447	9,070	452	-	996
Kensok	Short-Lived Assets		Facilities and Storage Location Security	CD GD	AN OP	General	General	52.71% 0.00%	16.61% 0.00%	10,217 3,507	(2,655)	3,703	180,496	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		i Facilities and Storage Location Security i Generation, Substation & Gas Location Security	ED	AN	General 5 Yr Software	General Software	68.27%	0.00%	3,507			190,717			- :			
Kensok	Short-Lived Assets			ED	AN	General	General	65.54%	0.00%	-	-		-		-	-	-	-	
Kensok	Short-Lived Assets			ED	AN	General	General	68.27%	0.00%	-	-	-	4,043	253	2,507	-	-	-	-
Kensok	Short-Lived Assets			ED	AN AN	Hardware Usates	Hardware Usuka	68.27%	0.00%	-	-	-	- 12.001	- ( 700	-		-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		i Generation, Substation & Gas Location Security i Generation, Substation & Gas Location Security	ED	AN AN	Production - Hydro Production - Other	Production - Hydro Production - Other	65.54% 65.54%	0.00%	130.405	6.042	3.004	13,034 139,451	6,780	984	556	222	-	
Kensok	Short-Lived Assets			ED	WA	E Distribution	E Distribution	100.00%	0.00%	210,493	13,290	10,685	234,468	-	-	-	-	-	-
Kensok	Other		i Telecommunication & Network Distribution location		AA	General	General	47.78%	15.09%	68,242	7,987	2,367	78,596	-	-	-	-	-	-
Kensok Rosentrater	Other Large Distinct Projects		i Telecommunication & Network Distribution location i Washington Advanced Metering Infrastructure Projec		AA WA	Hardware General	Hardware General	47.78% 77.22%	15.09% 22.78%	36,396	4,260	1,263 700.358	41,918 700.358	-	-	-	-	-	-
Rosentrater	Large Distinct Projects  Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec		WA	General Hardware	General Hardware	77.22% 77.22%	22.78%	-	-	700,358	700,358			-	-	-	-
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	5 Yr Software	Software	100.00%	0.00%										
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	E Distribution	E Distribution	100.00%	0.00%	-	-	(729,798)	(725,740)	3,019	-	-	-	-	
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	General	General	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec		WA WA	Hardware G Distribution	Hardware G Distribution	100.00%	0.00% 100.00%	-	-	-	-	-		-	-		
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	General	General	0.00%	100.00%	-	-		-	-	-		-	-	-
Howell	Wildfire	Customer Service Qual	i Wildfire Resiliency Plan	CD	AA	General	General	47.78%	15.09%	-	-	-	(1,116)	74	180	(917)	58	71	-
Howell	Wildfire		i Wildfire Resiliency Plan	ED	AN	3 Yr Software	Software	68.27%	0.00%	:	_ :		450,664						307,650
Howell Howell	Wildfire Wildfire		i Wildfire Resiliency Plan i Wildfire Resiliency Plan	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	441,844 183.069	7,179 1.506.323	8,504 658.806	3,915,874 8.723.145	2,601	92,877	15,436	185,430	5,701	430,773
Howell	Wildfire		i Wildfire Resiliency Plan i Wildfire Resiliency Plan	FD	ID	E Distribution General	E DISTRIBUTION General	0.00%	0.00%	2 137	1,506,323	888	8,723,145				-		
Howell	Wildfire	Customer Service Qual	i Wildfire Resiliency Plan	ED	WA	E Distribution	E Distribution	100.00%	0.00%	580,192	806,839	1,188,504	12,339,796	432,096	344,937	1,225,623	818,070	1,206,841	1,907,382
Howell	Wildfire		i Wildfire Resiliency Plan	ED	WA	General	General	100.00%	0.00%	3,361	19,771	6,337	65,050	8,132	2,977	10,613	3,757	1,074	1,252
Thackston	Programs		Base Load Thermal Program	CD	AA	General	General	47.78%	15.09%	-	-	-	25,202	-	9,203	1,086	901	852	
Thackston Thackston	Programs Programs		: Base Load Thermal Program : Base Load Thermal Program	CD FD	AA AN	Hardware General	Hardware General	47.78% 68.27%	15.09%	-	19 420	2,353	2,353 19 420	-	-	-	-	-	-
Thackston	Programs	Failed Plant & Operation	Base Load Thermal Program	ED	AN	Production - Other	Production - Other	65.54%	0.00%	(34,934)	40,598	43,564	589,713	3,104	1,257	50,549	5,580	(3,501)	253,152
Thackston	Programs		Base Load Thermal Program	ED	AN	Production - Thermal	Production - Therm	65.54%	0.00%	-	493,025	658,813	1,457,271	32,081	26	1,483	10,814	20,463	62,399
Thackston	Programs	Failed Plant & Operation	Base Load Thermal Program	ED	AN	Transmission	Transmission	65.54%	0.00%	-	-	-	26,004		-	17,043	-	-	-

										34,417,983	32,090,208	55,425,725	505,328,919	12,135,677	16,135,120	16,506,773	20,115,706	55,611,144	24,469,623
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Oct 2022 - System	Nov 2022 - System	Dec 2022 - System	2022 TOTAL - System	WA - Electric Jan 2022	WA - Electric Feb	WA - Electric Mar 2022	WA - Electric Apr 2022	WA - Electric May W	/A - Electric Jun
Thackston	Large Distinct Projects	Failed Plant & Operatic CS2 Single	Phase Transformer		AN	Transmission	Transmission	65.54%	0.00%	- '	- '		(38,169)	(31,932)	- "	6,916	- "	- '	-
Rosentrater Rosentrater	Programs Programs	Failed Plant & Operatic Electric Sto Failed Plant & Operatic Electric Sto			AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	106,198 31.582	404,704 542.915	188,954 405,544	2,552,217 1.671.144	1,292	19,084	(69,911)	516,550	44,270	3,824
Rosentrater	Programs	Failed Plant & Operatic Electric Sto			WA	E Distribution	E Distribution	100.00%	0.00%	76,338	670,471	305,320	2,194,646	120,586	25,402	29,409	299,689	46,989	92,968
Rosentrater	Programs	Failed Plant & Operatic Gas Non-R			ID	G Distribution	G Distribution	0.00%	0.00%	53,326	53,966	46,539	1,078,776	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Failed Plant & Operatic Gas Non-R Failed Plant & Operatic Gas Non-R			OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	498,381 329,283	346,538 428,607	807,056 229,884	5,261,557 4 317 433						
Rosentrater	Programs	Failed Plant & Operatic Meter Mino	or Blanket	ED	ID	E Distribution	E Distribution	0.00%	0.00%	23,703	19,099	14,749	217,394	-	-	-	-	-	-
Rosentrater	Programs Large Distinct Projects	Failed Plant & Operatic Meter Mino Failed Plant & Operatic N Lewiston			WA AN	E Distribution	E Distribution	100.00% 65.54%	0.00%	16,551 2.286	12,223 4,800	11,324 304	126,900 4,394,085	15,670	2,646	5,334	9,256	6,994	10,816 2.826.752
Rosentrater Thackston	Large Distinct Projects  Large Distinct Projects	Failed Plant & Operatic N Lewiston Failed Plant & Operatic Peaking Ge			AN AA	Transmission Hardware	Transmission Hardware	47.78%	15.09%	2,286	4,800	304	4,394,085	-	-	-	-	10.999	2,826,752
Thackston	Large Distinct Projects	Failed Plant & Operatic Peaking Ge			AN	Production - Other	Production - Other	65.54%	0.00%	61	9,569	17,399	239,812	-	-	809	57,400	16,526	•
Kensok Kensok	Programs Programs	Failed Plant & Operatic Technology Failed Plant & Operatic Technology			AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	13,297 1.880	81,395 17.355	284,696 27.068	646,002 138,856	(405) (20)	29,825 8.249	17,278 3,732	27,178 458	29,391 12.326	3,981 3,789
Kensok	Programs	Failed Plant & Operatic Technology			AN	Transmission	Transmission	65.54%	0.00%	1,000	- 17,333		92,293	(20)	0,247	60,069	(272)	(162)	312
Rosentrater		Mandatory & Complian Apprentice			AA	General	General	47.78%	15.09%	-	-	-	40,545	-	-	-	-	-	19,374
Thackston Thackston		Mandatory & Complian Cabinet Go Mandatory & Complian Cabinet Go			AN AN	General Hardware	General Hardware	68.27% 68.27%	0.00%	1,797 72	37,175 1 487	(31,491)	321,821 12,873				-		182,458 7.298
Thackston		Mandatory & Complian Cabinet Go			AN	Production - Hydro	Production - Hydro	65.54%	0.00%	49,759	805,688	244,062	63,109,823				-	39,644,771	445,047
Thackston		Mandatory & Complian Cabinet Go			AN	Transportation	Transportation	68.27%	0.00%	-	-	-	61,705	42,123	-	-	-	-	-
Thackston Thackston		Mandatory & Complian Cabinet Go Mandatory & Complian Clark Fork			ID AN	Transportation General	Transportation General	0.00% 65.54%	0.00%	-	-	-	(0) 22.855						
Thackston		Mandatory & Complian Clark Fork			AN	General	General	68.27%	0.00%		-	-	2,920				-		1,994
Thackston		Mandatory & Complian Clark Fork			AN	Production - Hydro	Production - Hydro	65.54%	0.00%	6,566	6,131	3,766	3,475,412	1,429	1,595,417	8,428	2,113	36,317	528,680
Rosentrater Rosentrater		Mandatory & Complian Clearwater Mandatory & Complian Colstrip Tra			AN AN	Transmission 5 Yr Software	Transmission Software	65.54% 68.27%	0.00%	-	-	-	- 22	15			-		
Rosentrater		Mandatory & Complian Colstrip Tra			AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-	-
Rosentrater		Mandatory & Complian Colstrip Tra			AN	General	General	68.27%	0.00%	3,697	997	4,556	(25,742)	(35,307)	0	1,406	988	956	5,738
Rosentrater Rosentrater		Mandatory & Complian Colstrip Tra Mandatory & Complian Colstrip Tra			AN AN	Hardware Hardware	Hardware Hardware	65.54% 68.27%	0.00%	1.849	499	2.278	74,135	41,742	0	703	494	478	2,869
Rosentrater		Mandatory & Complian Colstrip Tra			ID	Transmission	Transmission	0.00%	0.00%	5,541	2,559	17,942	88,188		-	-		-	-
Rosentrater		Mandatory & Complian Colstrip Tra			WA	Transmission	Transmission	100.00%	0.00%	10,534	4,865	34,108	167,653	4,649	12,757	13,744	14,583	19,828	9,649
Rosentrater Rosentrater		Mandatory & Complian Elec Reloca Mandatory & Complian Elec Reloca			AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	970,082	7 177	(749,718)	1,892,812 1.063.382	28,643			637,466	35,870	537,881
Rosentrater		Mandatory & Complian Elec Reloca			WA	E Distribution	E Distribution	100.00%	0.00%	198,644	370,821	116,708	5,639,081	226,744	374,574	364,130	440,275	267,348	520,945
Rosentrater		Mandatory & Complian Gas Cathoo			ID	G Distribution	G Distribution	0.00%	0.00%	33,057	4,441	78,756	186,863	-	-	-	-	-	-
Rosentrater Rosentrater		Mandatory & Complian Gas Cathoo Mandatory & Complian Gas Cathoo			OR WA	G Distribution	G Distribution G Distribution	0.00%	0.00%	185 474	15 258	152 684	70,993 615,776						
Rosentrater	Mandatory & Compliance	Mandatory & Complian Gas Facility	y Replacement Program (GFRP) Aldyl A Pip	: GD	ID	G Distribution	G Distribution	0.00%	0.00%	31,172	23,962	19,967	422,512	-	-	-	-	-	-
Rosentrater			y Replacement Program (GFRP) Aldyl A Pip	: GD	OR	G Distribution	G Distribution	0.00%	0.00%	769,863	600,340	1,088,350	8,637,047	-	-		-		-
Rosentrater Rosentrater		Mandatory & Complian Gas Facility Mandatory & Complian Gas HP Pip	y Replacement Program (GFRP) Aldyl A Pip neline Remediation Program		WA AA	G Distribution 3 Yr Software	G Distribution Software	0.00% 47.78%	100.00% 15.09%	860,143	1,523,015	251,797	17,114,541						
Rosentrater	Mandatory & Compliance	Mandatory & Complian Gas HP Pip	peline Remediation Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-	-	-	-	-	-	-
Rosentrater		Mandatory & Complian Gas Isolate			ID	G Distribution	G Distribution	0.00%	0.00%	683	1,019	301.443	37,796			-	-	-	•
Rosentrater Rosentrater		Mandatory & Complian Gas Isolate Mandatory & Complian Gas Isolate			OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	176,429 1.869	368,007 5.533	301,443	1,284,246 102.643						
Rosentrater	Mandatory & Compliance	Mandatory & Complian Gas Overbi	uilt Pipe Replacement Program		ID	G Distribution	G Distribution	0.00%	0.00%	924	366	3,017	25,135	-	-		-		
Rosentrater Rosentrater		Mandatory & Complian Gas Overbi Mandatory & Complian Gas Overbi			OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	23,451	23,405	26,844 9.681	277,080 51 307	-	-	-	-	-	-
Rosentrater		Mandatory & Complian Gas Overbi			ID	G Distribution	G Distribution	0.00%	0.00%	11,369	13,601	11,229	283,370						-
Rosentrater	Mandatory & Compliance	Mandatory & Complian Gas PMC P	Program		OR	G Distribution	G Distribution	0.00%	0.00%	22,112	17,494	24,844	664,583	-	-		-		
Rosentrater Rosentrater		Mandatory & Complian Gas PMC P			WA ID	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%	29,803 40,797	18,517 (150,364)	20,798 37,184	709,579 2 349 948	-	-		-		-
Rosentrater					OR	G Distribution	G Distribution	0.00%	0.00%	40,134	155,960	85,328	1,352,482						-
Rosentrater					WA	G Distribution	G Distribution	0.00%	100.00%	93,636	77,262	94,334	1,145,270	-	-	-	-	-	-
Rosentrater Kensok		Mandatory & Complian Gas Transi- Mandatory & Complian High Volta			WA	G Distribution General	G Distribution General	0.00%	100.00%	437,634	5.008	6.346	448.988	-	-		-		-
Thackston		Mandatory & Complian Hydro Safe			AN	Production - Hydro	Production - Hydro	65.54%	0.00%	437,034	5,006	0,340	440,900						-
Rosentrater		Mandatory & Complian Joint Use				E Distribution	E Distribution	0.00%	0.00%	31,539	88,992	(555,919)	951,893	-	-	-	-	-	-
Rosentrater Kensok		Mandatory & Complian Joint Use Mandatory & Complian Payment C			WA AA	E Distribution 5 Yr Software	E Distribution Software	100.00% 47.78%	0.00% 15.09%	219,789 248	176,768	161,064 1.376	3,388,476 8.441	505,423	556,228	230,342 476	692,006 582	308,100 719	481,769 98
Kensok		Mandatory & Complian Payment C			AA	Hardware	Hardware	47.78%	15.09%	301	-	1,672	10,258			579	708	873	119
Rosentrater		Mandatory & Complian Protection			AN	General	General	65.54%	0.00%					-	-	-	-	-	-
Rosentrater Rosentrater		Mandatory & Complian Protection Mandatory & Complian Protection			AN AN	General Transmission	General Transmission	68.27% 65.54%	0.00%	13,824 1,413,379	16 4.159	3.341	13,841 2,758,558	5,691	16,949	138	2,500	1.063	380,390
Thackston		Mandatory & Complian Use Permit			AN	Transmission	Transmission	65.54%	0.00%	3,649	2,511	2,727	61,212	22,433	(575)	1,705	1,123	1,921	603
Thackston		Mandatory & Complian Use Permit			ID	E Distribution	E Distribution	0.00%	0.00%	6,486	2,834	3,246	70,354		-		1	1	
Thackston Thackston		Mandatory & Complian Use Permit Mandatory & Complian Use Permit			WA ID	E Distribution G Distribution	E Distribution G Distribution	100.00%	0.00%	3,421	9,024 104	26,374 270	70,419 6,649	17,517		6,367	839	982	2,105
Thackston		Mandatory & Complian Use Permit		GD	OR	G Distribution	G Distribution	0.00%	0.00%	5,699	2,501	5,825	36,627	-	-	-	-	-	-
Thackston		Mandatory & Complian Use Permit			WA	G Distribution	G Distribution	0.00%	100.00%	4,906	2,050	4,930	20,288				-		
Rosentrater Rosentrater			untain 230/115kV Station (New) Integration untain 230/115kV Station (New) Integration		AA WA	General General	General General	47.78% 77.22%	15.09% 22.78%	115,465 (115,465)	-	-	3,374,312 (1,189,677)	40,534 (333)	1,635 4.820	4,673	- 512	478,119 302	515,720
Rosentrater	Mandatory & Compliance	Mandatory & Complian Saddle Mor	untain 230/115kV Station (New) Integration	ED	AN	General	General	65.54%	0.00%	,	-	-			-	-	-	-	-
Rosentrater	Mandatory & Compliance	Mandatory & Complian Saddle Mor	untain 230/115kV Station (New) Integration	(ED	AN	General	General	68.27%	0.00%	-	-	-	(2,124,302)	(58,527)	4,788	6,528	14,672	(682,722)	(734,564)
Rosentrater Rosentrater			untain 230/115kV Station (New) Integration untain 230/115kV Station (New) Integration		AN AN	Transmission General	Transmission General	65.54% 68.27%	0.00%	-	107	-	755	-	(136)	121	220	-	220
Rosentrater	Mandatory & Compliance	Mandatory & Complian Saddle Mor	untain 230/115kV Station (New) Integration	ED	AN	Transmission	Transmission	65.54%	0.00%	464,931	1,990	29,751	8,852,611	361,347	469	-	-	5,107,542	7,125
Rosentrater			untain 230/115kV Station (New) Integration		WA	E Distribution	E Distribution	100.00%	0.00%	-	-	1,494	4,563,829	56,793	3,691,488	42,732	8,976	429	-
Rosentrater Kensok		Mandatory & Complian Saddle Mon Mandatory & Complian Security Co	untain 230/115kV Station (New) Integration		WA AA	General Hardware	General Hardware	100.00% 47.78%	0.00% 15.09%	-	-	169.481	169.481	-	-	-	-	-	-
Thackston	Mandatory & Compliance	Mandatory & Complian Spokane R	River License Implementation	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	7,033	43,063	32,886	107,452	16,038	-	-	-	-	-
Rosentrater			/alley Transmission Reinforcement Project		AN	General	General	65.54%	0.00%	-	-	-		-	-				-
Rosentrater Rosentrater			'alley Transmission Reinforcement Project 'alley Transmission Reinforcement Project		AN WA	Transmission E Distribution	Transmission E Distribution	65.54% 100.00%	0.00%	(186,687)	107	48,840	2,552,410 485,353	18,135	5,872	1,041	4,044	148	1,623,721 446,770
Rosentrater			/alley Transmission Reinforcement Project		WA	General	General	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-

	-								34,417,983	32,090,208	55,425,725	505,328,919	12,135,677	16,135,120	16,506,773	20,115,706	55,611,144	24,469,623
Witness	Plant Group for Testimony Purposes		Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	Oct 2022 - System	Nov 2022 - System	Dec 2022 - System	2022 TOTAL - System	2022	WA - Electric Feb 2022	WA - Electric Mar 2022	WA - Electric Apr 2022	WA - Electric May 2022	VA - Electric Jun 2022
Rosentrater Rosentrater	Mandatory & Compliance	Mandatory & Complian Transmission Construction - Compliance Mandatory & Complian Transmission Construction - Compliance	CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09% 0.00%	1.009	681	3.256.172	(1,058) 3.354.787	(506) 24,589	84,831	1.221	2.055	(56,192)	2.128
Rosentrater		Mandatory & Complian Transmission Construction - Compliance  Mandatory & Complian Transmission Construction - Compliance	FD	WA	F Distribution	F Distribution	100.00%	0.00%	1,009	001	434 291	3,354,767	24,309	04,031	329.643	8.318	(50,192)	2,120
Rosentrater		Mandatory & Complian Transmission NERC Low-Risk Priority Lines Mitigation		AN	Transmission	Transmission	65.54%	0.00%	6,611	7,240	5,345	1,146,219		-	527,045	-		-
Rosentrater		Mandatory & Complian Tribal Permits & Settlements	ED	AN	Transmission	Transmission	65.54%	0.00%	-	-	-	91,902	-	-	-	60,232	-	-
Rosentrater		Mandatory & Complian Tribal Permits & Settlements	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-	-	-	(3,737)	-	-	-	-	-	-
Rosentrater Rosentrater		Mandatory & Complian Westside 230/115kV Station Brownfield Rebuild Pro Mandatory & Complian Westside 230/115kV Station Brownfield Rebuild Pro		AN AN	General Transmission	General Transmission	65.54% 65.54%	0.00%	546.795	55.855	2.689.784	3.292.230	15.551		54.564	70.473	1.859	(149.254)
Rosentrater		Mandatory & Complian WSDOT Control Zone Mitigation	ED	WA	E Distribution	E Distribution	100.00%	0.00%	106.894	9.060	48.705	929.099	22.123	2.070	24.983	13.983	100.527	212.430
Thackston		Mandatory & Complian WSDOT Franchises	ED	WA	Intangible	Intangible	100.00%	0.00%	-	-	826	12,960	1,200	-	-		-	-
Rosentrater	Large Distinct Projects	No Driver Spokane Smart Circuit	ED	WA	E Distribution	E Distribution	100.00%	0.00%					ž.,					
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit; Basic Workplace Technology Delivery Performance & Capacit; Basic Workplace Technology Delivery	CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	37,992 37,992	26,046 26,046	163,344 163,345	522,076 522.077	744 744	11,982 11,982	12,442 12,442	12,458 12,458	17,663 17,663	27,382 27,382
Kensok	Short-Lived Assets	Performance & Capacit Basic Workplace Technology Delivery	CD	AA	Hardware	Hardware	47.78%	15.09%	75.984	52.091	326.689	1.050.632	1.587	24,963	26,451	24,910	35.733	54,793
Rosentrater	Other	Performance & Capacit Campus Repurposing Phase 2	CD	AA	General	General	47.78%	15.09%	12		-	12	-			-,,		
Kensok	Short-Lived Assets	Performance & Capacit: Control and Safety Network Infrastructure	CD	AA	General	General	47.78%	15.09%	-	-	1,151,476	1,259,128	-	-	-	8,268	42,578	595
Thackston Kensok	Large Distinct Projects Short-Lived Assets	Performance & Capacit Coyote Springs LTSA  Performance & Capacit Data Center Compute and Storage Systems	ED CD	AN AA	Production - Other 5 Yr Software	Production - Other Software	65.54% 47.78%	0.00% 15.09%	1 710	243 129	35 361	649 324	3 338	10.827	12 990	9.049	17 392	62 218
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Data Center Compute and Storage Systems  Performance & Capacit Data Center Compute and Storage Systems	CD	AA AA	5 Yr Sortware Hardware	Sottware Hardware	47.78%	15.09%	655,151	243,129	35,361	695.004	3,338	4.793	12,990 5,068	4.142	17,392	62,218 899
Kensok	Short-Lived Assets	Performance & Capacit Data Center Compute and Storage Systems	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	191,050	-	99,324	10,481	8,355	7,018	37
Kensok	Large Distinct Projects	Performance & Capacit Digital Grid Network	CD	AA	5 Yr Software	Software	47.78%	15.09%		-	-	507	237	206	(629)	123	132	36
Kensok	Large Distinct Projects	Performance & Capacit Digital Grid Network	CD	AA	General	General	47.78%	15.09%	-	-	-	171,088	2,463	68,044	(784)	1,696	3,801	3,865
Kensok	Large Distinct Projects	Performance & Capacit Digital Grid Network	CD	AN WA	General	General	52.71% 77.22%	16.61% 22.78%		572 102	1,705,318	1,705,318			-	-	-	
Kensok Kensok	Large Distinct Projects Large Distinct Projects	Performance & Capacit Digital Grid Network Performance & Capacit Digital Grid Network	CD	WA	General Hardware	General Hardware	77.22%	22.78%		34.263	8,223 492	580,325 34,755						
Kensok	Large Distinct Projects	Performance & Capacit Digital Grid Network	ED	WA	E Distribution	E Distribution	100.00%	0.00%		18,293	1,359	19.652						
Rosentrater	Programs	Performance & Capacit Distribution System Enhancements	ED	AN	Transmission	Transmission	65.54%	0.00%	-		-	(0)	(0)	-	-			
Rosentrater	Programs	Performance & Capacit Distribution System Enhancements	ED	ID	E Distribution	E Distribution	0.00%	0.00%	863,840	205,578	160,513	3,610,020	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit Distribution System Enhancements	ED	WA	E Distribution	E Distribution	100.00%	0.00%	92,797	7,645	935	3,615,436	44,962	1,586,770	260,628	251,439	30,507	713,893
Rosentrater Kensok	Programs Short-Lived Assets	Performance & Capacit Downtown Network - Performance & Capacity Performance & Capacit Endpoint Compute and Productivity Systems	ED CD	WA AA	E Distribution 3 Yr Software	E Distribution Software	100.00% 47.78%	0.00% 15.09%	66,918 818	53,988 145,432	2,579 58.215	358,877 2 574 972	11,426 (862)	65,961 883 501	23,014	31,693 (16.839)	6,669 74.848	6,539
Kensok	Short-Lived Assets	Performance & Capacit Endpoint Compute and Productivity Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	(4.411)	31.988	48.607	426.597	678	26.422	5.770	2.020	4.669	84.193
Kensok	Short-Lived Assets	Performance & Capacit Endpoint Compute and Productivity Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	32,410	84,720	(191,111)	2,347,752	(4,029)	46,055	2,656	3,030	(93,955)	1,764
Kensok	Short-Lived Assets	Performance & Capacit Endpoint Compute and Productivity Systems	ED	AN	3 Yr Software	Software	68.27%	0.00%	922	5,287	7,737	163,711	76,646	1,930	1,808	749	7,947	2,435
Kensok	Short-Lived Assets	Performance & Capacit Endpoint Compute and Productivity Systems	ED	AN	Hardware	Hardware	68.27%	0.00%	1,126	6,462	9,456	200,091	93,678	2,359	2,209	916	9,713	2,976
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie Performance & Capacit Energy Delivery Modernization & Operational Efficie		AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	33,800 10.293	273,718 501.534	76,042 338.498	4,155,156 2,251,724	888,196 128,968	3,871 9,624	3,526 3.650	1,714 7,555	1,012 5,959	569 2.126
Kensok	Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie		AA	Hardware	Hardware	47.78%	15.09%	488	1.742	1,337	51,777	120,700	7,024	3,030	7,555	3,737	1,065
Kensok	Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie		AN	5 Yr Software	Software	65.54%	0.00%	-		-			-	-			-
Kensok	Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie		AN	5 Yr Software	Software	68.27%	0.00%	10,228	29,033	6,004	623,427	12,352	8,157	78,515	18,365	2,711	(12,315)
Kensok	Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie		AN	Hardware	Hardware	68.27%	0.00%	2,098	1,681	817	117,576			16,670	4,464	446	(317)
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Energy Delivery Modernization & Operational Efficie Performance & Capacit Energy Delivery Modernization & Operational Efficie		WA	5 Yr Software Hardware	Software Hardware	100.00% 100.00%	0.00%	•	1,668 1,668	226,891 413,080	678,794 884,274	115,279 57.063	136,202 67,420	76 37	76 38	-	(73,183) 73,183
Kinney	EIM	Performance & Capacit Energy Imbalance Market	CD	AA	General	General	47.78%	15.09%	(5,067)	1,000	413,000	25.837	1,217	1.341	2.645	4.320	1,441	847
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	AN	5 Yr Software	Software	65.54%	0.00%	-	-	-			-	-			-
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	10,595,092	-	-	6,384,686	325,885	276,347	137,436
Kinney	EIM FIM	Performance & Capacit Energy Imbalance Market	ED ED	AN AN	General	General	65.54% 68.27%	0.00%	-	-	-	2.960		-	1,705	- 119	132	40
Kinney Kinney	FIM	Performance & Capacit; Energy Imbalance Market Performance & Capacit; Energy Imbalance Market	FD	AN	General Hardware	General Hardware	68.27%	0.00%				202,019			81,710	3,900	6,205	45,796
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%				202,017			-	5,700	-	40,770
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	AN	Production - Other	Production - Other	65.54%	0.00%		-								
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	AN	Transmission	Transmission	65.54%	0.00%	-			9,453		4,802	1,308	85		
Kinney Kinney	EIM FIM	Performance & Capacit Energy Imbalance Market Performance & Capacit Energy Imbalance Market	ED ED	ID ID	E Distribution General	E Distribution General	0.00%	0.00%		-	-	-			-	-	-	-
Kinney	EIM	Performance & Capacit Energy Imbalance Market  Performance & Capacit Energy Imbalance Market	FD	MT	E Distribution	E Distribution	0.00%	0.00%										
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	MT	General	General	0.00%	0.00%										
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-	2,811	-	2,231	580	-	-	-
Kinney	EIM	Performance & Capacit Energy Imbalance Market	ED	WA	General	General	100.00%	0.00%	-	-		-		-		-	-	
Kinney Kensok	NEW (Actuals) Short-Lived Assets	Performance & Capacit Energy Imbalance Market Modernization & Operation Performance & Capacit Energy Resources Modernization & Operational Effice		AN AA	5 Yr Software 3 Yr Software	Software Software	68.27% 47.78%	0.00% 15.09%	-	-	485,829	485,829 (660)	645	(961)	-	-	-	-
Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic Performance & Capacit Energy Resources Modernization & Operational Efficiency		AA AA	5 Yr Software 5 Yr Software	Software Software	47.78%	15.09%	18,180	75,173	218,627	1.061.148	94.186	27,202	42,767	31,927	29,827	38.980
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic		AA	Hardware	Hardware	47.78%	15.09%	-		6,339	13,686	3,500	11				-
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Efficiency	i ED	AN	2 Yr Software	Software	68.27%	0.00%	-	-	-	-	-			-	-	
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic		AN	3 Yr Software	Software	65.54%	0.00%	-	-	-			-		-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic Performance & Capacit Energy Resources Modernization & Operational Effic		AN AN	3 Yr Software 5 Yr Software	Software Software	68.27% 65.54%	0.00%	-	-	-	1,895	478	816	-	-	-	-
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic Performance & Capacit Energy Resources Modernization & Operational Effic		AN	5 Yr Software	Software	68.27%	0.00%	-	10,121	1,117,885	1,194,840	42	-	831	-	44,751	-
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic		AN	Hardware	Hardware	65.54%	0.00%	-		-		-	-	-			-
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Efficiency	i ED	AN	Hardware	Hardware	68.27%	0.00%	-	-	-	(65,239)	10	•	204	-	(44,751)	•
Kensok	Short-Lived Assets	Performance & Capacit Energy Resources Modernization & Operational Effic		AA	5 Yr Software	Software	0.00%	47.36%	-	-	-	-		-		-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit; Energy Resources Modernization & Operational Effic Performance & Capacit; Energy Resources Modernization & Operational Effic		AA AA	5 Yr Software Hardware	Software Hardware	0.00%	50.19% 47.36%	-	-	-	-	-	-		-	-	-
Kensok Kensok	Programs	Performance & Capacit Energy Resources Modernization & Operational Effic Performance & Capacit Enterprise & Control Network Infrastructure	CD	AA AA	3 Yr Software	Software	47.78%	47.36% 15.09%				109.830	-	-			52.482	
Kensok	Programs	Performance & Capacit Enterprise & Control Network Infrastructure	CD	AA	5 Yr Software	Software	47.78%	15.09%	-	-	-	(97,756)	1,354	773	604	751	(51,475)	32
Kensok	Programs	Performance & Capacit Enterprise & Control Network Infrastructure	CD	AA	General	General	47.78%	15.09%	14,056	50,328	478,886	3,798,195	21,993	23,109	149,806	201,443	20,323	711,938
Kensok	Programs	Performance & Capacit Enterprise & Control Network Infrastructure	CD	AA	Hardware	Hardware	47.78%	15.09%	486	456	-	93,236	4,740	10,250	8,668	3,615	6,471	3,430
Kensok Kensok	Programs Short-Lived Assets	Performance & Capacit; Enterprise & Control Network Infrastructure Performance & Capacit; Enterprise Communication Systems	ED CD	AN AA	Transmission 1 Yr Software	Transmission Software	65.54% 47.78%	0.00% 15.09%	914	(619.752)	-	1,327	(17) 179,000	375 21.733	400 24,927	112 39.892	6,247	17,238
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Enterprise Communication Systems Performance & Capacit Enterprise Communication Systems	CD	AA AA	1 Yr Software 3 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	914 25.000	(619,752) 149,528	182.944	1.577.614	179,000	21,733	24,927	39,892	6,247	17,238 88.019
Kensok	Short-Lived Assets	Performance & Capacit Enterprise Communication Systems  Performance & Capacit Enterprise Communication Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	25,000	619,787	396,437	1,038,302	(73,589)	24,283	38,086	8,344	7,892	996
Kensok	Short-Lived Assets	Performance & Capacit Enterprise Communication Systems	CD	AA	General	General	47.78%	15.09%	39,353	16,431	15,970	765,529	82,053	1,092	9,315	5,747	6,400	656
Kensok	Short-Lived Assets	Performance & Capacit Enterprise Communication Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	1,178	3,961	555,811	885,915	(3,102)	320	34	-	2,198	195,229
Kensok Kensok	Short-Lived Assets Programs	Performance & Capacit; Enterprise Network Infrastructure Performance & Capacit; Environmental Control & Monitoring Systems	CD	AA AA	General General	General General	47.78% 47.78%	15.09% 15.09%	6,629 56,198	15,967 80.552	13,273 25.436	363,051 760.849	767	2.610	6.297	22.537	132,025 3,964	4,318 36.819
Kensok	Programs	Performance & Capacit Environmental Control & Monitoring Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	76,103	1,940	1,986	80,029	-	2,010	0,297		3,704	30,017

										34,417,983	32,090,208	55,425,725	505,328,919	12,135,677	16,135,120	16,506,773	20,115,706	55,611,144	24,469,623
	Plant Group for	Primary			Jurisdic	Depreciation	Ser.Jur.Allocatio	WA - E -	WA - G -	Oct 2022 -	Nov 2022 -	Dec 2022 -	2022 TOTAL -	WA - Electric Jan	WA - Electric Feb	WA - Electric Mar	WA - Electric Apr	WA - Electric May	WA - Electric Jun
Witness	Testimony Purposes	Investment Driver	Project (Business Case)	Service	tion	Category	n Category	Allocation %	Allocation %	System	System	System	System	2022	2022	2022	2022	2022	2022
Kensok	Short-Lived Assets		t ET Modernization & Operational Efficiency - Technology		AA	2 Yr Software	Software	47.78%	15.09%	-	- '	- '	67,003		-		-		-
Kensok	Short-Lived Assets		t ET Modernization & Operational Efficiency - Technology		AA	3 Yr Software	Software	47.78%	15.09%	14,414	138,516	114,439	268,643	225	261	78	45	-	-
Kensok	Short-Lived Assets		t ET Modernization & Operational Efficiency - Technology		AA	5 Yr Software	Software	47.78%	15.09%	(134)	796	589,210	1,072,876	2,014	18,579	4,130	598	50,547	74,094
Kensok	Short-Lived Assets		t ET Modernization & Operational Efficiency - Technol		AA	Hardware	Hardware	47.78%	15.09%	-	-	-	(94,283)	633	3,835	906	80	(50,547)	40
Kensok	Short-Lived Assets		t ET Modernization & Operational Efficiency - Technology		AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	7,721	-	5,271		-		
Kensok	Programs		t Fiber Network Lease Service Replacement	CD	AA	General	General	47.78%	15.09%	-	-	-	-	-	-	-	-	-	-
Kensok	Programs		t Fiber Network Lease Service Replacement	ED	AN	Transmission	Transmission	65.54%	0.00%	388	753	282,099	687,525	264	817	64,277	7,732	783	161,290
Kensok	Short-Lived Assets			CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	-	22,028	(49)	1,429	1,211	· ·	7,935	-
Kensok	Short-Lived Assets		t Financial & Accounting Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	-	-	715,027	1,329,059	17,126	31,576	30,335	(12,776)	5,194	189,563
Kensok	Short-Lived Assets		t Financial & Accounting Technology	CD	AA	Hardware	Hardware	47.78%	15.09%				(8,506)	273	588	553	(285)	(5,194)	
Rosentrater	Programs		t Gas Airway Heights HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	7,326,944	197,195	343,641	7,867,781				-		
Rosentrater	Large Distinct Projects		t Gas Cheney HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-			-	-	-	
Rosentrater	Large Distinct Projects		t Gas Operator Qualification Compliance	CD	WA	Transportation	Transportation	77.22%	22.78%	-	-	-	-			-	-	-	
Rosentrater	Large Distinct Projects		t Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	47.36%	-	-	-		-	-		-		-
Rosentrater	Large Distinct Projects		t Gas Operator Qualification Compliance t Gas Operator Qualification Compliance	GD GD	AA AN	General Transportation	General Transportation	0.00%	50.19% 72.92%	-	-		5,750 106.729	•		-	-		
Rosentrater	Large Distinct Projects											-		-	-		-		-
Rosentrater	Programs		t Gas Reinforcement Program t Gas Reinforcement Program	GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	32,892 28.854	21,547 18.947	33.056	67,436 1,269,441	•		-	-		
Rosentrater	Programs			GD					100.00%	28,854	31,379			-	-		-		-
Rosentrater	Programs		t Gas Reinforcement Program t Gas Telemetry Program	GD	WA AN	G Distribution General	G Distribution General	0.00%	72.92%	4.169		17,477	555,256 4.169				-		
Rosentrater	Programs			GD	AN ID		General G Distribution			4,169	-	-	4,169	-	-		-		-
Rosentrater	Programs		t Gas Telemetry Program t Gas Telemetry Program	GD	OR	G Distribution G Distribution	G Distribution	0.00%	0.00%			-	1.650				-		-
Rosentrater	Programs			GD	WA	G Distribution	G Distribution G Distribution	0.00%	100.00%		11 (20		13,558	-	-		-		-
Rosentrater	Programs NEW (Actuals)		t Gas Telemetry Program t Gas Warden HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	12.656	11,628		202.293				-		
Rosentrater Kensok	NEW (Actuals) Short-Lived Assets		t Gas warden HP Keinforcement t Human Resources Technology	CD	AA.	3 Yr Software	Software	47.78%	15.09%	3,792	5.340	33.308	202,293 160,280	1.308	1.690	6.598			
Kensok	Short-Lived Assets		t Human Resources Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,192	5,340	222.010	224.566	(197)	1,281	0,090	39	98	
Rosentrater	Large Distinct Projects		t Jackson Prairie Joint Proiect	GD	AN	Gas Storage	Gas Storage	0.00%	68.81%	254.158	210.473	260.490	2.135.267	(197)	1,201		24	90	
Rosentrater	Large Distinct Projects		t Jackson Prairie Joint Project t Jackson Prairie Joint Project	GD	OR	Gas Storage	Gas Storage Gas Storage	0.00%	0.00%	27,146	210,473	27,822	2,135,267						
Kensok	Large Distinct Projects		t Jackson Prairie Joint Project t Land Mobile Radio & Real Time Communication Syst		AA	5 Yr Software	Software	47.78%	15.09%	(34)	22,400	21,022	16.279				-		17
Kensok	Large Distinct Projects		t Land Mobile Radio & Real Time Communication Syst		AA	General	General	47.78%	15.09%	(694)	32,213	8.380	256.905	1,205	4,255	6,244	2.830	3,551	1,314
Kensok	Large Distinct Projects		t Land Mobile Radio & Real Time Communication Syst		AA	Hardware	Hardware	47.78%	15.09%	(094)	32,213	0,300	256,905	1,205	4,255	0,244	2,030	3,551	1,314
Kensok	Large Distinct Projects		t Land Mobile Radio & Real Time Communication Syst		AA	Transportation	Transportation	47.78%	15.09%	-	-	-	26.332	-	10.873	1.707		-	-
Kensok	Short-Lived Assets			CD	AA	5 Yr Software	Software	47.78%	15.09%	(2)	359	155.664	506.999	30	283	1,707	3		166,430
Kensok	Short-Lived Assets		t Legal & Compliance Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	(2)	337	133,004	300,777	30	203				100,430
Kensok	Short-Lived Assets		t Legal & Compliance Technology	CD	WA	5 Yr Software	Software	77.22%	22.78%	-	-	48.002	48.002	-	-	-	-	-	-
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AA	General	General	47.78%	15.09%	-	-	40,002	40,002		-	-	-	-	-
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AN	E Distribution	E Distribution	63.66%	0.00%				252		22			138	
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AN	E Distribution	E Distribution	65.54%	0.00%									-	
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AN	General	General	65.54%	0.00%										
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AN	General	General	68.27%	0.00%			3.039	5.202		96	787		594	
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		AN	Transmission	Transmission	65.54%	0.00%		53	12.158	1.279.662		- 70	18.142		374	804,365
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		ID.	E Distribution	E Distribution	0.00%	0.00%		53	12,150	1,180,456			10,142			004,000
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		ID	General	General	0.00%	0.00%	10.830	7.647	2.450	20,926						
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		WA	E Distribution	E Distribution	100.00%	0.00%	50	(769.215)	1.330.412	1.764.733	12.101	64	(560)	52.688	1.439	136.171
Rosentrater	Programs		t Substation - New Distribution Station Capacity Progr		WA	General	General	100.00%	0.00%	7.227	571	7.684	15.655	132	1	6	10	11	14
Magalsky	Programs		t Electric Transportation	ED	WA	E Distribution	E Distribution	100.00%	0.00%	719.027	84.182	274.732	1.997.584	37.876	190.392	92.945	56.587	123.738	97.794
Rosentrater	Large Distinct Projects	No Driver		ED	AN	5 Yr Software	Software	68.27%	0.00%	,	,.02		(557)	,570	(46,778)		5,292	1.831	,,,,,
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	WA	E Distribution	E Distribution	100.00%	0.00%	_	_	-	559.645	92.285	11.026	916	334.120	700.000	114.159
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	WA	General	General	100.00%	0.00%		_		(3,230)	(3.230)	,020	-		,000	,
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - South Landing (Catalyst) - Clea		WA	E Distribution	E Distribution	100.00%	0.00%	2.969	_	-	1.958.548	451		-	1.855.735	374.325	19,718
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Real Time Power System Simul		AN	General	General	65.54%	0.00%	-,.07	_		.,,		_		1,000,700	,525	,,,,
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Real Time Power System Simul		AN	General	General	68.27%	0.00%	_	_	-	2.529	1.727		-	_		
Thackston	Mandatory & Compliance		Strategic Initiatives - Upriver Park	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	1.005	_		3.823.802	.,,,,,	_		2.290.095	174.287	11.700
HULKSTOIT	manatory a compliance	NO DIIVEI	Surregio initiatives - upriver raik	LU	4-11A	r roadction - right	Judiction - Hydro	03.34%	0.0076	1,005			3,023,002				2,270,095	174,207	11,700

										13,011,700	12,322,684	33,105,070	12,370,375	13,838,284	29,043,837	258,665,992	2,637,488	2,267,598
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Sarvica	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Electric Jul 2022	WA - Electric Aug	WA - Electric Sep 2022	WA - Electric Oct 2022	WA - Electric Nov 2022	WA - Electric Dec V	VA - Electric 2022 TOTAL	WA - Natural Gas Jan 1	WA - Natural Gas Feb 2022
nsok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	3 Yr Software	Software	47.78%	15.09%	(551,434)	7,201	4,843	4,757	138,524	314,524	(56,453)	(27,552)	9,416
nsok nsok	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	Atlas Atlas	CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	774,115	-		-		-	774,115		
ensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	Hardware	Hardware	47.78%	15.09%	(7,589)	-	-	-	-	-	(6,932)	(529)	193
hackston hackston	Programs Programs	Asset Condition Asset Condition	Base Load Hydro Base Load Hydro	CD ED	AA AN	Hardware General	Hardware General	47.78% 68.27%	15.09% 0.00%	-	-	-	-	-	-	2,701 6,557	-	
nackston	Programs	Asset Condition	Base Load Hydro	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	1,771	977	27,239	41,867	884	132,005	408,916	-	-
nackston nackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Cabinet Gorge 15 kV Bus Replacement Cabinet Gorge Unit 3 Protection & Control Upgrade	ED	AN AN	Production - Hydro Production - Hydro	Production - Hydro Production - Hydro	65.54% 65.54%	0.00%	82	-	-	-	-	-	8,598 (553)	-	-
nackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade		AA	General	General	47.78%	15.09%			-	-	-	-	7,286	2,272	- 9
nackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade	ED FD	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	1,244	1,027	4,284	67	-	-	2,161,182	-	-
hackston osentrater	Large Distinct Projects Programs	Asset Condition Asset Condition	Cabinet Gorge Unwatering Pumps Capital Tools & Stores	CD	AN AA	Production - Hydro General	Production - Hydro General	65.54% 47.78%	0.00% 15.09%	23.612	37.381	83.289	8.471	10.951	28.986	337.596	-	5.064
osentrater	Programs	Asset Condition	Capital Tools & Stores	CD	AN	General	General	52.71%	16.61%	-	9,347	-	-	21,168	39,372	95,673	-	1,684
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	943	-	6.334	-	29.149	48,205	85,171	159	-
osentrater	Programs	Asset Condition	Capital Tools & Stores	ED	AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	ED ED	AN ID	General General	General General	68.27%	0.00%	36,903	3,591	22,398	9,287	40,159	-	222,171	-	-
osentrater	Programs	Asset Condition	Capital Tools & Stores	ED	WA	General	General	100.00%	0.00%	11,066	21,944	24,477	36,794	25,464	10,767	273,073	-	-
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD GD	AA AA	General General	General General	0.00%	47.36% 50.19%	-	-	-	-	-	-	-	-	-
osentrater	Programs	Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD	ID	General	General	0.00%	0.00%			-	-	-	-			
osentrater	Programs	Asset Condition	Capital Tools & Stores	GD GD	OR WA	General	General	0.00%	0.00%	-	-	-	-	-	-	-	480	
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Distribution Grid Modernization	GD ED	AN AN	General General	General General	0.00% 65.54%	100.00%	-	-	-	-	-	-	-	480	4,316
osentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
losentrater losentrater	Programs Programs	Asset Condition Asset Condition	Distribution Grid Modernization Distribution Grid Modernization	ED ED	ID WA	General E Distribution	General E Distribution	0.00% 100.00%	0.00%	162,322	59,605	54,034	398,708	226,308	371,530	2,667,115	-	-
tosentrater	Programs	Asset Condition	Distribution Grid Modernization  Distribution Minor Rebuild	ED	ID	E Distribution	E Distribution	0.00%	0.00%	102,322	59,005	54,034	390,706	220,300	3/1,530	2,007,115		
losentrater	Programs	Asset Condition	Distribution Minor Rebuild	ED	MT	E Distribution	E Distribution	0.00%	0.00%								-	-
losentrater losentrater	Programs Large Distinct Projects	Asset Condition Asset Condition	Distribution Minor Rebuild Distribution Transformer Change Out Program	ED ED	WA ID	E Distribution E Distribution	E Distribution E Distribution	100.00%	0.00%	528,819	600,022	660,148	645,385	636,657	733,033	9,049,949	-	-
osentrater	Large Distinct Projects	Asset Condition	Distribution Transformer Change Out Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-	-	-	-	-	-	-
losentrater	Programs	Asset Condition Asset Condition	Downtown Network - Asset Condition Fleet Services Capital Plan	ED CD	WA AA	E Distribution	E Distribution	100.00% 47.78%	0.00% 15.09%	157,003	195,985	652,565	232,974	89,658	56,878	1,826,049 (571)	-	-
losentrater losentrater	Programs Programs	Asset Condition	Fleet Services Capital Plan	CD	AA	General Transportation	General Transportation	47.78%	15.09%			-	-	-	-	(962)		-
losentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN	General	General	52.71%	16.61%	- 49					-	14,782	-	-
losentrater losentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD	AN ID	Transportation Transportation	Transportation Transportation	52.71% 0.00%	16.61%	49	59,187	5,581	3,570	1,097	-	184,844	-	-
osentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	WA	Transportation	Transportation	77.22%	22.78%	2,966	-		-		-	40,938		
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED ED	AN AN	General Transportation	General Transportation	68.27% 65.54%	0.00%	-	-	•		-	-	47,649	-	•
osentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	AN	Transportation	Transportation	68.27%	0.00%	66,210	225,391	5,879	36,629	-	-	997,628		-
osentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	ID	Transportation	Transportation	0.00%	0.00%	-	-	-	-	-	-		-	-
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED GD	WA AN	Transportation Transportation	Transportation Transportation	100.00%	0.00% 68.81%	(198)	-	-	7,974	153,605	-	1,789,060	-	-
osentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	AN	Transportation	Transportation	0.00%	72.92%	-	-	-	-	-	-	-	-	-
tosentrater tosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD GD	ID OR	Transportation Transportation	Transportation Transportation	0.00%	0.00%	-	-	-	-	-	-	-	-	-
losentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	WA	Transportation	Transportation	0.00%	100.00%			-	-	-	-			-
losentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
losentrater losentrater	NEW (Actuals) NEW (Actuals)	Asset Condition Asset Condition	Gas ERT Replacement Program Gas ERT Replacement Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
tosentrater	Programs	Asset Condition	Gas Regulator Station Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
losentrater losentrater	Programs Programs	Asset Condition Asset Condition	Gas Regulator Station Replacement Program Gas Regulator Station Replacement Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00% 100.00%	-	-	-	-	-	-	-	2,094	14,662
hackston	Large Distinct Projects	Asset Condition	Generation DC Supplied System Update	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			-	-	-	339	12,116	2,094	14,002
hackston	Short-Lived Assets Short-Lived Assets	Asset Condition	HMI Control Software HMI Control Software	CD	AA	5 Yr Software	Software	47.78% 47.78%	15.09% 15.09%	133 448	104 350	74 248	33	163,134	3,463	169,158 173,477	164 552	170 571
hackston hackston	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	HMI Control Software HMI Control Software	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	448 1,313	350 1,026	248 727	110 321	160,959 163,134	3,931 5,382	173,477 193,705	552 1,618	1,675
hackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-	-	1,656,116	1,656,116		-
hackston hackston	Short-Lived Assets Large Distinct Projects	Asset Condition Asset Condition	HMI Control Software KF_Fuel Yard Equipment Replacement	ED ED	AN AN	Production - Hydro General	Production - Hydro General	65.54% 68.27%	0.00%	-	-	167,970	10,296	44,026	31,942 18,412	31,942 240,703	-	-
hackston	Large Distinct Projects	Asset Condition	KF_Fuel Yard Equipment Replacement	ED	AN	Production - Thermal	Production - Therm	65.54%	0.00%			19,382,774	(29,032)	457,661	352,695	20,164,098		-
losentrater	Programs	Asset Condition	LED Change-Out Program	ED	ID	E Distribution	E Distribution	0.00%	0.00%						-		-	-
losentrater hackston	Programs Large Distinct Projects	Asset Condition Asset Condition	LED Change-Out Program Little Falls Plant Upgrade	ED ED	WA AN	E Distribution Production - Hydro	E Distribution Production - Hydro	100.00% 65.54%	0.00%	6,565	7,550	16,496	13,800	13,658	12,516	145,063	-	
hackston	Large Distinct Projects	Asset Condition	Long Lake Plant Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-	-	-	11,224	-	-
osentrater hackston	Other Large Distinct Projects	Asset Condition Asset Condition	New Dollar Road Service Center Nine Mile Powerhouse Crane Rehab	GD ED	WA AN	General Production - Hydro	General Production - Hydro	0.00% 65.54%	100.00%	-	-	-	-	650.985	16,730	667.715	-	-
hackston	Large Distinct Projects	Asset Condition	Post Falls Landing and Crane Pad Development	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%						10,730	92,983		
losentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED	ID	E Distribution	E Distribution	0.00%	0.00%					1			-	-
tosentrater hackston	Large Distinct Projects Programs	Asset Condition Asset Condition	Primary URD Cable Replacement Regulating Hydro	ED CD	WA AA	E Distribution General	E Distribution General	100.00% 47.78%	0.00% 15.09%	3,403	4,422	1,778	1,899	988 1,507	1,118	24,062 1,507	-	
hackston	Programs	Asset Condition	Regulating Hydro	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-	-
hackston	Programs	Asset Condition	Regulating Hydro	ED	AN	General	General	65.54% 68.27%	0.00%	-	1.541	-	-	-	-	10.201	-	-
hackston hackston	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	ED ED	AN AN	General Production - Hydro	General Production - Hydro	65.54%	0.00%	(54,953)	(31,473)	90,577	115,403	206,972	903,423	1,644,489		
hackston	Programs	Asset Condition	Regulating Hydro	ED	AN	Transmission	Transmission	65.54%	0.00%	- "		-	-	-	-	56,184	-	-
hackston osentrater	Programs Programs	Asset Condition Asset Condition	Regulating Hydro SCADA - SOO and BuCC	CD	AN AA	Transportation 3 Yr Software	Transportation Software	68.27% 47.78%	0.00% 15.09%	(1,357)	-		-		33,631	33,631 35,746		
osentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	5 Yr Software	Software	47.78%	15.09%	(1,337)	8,255	-		392	3,877	56,114		-
tosentrater tosentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC SCADA - SOO and BuCC	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	- 2 839	27,742 8.254	210 1 776	1,218 4 905	74,140 1 902	153 9.106	103,463 53,395	141	-
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and Bucc SCADA - SOO and Bucc	ED		5 Yr Software	Hardware Software	47.78% 68.27%	15.09%	2,839 2,985	8,254 2,692	1,776	4,905	1,902	9,106	53,395 181,218	141	-
osentrater	Programs	Asset Condition	SCADA - SOO and BuCC	ED	AN	Hardware	Hardware	68.27%	0.00%	1,662	1,499	988	-	-	-	100,906	-	=
osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	(0) 79 700	3.753	28,161 4,316	20,144 5,758	826,004 23,168	153,953 56,551	2,003,571 373,941	275,216 369	29,971 2,940
	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	AN	General	General	52.71%	16.61%	79,700	3,753 176	4,316 2,356	5,758	23,108	180,930	183,679	209	2,940
losentrater									0.00%									
osentrater osentrater osentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	-	-	13,675	113	-	11,491	40,159	4,390	

										13,011,700	12,322,684	33,105,070	12,370,375	13,838,284	29,043,837	258,665,992	2,637,488	2,267,598
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Electric Jul 1	WA - Electric Aug 2022	WA - Electric Sep	WA - Electric Oct 2022	WA - Electric Nov 2022	WA - Electric Dec V	NA - Electric 2022 TOTAL	WA - Natural Gas Jan 2022	WA - Natural Gas Feb 2022
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED	AN	General	General	68.27%	0.00%		- LOLL	-	-	-	-	37,508	-	
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	ED ED	ID WA	General E Distribution	General E Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED	WA	General	General	100.00%	0.00%		-	-	-	70,207	88,206	158,413	-	
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	GD	OR	General	General	0.00%	0.00%	-	-	-	-	-	-	-		-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Substation - Station Rebuilds Program	GD ED	WA AN	General General	General General	0.00% 65.54%	100.00%		-	-	-	-	-		22,915	-
Rosentrater	Programs	Asset Condition	Substation - Station Rebuilds Program	ED	AN	General	General	68.27%	0.00%	-	42,366	-	-	-	-	78,571	-	-
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Substation - Station Rebuilds Program Substation - Station Rebuilds Program	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	130,707	332,311	41,145	44,038	5,513	2,682,605	3,600,848	-	•
Rosentrater	Programs Programs	Asset Condition Asset Condition	Substation - Station Rebuilds Program Substation - Station Rebuilds Program	ED	WA	E Distribution  E Distribution	E Distribution	100.00%	0.00%	89.441	368.307	13.898	20.772		67.384	4.213.037	-	
Kensok	Short-Lived Assets	Asset Condition	Technology Refresh to Sustain Business Process	CD	AA	General	General	47.78%	15.09%	-	-	-		-				
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Telematics 2025 Telematics 2025	CD CD	AA AA	3 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	51	-	•	76,948	1,772	- 298	27,692 46,927	8,308 17,329	219 (30,982)
Rosentrater	Programs	Asset Condition	Transmission - Minor Rebuild	ED	AN	Transmission	Transmission	65.54%	0.00%	3,090	212,094	6,378	874,132	90,255	989,854	2.407.480	- 17,329	(30,902)
Rosentrater	Large Distinct Projects	Asset Condition	Transmission Major Rebuild - Asset Condition	ED	AN	Transmission	Transmission	65.54%	0.00%	1,492	1,099	(98,458)		-	-	2,282,773	•	•
Rosentrater Rosentrater	Large Distinct Projects Programs	Asset Condition Asset Condition	Transmission Major Rebuild - Asset Condition Wood Pole Management	ED ED	ID ID	E Distribution F Distribution	E Distribution E Distribution	0.00%	0.00%	-		-	-				-	
Rosentrater	Programs	Asset Condition	Wood Pole Management	ED	WA	E Distribution	E Distribution	100.00%	0.00%	1,090,714	957,703	1,457,248	130,091	199,060	1,527	11,126,949	-	-
Rosentrater	Programs		New Revenue - Growth	ED	ID	E Distribution	E Distribution	0.00%	0.00%								-	-
Rosentrater Rosentrater	Programs Programs		New Revenue - Growth	ED FD	WA WA	E Distribution Transmission	E Distribution Transmission	100.00%	0.00%	1,938,854	3,563,873 141	3,087,908	4,275,073 42	4,960,036	2,959,731	36,530,067 1 273		
Rosentrater	Programs		New Revenue - Growth	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	- 1,275	-	-
Rosentrater	Programs		New Revenue - Growth	GD	OR	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-			-	-	-
Rosentrater Rosentrater	Programs Other		New Revenue - Growth Rattlesnake Flat Wind Farm Project 115kV Integration	GD n CD	WA AA	G Distribution General	G Distribution General	0.00% 47.78%	100.00% 15.09%	-	-	-	-			-	1,011,193	1,001,136
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integration		AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	
Rosentrater Rosentrater	Other Other		Rattlesnake Flat Wind Farm Project 115kV Integration		AN AN	General Transmission	General Transmission	68.27% 65.54%	0.00%	-	-	-	-			0	-	•
Rosentrater	Other	Customer Requested	Rattlesnake Flat Wind Farm Project 115kV Integration T&D Reimbursable	ED	AN	Transmission Transmission	Transmission	65.54%	0.00%	-	-	-	-		154,789	154,789	-	
Rosentrater	Other	Customer Requested	T&D Reimbursable	ED	WA	General	General	100.00%	0.00%	-	-			-	-	-		
Thackston	Programs Short-Lived Assets		Automation Replacement	ED	AN AA	Production - Hydro 5 Yr Software	Production - Hydro Software	65.54% 47.78%	0.00% 15.09%	- 55.713	13 320	4 538	1 911	2.129	894,215	179,220 1.703.572	-	-
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		Customer Experience Platform Program Customer Experience Platform Program	CD ED	WA	5 Yr Software 5 Yr Software	Software Software	100.00%	0.00%	734,860	110,969	4,538 103,135	26,478	2,129	22,425	1,703,572	15,523	3,898
Magalsky	Short-Lived Assets		Customer Facing Technology Program	CD	AA	2 Yr Software	Software	47.78%	15.09%	15,044	37,798	8,670	1,065	4,728	4,055	1,104,844		
Magalsky	Short-Lived Assets		Customer Facing Technology Program	CD	AA AA	3 Yr Software	Software	47.78%	15.09% 15.09%	(416)	-	115.198	6.994	3.984	595.355	53,322 721.531	4,949	6,225
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		Customer Facing Technology Program Customer Facing Technology Program	CD	AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09%	426	52	115,198	6,994	3,984 Q	1.120	721,531	13	16
Magalsky	Short-Lived Assets	Customer Service Qual	Customer Transactional Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	84,910	41,886	2,312	3,765	132,873		-
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		Customer Transactional Systems Customer Transactional Systems	CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	5,214	23,867	1,048	1,732	31	403,257 12.437	1,034,140 12.437	2,893	2,472
Magaisky	Short-Lived Assets		Customer Transactional Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	- 8	37	2	3	0	30.501	31.432	-	
Magalsky	Short-Lived Assets		Customer Transactional Systems	CD	WA	5 Yr Software	Software	77.22%	22.78%		-					261	(265)	349
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets		Customer Transactional Systems Customer Transactional Systems	ED GD	WA OR	5 Yr Software 5 Yr Software	Software Software	100.00%	0.00%	-	-	-	-	-	-	-	-	-
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	2 Yr Software	Software	47.78%	15.09%	494	1,684	318	-		62,018	74,977	(36)	704
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	3 Yr Software	Software	47.78%	15.09%	17,685		(17,685)	•	-	234,589	234,470	(37)	•
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	(21,835)	25,142	55,604 112,419	5,690 1.367	28,939	116,153	376,667 113.786	(3,714)	23,245
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	Hardware	Hardware	47.78%	15.09%	(2,125)	20,723	95,195	3,098	8,767	15,309	183,978	(732)	5,030
Kensok	Short-Lived Assets	Customer Service Qual		ED	AN	5 Yr Software	Software	65.54%	0.00%	-	-	-	-	-	-		-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		ED ED	AN AN	5 Yr Software Transmission	Software Transmission	68.27% 65.54%	0.00%	(33)	784	1,503	133	1,089	138	2,589 275,023		
Kensok	Short-Lived Assets	Customer Service Qual	Facilities and Storage Location Security	CD	AA	5 Yr Software	Software	47.78%	15.09%	-	-	-	-	-	-		-	-
Kensok	Short-Lived Assets		Facilities and Storage Location Security	CD	AA	General	General	47.78%	15.09%		-	-	-	-	58,009	58,009	5	
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Facilities and Storage Location Security	CD	AA AN	Hardware General	Hardware General	47.78% 52.71%	15.09% 16.61%	(138)	64 122	25.086	5 386	(1.399)	1 952	13,007 95 146	373	457
Kensok	Short-Lived Assets		Facilities and Storage Location Security	GD	OR	General	General	0.00%	0.00%	-	-	-	-	- (1,577)	- 1,752	75,140	-	-
Kensok	Short-Lived Assets		Generation, Substation & Gas Location Security	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-			-	-	•
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Generation, Substation & Gas Location Security Generation, Substation & Gas Location Security	ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	-	-	-	-			2,760	-	
Kensok	Short-Lived Assets	Customer Service Qual	Generation, Substation & Gas Location Security	ED	AN	Hardware	Hardware	68.27%	0.00%		-	-	-	-	-	-		
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED ED	AN AN	Production - Hydro Production - Other	Production - Hydro Production - Other	65.54% 65.54%	0.00%	-	-	-	85.468	3 960	1 969	8,542 91,396	-	-
Kensok	Short-Lived Assets Short-Lived Assets		Generation, Substation & Gas Location Security Generation, Substation & Gas Location Security	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-		210,493	13,290	10,685	234,468		
Kensok	Other	Customer Service Qual	Telecommunication & Network Distribution location	! CD	AA	General	General	47.78%	15.09%	-	-	-	32,609	3,816	1,131	37,557	-	-
Kensok Rosentrater	Other Large Distinct Projects		Telecommunication & Network Distribution location Washington Advanced Metering Infrastructure Project		AA WA	Hardware General	Hardware General	47.78% 77.22%	15.09% 22.78%	-	-	-	17,392	2,035	603 540,803	20,030 540,803	-	-
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Project		WA	Hardware	Hardware	77.22%	22.78%	-	-	-	-	-	-	-	-	
Rosentrater	Large Distinct Projects		Washington Advanced Metering Infrastructure Project		WA	5 Yr Software	Software	100.00%	0.00%	-	-	-	-	-			-	
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		Washington Advanced Metering Infrastructure Project Washington Advanced Metering Infrastructure Project		WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	1,040	-	-	-		(729,798)	(725,740)	-	•
Rosentrater	Large Distinct Projects	Customer Service Qual	Washington Advanced Metering Infrastructure Project	c ED	WA	Hardware	Hardware	100.00%	0.00%	-	-	-	-	-	-	-	-	
Rosentrater	Large Distinct Projects		Washington Advanced Metering Infrastructure Project		WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-	-	-	-	-	
Rosentrater Howell	Large Distinct Projects Wildfire		i Washington Advanced Metering Infrastructure Project Wildfire Resiliency Plan	c GD CD	WA AA	General General	General General	0.00% 47.78%	100.00% 15.09%	-	-	-	-	-	-	(533)	- 23	- 57
Howell	Wildfire	Customer Service Qual	Wildfire Resiliency Plan	ED	AN	3 Yr Software	Software	68.27%	0.00%	-		-	-	-	-	307,650	- 23	-
Howell	Wildfire		Wildfire Resiliency Plan	ED	AN	Transmission	Transmission	65.54%	0.00%	899,429	405,370	228,985	289,584	4,705	5,573	2,566,464	-	
Howell Howell	Wildfire Wildfire		Wildfire Resiliency Plan Wildfire Resiliency Plan	ED ED	ID ID	E Distribution General	E Distribution General	0.00%	0.00%	-	-	-	-	-	-	-		
Howell	Wildfire		Wildfire Resiliency Plan	ED	WA	E Distribution	E Distribution	100.00%	0.00%	630,049	1,696,708	1,502,554	580,192	806,839	1,188,504	12,339,796	-	-
Howell	Wildfire		Wildfire Resiliency Plan	ED	WA	General	General	100.00%	0.00%	761	2,156	4,859	3,361	19,771	6,337	65,050	-	2 906
Thackston Thackston	Programs Programs		Base Load Thermal Program Base Load Thermal Program	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	-	-	-		-	1,124	12,043 1.124		2,906
Thackston	Programs	Failed Plant & Operation	Base Load Thermal Program	ED	AN	General	General	68.27%	0.00%	-	-	-	-	13,257	-	13,257	-	-
Thackston	Programs		Base Load Thermal Program Base Load Thermal Program	ED ED	AN AN	Production - Other Production - Thermal	Production - Other	65.54% 65.54%	0.00%	250,270	(210,634)	4,457 72,915	(22,896)	26,608 323,129	28,552 431.786	386,498 955.096	-	
Thackston Thackston	Programs Programs		Base Load Thermal Program Base Load Thermal Program	ED	AN AN	Production - Thermal Transmission	Production - Therm Transmission	65.54% 65.54%	0.00%	-	-	72,915		323,129	431,786	955,096 17.043		

										13,011,700	12,322,684	33,105,070	12,370,375	13,838,284	29,043,837	258,665,992	2,637,488	2,267,598
	Plant Group for	Primary			Jurisdio	Depreciation	Ser.Jur.Allocatio	WA - E -	WA - G -	WA - Electric Jul	WA - Electric Aug	WA - Electric Sep	WA - Electric Oct	WA - Electric Nov	WA - Electric Dec	WA - Electric 2022	WA - Natural Gas Jan	WA - Natural Gas Feb
Witness	Testimony Purposes	Investment Driver	Project (Business Case)	Service	tion	Category	n Category	Allocation %	Allocation %	2022	2022	2022	2022	2022	2022	TOTAL	2022	2022
Thackston Rosentrater	Large Distinct Projects Programs	Failed Plant & Operati Failed Plant & Operati	c CS2 Single Phase Transformer	ED ED	AN AN	Transmission Transmission	Transmission Transmission	65.54% 65.54%	0.00%	21,755	178,492	498,681	69.602	265.243	123,841	(25,016) 1.672.723	-	-
Rosentrater	Programs	Failed Plant & Operati		ED	ID	E Distribution	E Distribution	0.00%	0.00%	21,755	170,472	470,001	07,002	200,243	123,041	1,072,723		
Rosentrater	Programs	Failed Plant & Operati		ED	WA	E Distribution	E Distribution	100.00%	0.00%	57,665	252,062	217,746	76,338	670,471	305,320	2,194,646	-	
Rosentrater Rosentrater	Programs			GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater	Programs Programs		c Gas Non-Revenue Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%			-					230.226	194,646
Rosentrater	Programs	Failed Plant & Operati		ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		-			-	-	-	174,040
Rosentrater	Programs	Failed Plant & Operati		ED	WA	E Distribution	E Distribution	100.00%	0.00%	13,962	13,433	8,691	16,551	12,223	11,324	126,900	-	-
Rosentrater Thackston	Large Distinct Projects Large Distinct Projects			ED CD	AN AA	Transmission Hardware	Transmission Hardware	65.54% 47.78%	0.00% 15.09%	44,115	2,106	2,066	1,498	3,146	199	2,879,883		•
Thackston	Large Distinct Projects			ED	AN	Production - Other	Production - Other	65.54%	0.00%	62.902	1.681	141	40	6.272	11.403	157.173	-	
Kensok	Programs			CD	AA	General	General	47.78%	15.09%	1,089	9,552	9,512	6,354	38,894	136,042	308,691	(128)	9,418
Kensok	Programs		Technology Failed Assets	CD	AA	Hardware	Hardware	47.78%	15.09%	1,062	10,096	4,535	898	8,293	12,934	66,352	(6)	2,605
Kensok Rosentrater	Programs Mandatory & Compliance			CD CD	AN AA	Transmission General	Transmission General	65.54% 47.78%	0.00% 15.09%	78	233	232			-	60,489 19,374		
Thackston				ED	AN	General	General	68.27%	0.00%	320	23,170	8,639	1,226	25,378	(21,497)	219,694		
Thackston				ED	AN	Hardware	Hardware	68.27%	0.00%	13	927	346	49	1,015	(860)	8,788	-	
Thackston Thackston			o Cabinet Gorge Dam Fishway o Cabinet Gorge Dam Fishway	ED ED	AN AN	Production - Hydro Transportation	Production - Hydro Transportation	65.54% 68.27%	0.00%	143,734	276,998	131,010	32,612	528,048	159,958	41,362,178 42.123	•	•
Thackston				ED	ID	Transportation	Transportation	0.00%	0.00%	-		-				42,123		
Thackston				ED	AN	General	General	65.54%	0.00%	14,979		-			-	14,979	-	
Thackston Thackston				ED ED	AN AN	General Production - Hydro	General Production - Hydro	68.27% 65.54%	0.00%	12,658	6,127	75.826	4,303	4,018	2,468	1,994 2,277,785		•
Rosentrater				ED	AN	Transmission	Transmission	65.54%	0.00%	12,050	0,127	/5,626	4,303	4,016	2,400	2,211,105	-	
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Colstrip Transmission	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-	-	-	15	-	-
Rosentrater	Mandatory & Compliance			ED	AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED ED	AN AN	General Hardware	General Hardware	68.27% 65.54%	0.00%	431	1,205	695	2,524	681	3,110	(17,573)		
Rosentrater	Mandatory & Compliance			ED	AN	Hardware	Hardware	68.27%	0.00%	215	602	348	1,262	340	1,555	50,609		
Rosentrater	Mandatory & Compliance			ED	ID	Transmission	Transmission	0.00%	0.00%		-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Mandatory & Compliance			ED ED	WA AN	Transmission Transmission	Transmission Transmission	100.00% 65.54%	0.00%	17,836 232	10,134 0	14,965 457	10,534	4,865	34,108	167,653 1,240,549	-	-
Rosentrater				FD	ID.	F Distribution	F Distribution	0.00%	0.00%	232		457				1,240,549		
Rosentrater				ED	WA	E Distribution	E Distribution	100.00%	0.00%	578,014	489,093	1,691,786	198,644	370,821	116,708	5,639,081	-	-
Rosentrater			Gas Cathodic Protection Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	•	•
Rosentrater Rosentrater			n Gas Cathodic Protection Program n Gas Cathodic Protection Program	GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%							- :	141	246.133
Rosentrater			Gas Facility Replacement Program (GFRP) Aldyl A Pip	; GD	ID	G Distribution	G Distribution	0.00%	0.00%	-		-			-	-		240,100
Rosentrater			n Gas Facility Replacement Program (GFRP) Aldyl A Pip		OR	G Distribution	G Distribution	0.00%	0.00%		-	-	-	-	-	-	-	
Rosentrater Rosentrater			n Gas Facility Replacement Program (GFRP) Aldyl A Pip n Gas HP Pipeline Remediation Program	CD CD	WA AA	G Distribution 3 Yr Software	G Distribution Software	0.00% 47.78%	100.00% 15.09%	-	-	-		-	-	-	229,123	247,267
Rosentrater				GD	WA	G Distribution	G Distribution	0.00%	100.00%			-		-			-	
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Gas Isolated Steel Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%			-			-	-	-	
Rosentrater				GD GD	OR	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-		
Rosentrater Rosentrater			n Gas Isolated Steel Replacement Program n Gas Overbuilt Pipe Replacement Program	GD	WA ID	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%							- :	1,841	4,838
Rosentrater				GD	OR	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Rosentrater			Gas Overbuilt Pipe Replacement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	-	-	-	-	-	7,349	4,417
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-		-	-	-	-		•
Rosentrater	Mandatory & Compliance			GD	WA	G Distribution	G Distribution	0.00%	100.00%	-							157,352	162,506
Rosentrater				GD	ID	G Distribution	G Distribution	0.00%	0.00%			-			-	-	-	
Rosentrater Rosentrater				GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	13,125	12,933
Rosentrater			Gas Transient Voltage Mitigation Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%			-		-			13,125	12,933
Kensok	Mandatory & Compliance	Mandatory & Complian	High Voltage Protection (HVP) Refresh	ED	WA	General	General	100.00%	0.00%	-	-	-	437,634	5,008	6,346	448,988	-	-
Thackston				ED FD	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-	-	-	-	•	•
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	100.00%	0.00%	(485,013)	373.501	168.499	219.789	176,768	161.064	3.388.476		
Kensok				CD	AA	5 Yr Software	Software	47.78%	15.09%	- (,)	379	1,004	119	-	657	4,034		
Kensok	Mandatory & Compliance	Mandatory & Complian	Payment Card Industry Compliance (PCI)	CD	AA	Hardware	Hardware	47.78%	15.09%	-	460	1,220	144	-	799	4,902	-	-
Rosentrater Rosentrater				ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	-	-	-	9 437	11	- 0	9 448	-	-
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Protection System Opgrade for PRC-002	ED	AN	Transmission	Transmission	65.54%	0.00%	468,459	1,204	321	926,328	2,726	2,189	1,807,959	-	
Thackston	Mandatory & Compliance	Mandatory & Complian	use Permits	ED	AN	Transmission	Transmission	65.54%	0.00%	4,261	895	1,927	2,391	1,646	1,787	40,118	-	-
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance			ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00% 100.00%	0.00%	2,634	333	822	3,421	9,024	26,374	70,419	-	-
Thackston	Mandatory & Compliance			GD	ID	G Distribution	G Distribution	0.00%	0.00%	2,034	- 333	- 022	3,421	9,024	20,374	70,419	-	
Thackston	Mandatory & Compliance			GD	OR	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Thackston	Mandatory & Compliance			GD	WA	G Distribution	G Distribution	0.00%	100.00%		-		-	-	-		1,775	-
Rosentrater Rosentrater			n Saddle Mountain 230/115kV Station (New) Integration Saddle Mountain 230/115kV Station (New) Integration		AA WA	General General	General General	47.78% 77.22%	15.09% 22.78%	731	1,012	519,483 (839,460)	55,175 (89.160)	-	-	1,612,409 (918.645)	12,800	516 1.422
Rosentrater			saddle Mountain 230/115kV Station (New) Integration Saddle Mountain 230/115kV Station (New) Integration		AN	General	General	65.54%	0.00%	-	-	(057,400)	(07,100)	-	-	(713,043)	(70)	1,422
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Saddle Mountain 230/115kV Station (New) Integration	(ED	AN	General	General	68.27%	0.00%	17	(368)	-	-	-	-	(1,450,176)	-	-
Rosentrater Rosentrater			<ul> <li>Saddle Mountain 230/115kV Station (New) Integration</li> <li>Saddle Mountain 230/115kV Station (New) Integration</li> </ul>		AN AN	Transmission General	Transmission General	65.54% 68.27%	0.00%	-	-	-	-	70	-	495	-	-
Rosentrater			5 Saddle Mountain 230/115kV Station (New) Integration 5 Saddle Mountain 230/115kV Station (New) Integration		AN	General Transmission	General Transmission	65.54%	0.00%	-	-	-	304,716	1,304	19.498	5.802.001	-	
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Saddle Mountain 230/115kV Station (New) Integration	(ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	8,194	753,722		,504	1,494	4,563,829	-	
Rosentrater			Saddle Mountain 230/115kV Station (New) Integration	CD CD	WA	General	General	100.00%	0.00%	-	-	-	-	-	80.986	80.986	-	-
Kensok Thackston	Mandatory & Compliance Mandatory & Compliance			ED.	AA AN	Hardware Production - Hydro	Hardware Production - Hydro	47.78% 65.54%	15.09%	-	-	-	4.610	28.223	80,986 21,553	80,986 70.424	-	
Rosentrater			Spokane Valley Transmission Reinforcement Project		AN	General	General	65.54%	0.00%	-	-	-	-,010	-	-	7.5,424	-	-
Rosentrater			Spokane Valley Transmission Reinforcement Project		AN	Transmission	Transmission	65.54%	0.00%	(20,514)	8,321	122,355	(122,355)	70	32,010	1,672,849	-	-
Rosentrater Rosentrater			n Spokane Valley Transmission Reinforcement Project n Spokane Valley Transmission Reinforcement Project		WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	38,583	-	-	-	-	-	485,353	-	-
Auschilater	managery or compliance	munuatory or compilal	- Sportant variety Fransissassis Remitorcelliest Project		VIA	OUNCI OI	GC-ICI di	100.00%	0.00%		-	-		-	-	-	-	

										13,011,700	12,322,684	33,105,070	12,370,375	13,838,284	29,043,837	258,665,992	2,637,488	2,267,598
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Electric Jul 2022	WA - Electric Aug 2022	WA - Electric Sep 2022	WA - Electric Oct 2022	WA - Electric Nov 2022	WA - Electric Dec 2022	WA - Electric 2022 TOTAL	WA - Natural Gas Jan 2022	WA - Natural Gas Feb 2022
Rosentrater Rosentrater	Mandatory & Compliance	Mandatory & Complian		CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09% 0.00%	1,807	1,559	1,525	- 662	447	2.134.095	(506) 2.198.727	(160)	- '
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Transmission Construction - Compliance	ED	WA	E Distribution	E Distribution	100.00%	0.00%	1,007	-	-	-	-	434,291	772,252	-	
Rosentrater Rosentrater			Transmission NERC Low-Risk Priority Lines Mitigation Tribal Permits & Settlements	FD FD	AN AN	Transmission Transmission	Transmission Transmission	65.54% 65.54%	0.00%	-	1,416,183	(677,532)	4,333	4,745	3,503	751,232 60.232	-	-
Rosentrater				ED	ID	E Distribution	E Distribution	0.00%	0.00%		-	-		-		- 60,232	-	
Rosentrater Rosentrater			Westside 230/115kV Station Brownfield Rebuild Proj		AN AN	General Transmission	General Transmission	65.54% 65.54%	0.00%	-	2.031	4.641	358.370	36.607	1.762.884	2.157.728	-	-
Rosentrater			Westside 230/115kV Station Brownfield Rebuild Proj WSDOT Control Zone Mitigation	ED	WA	E Distribution	E Distribution	100.00%	0.00%	175,195	2,031 80,607	132,524	106,894	9,060	1,762,884	2,157,728 929,099		
Thackston	Mandatory & Compliance				WA	Intangible	Intangible	100.00%	0.00%	3,077	-	7,857	-	-	826	12,960	-	-
Rosentrater Kensok	Large Distinct Projects Short-Lived Assets	No Driver Performance & Capacit		ED CD	WA AA	E Distribution 5 Yr Software	E Distribution Software	100.00% 47.78%	0.00% 15.09%	10,177	28.474	19,498	18.154	12,446	78,054	249,473	235	3,784
Kensok	Short-Lived Assets		Basic Workplace Technology Delivery	CD	AA	General	General	47.78%	15.09%	10,177	28,474	19,498	18,154	12,446	78,054	249,474	235	3,784
Kensok Rosentrater	Short-Lived Assets Other			CD	AA AA	Hardware General	Hardware General	47.78% 47.78%	15.09% 15.09%	20,354	56,949	38,995	36,309	24,892	156,108	502,043	501	7,883
Kensok	Short-Lived Assets	Performance & Capacit	Control and Safety Network Infrastructure	CD	AA	General	General	47.78%	15.09%	-	-	-	-	-	550,231	601,672	-	
Thackston Kensok	Large Distinct Projects Short-Lived Assets	Performance & Capacit Performance & Capacit	Coyote Springs LTSA Data Center Compute and Storage Systems	ED CD	AN AA	Production - Other 5 Yr Software	Production - Other Software	65.54% 47.78%	0.00% 15.09%	5,337	27,043	28,193	817	116,179	16.897	310.279	1,054	3,419
Kensok	Short-Lived Assets	Performance & Capacit	Data Center Compute and Storage Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	(7)	6	13	313,063	1,328	1,692	332,107	233	1,514
Kensok Kensok	Short-Lived Assets Large Distinct Projects	Performance & Capacit Performance & Capacit	Data Center Compute and Storage Systems Digital Grid Network	ED CD	AN AA	Production - Hydro 5 Yr Software	Production - Hydro Software	65.54% 47.78%	0.00% 15.09%	- 52	45	39				125,214 242	- 75	- 65
Kensok	Large Distinct Projects	Performance & Capacit	Digital Grid Network	CD	AA	General	General	47.78%	15.09%	294	1,966	409		-		81,754	778	21,487
Kensok Kensok	Large Distinct Projects Large Distinct Projects	Performance & Capacit Performance & Capacit		CD	AN WA	General General	General General	52.71% 77.22%	16.61% 22.78%	-	-	-	-	441.766	898,935 6.349	898,935 448.115	-	-
Kensok	Large Distinct Projects	Performance & Capacit		CD	WA	Hardware	Hardware	77.22%	22.78%		-	-		26,457	380	26,837	-	
Kensok	Large Distinct Projects	Performance & Capacit		ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-	-	18,293	1,359	19,652	-	-
Rosentrater Rosentrater	Programs Programs			ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	-	-	-	-	-	-	(0)		-
Rosentrater	Programs			ED	WA	E Distribution	E Distribution	100.00%	0.00%	180,616	47,492		92,797	7,645	935	3,615,436	-	-
Rosentrater Kensok	Programs Short-Lived Assets			ED CD	WA AA	E Distribution 3 Yr Software	E Distribution Software	100.00% 47.78%	0.00% 15.09%	2,624 130.451	4,501 26,325	82,963 35.318	66,918 391	53,988 69,494	2,579 27.818	358,877 1.230.446	(272)	278.997
Kensok	Short-Lived Assets	Performance & Capacit	Endpoint Compute and Productivity Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	7,906	11,887	23,901	(2,108)	15,286	23,227	203,849	214	8,344
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD FD	AA AN	Hardware 3 Yr Software	Hardware Software	47.78% 68.27%	15.09%	1,089,072 2,742	39,622 3.480	73,005 4 502	15,487 629	40,483	(91,322) 5.282	1,121,869 111.759	(1,272)	14,543
Kensok	Short-Lived Assets	Performance & Capacit	Endpoint Compute and Productivity Systems	ED	AN	Hardware	Hardware	68.27%	0.00%	3,352	4,254	5,502	769	4,411	6,455	136,594	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Delivery Modernization & Operational Efficien Energy Delivery Modernization & Operational Efficien		AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	856,839 8.247	34,460 124		16,151 4,919	130,796 239.657	36,336 161,751	1,985,534 1,075,982	280,480 40,726	1,222 3.039
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AA	Hardware	Hardware	47.78%	15.09%	0,247	-	21,972	233	833	639	24,742	40,720	3,037
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit	Energy Delivery Modernization & Operational Efficien Energy Delivery Modernization & Operational Efficien	ED	AN AN	5 Yr Software 5 Yr Software	Software Software	65.54% 68.27%	0.00%	-	250.063	36.839	6.982	19.819	4.099	425.588	-	•
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AN	Hardware	Hardware	68.27%	0.00%		250,063 51,351	4,514	1,432	1,148	558	80,264	-	
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		WA WA	5 Yr Software	Software	100.00%	0.00%	269,574	2,212	-	-	1,668	226,891	678,794	-	-
Kensok Kinney	Short-Lived Assets EIM		Energy Delivery Modernization & Operational Efficien Energy Imbalance Market	CD	AA	Hardware General	Hardware General	100.00% 47.78%	0.00% 15.09%	269,574 1,131	2,212 1,560	265	(2,421)	1,668	413,080	884,274 12,346	384	423
Kinney	EIM			ED	AN	5 Yr Software	Software	65.54%	0.00%					-	-		-	-
Kinney Kinney	EIM			ED ED	AN AN	5 Yr Software General	Software General	68.27% 65.54%	0.00%	97,213	5,845	5,434		-	-	7,232,845	-	
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	AN	General	General	68.27%	0.00%	22	3	-	-	-	-	2,020	-	-
Kinney Kinney	EIM EIM			ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%	271	28	-	-	-	-	137,910	-	
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	AN	Production - Other	Production - Other	65.54%	0.00%	-	-	-		-	-	-		
Kinney Kinney	EIM			ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	-	-	-		-	-	6,195	-	-
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	ID	General	General	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Kinney Kinney	EIM FIM			ED ED	MT MT	E Distribution General	E Distribution General	0.00%	0.00%	-	-	-	-	-	-	-	-	-
Kinney	EIM			ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-		-		2,811	-	
Kinney Kinney	EIM NEW (Actuals)		Energy Imbalance Market Energy Imbalance Market Modernization & Operation	ED	WA AN	General 5 Yr Software	General Software	100.00% 68.27%	0.00%	-	-	-	-	-	331,656	331,656	-	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AA	3 Yr Software	Software	47.78%	15.09%	-	-	-	-	-	331,000	(315)	204	(303)
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici		AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09% 15.09%	16,110	30,327	46,662	8,687	35,921	104,471	507,068 6.540	29,743	8,590
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AN	2 Yr Software	Software	68.27%	0.00%	-		-		-	3,029	6,540	1,105	-
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effici	ED	AN	3 Yr Software	Software	65.54%	0.00%	-	-	-	-	-	-		-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AN AN	3 Yr Software 5 Yr Software	Software Software	68.27% 65.54%	0.00%	-	-	-	-	-	-	1,293	-	
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effici	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-	6,909	763,135	815,669	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AN AN	Hardware Hardware	Hardware Hardware	65.54% 68.27%	0.00%	-	-	-	-	-	-	(44,536)	-	-
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effici	GD	AA	5 Yr Software	Software	0.00%	47.36%	-	-	-		-	-	-		-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AA AA	5 Yr Software Hardware	Software Hardware	0.00%	50.19% 47.36%	-	-	-		-	-		-	-
Kensok	Programs			CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	-	-	-	-	52,482	-	
Kensok Kensok	Programs Programs			CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	444 196.305	514 43,877	291 186.567	6,716	24,049	228,835	(46,713) 1.814.961	427 6 945	244 7.298
Kensok	Programs			CD	AA	Hardware	Hardware	47.78%	15.09%	1,317	3,444	2,168	232	24,049	220,035	44,553	1,497	3,237
Kensok	Programs			ED	AN AA	Transmission	Transmission	65.54%	0.00%	-	-	-	-	-	-	870	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	1 Yr Software 3 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	1,757 214,971	2,457 204,189	2,458 74,699	437 11,946	(296,147) 71,451	87,420	753,860	56,526 18	6,863 130
Kensok	Short-Lived Assets	Performance & Capacit	Enterprise Communication Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,347	836	347	9	296,164	189,437	496,151	(23,238)	7,668
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	199,140 (195)	19,590 (102,869		18,805 563	7,852 1.893	7,631 265.593	365,807 423,333	25,911 (979)	345 101
Kensok	Short-Lived Assets	Performance & Capacit	Enterprise Network Infrastructure	CD	AA	General	General	47.78%	15.09%	2,172	5,115	12,713	3,167	7,630	6,342	173,483		
Kensok Kensok	Programs Programs			CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	1,799	74,416	136,861	26,854 36,366	38,491 927	12,154 949	363,570 38.242	242	824
Norman	Jyruma	omance or capacit				···	uruwurd	47.7070	13.0776	-			30,300	721	749	30,242		•

Penal Course   Penal Penal Penal   Penal Penal Penal Penal   Penal Pen	2,267,598
Windows   Testimony Principal   Project (Qual-sect on Project (Qual-sect on Project )   Section   Sectio	WA - Natural Gas Feb
Profession   Pro	2022
Servict Level Assets   Servict Level Assets   Service Record Et Modermator A Capacit Et Modermator A	
Servict Leaf Assets   Performance & Capacit Ef Mederization & Operational Efficiency - Ferrinde Lange   Desire Programs & Capacit Efficiency - Ferrinde Efficiency - Ferrinde & Capacit Efficience &	82
Sent-Level Aveiles   Sent-Level Aveiles   Performance & Capital File Medicarization & Coperation Efficiency - Technolis (Department & Capital File Medicarization & Capital File Medicariz	5,867
From the Programs   Professionary   Profession	1,211
Programs   Programs   Professance & Capacit Fire Network Search (Perkover)   Edward & Accounting Fire Network (Search Februance & Capacit Fire Network)   Edward & Accounting Fire Network (Search Februance & Capacit Fire Network)   Edward & Accounting Fire Network)   Edward & Accounting Fire Network (Search Februance & Capacit Fire Network)   Edward & Accounting Fire Network)   Edward &	-
Soft-Load Assets   Soft-Load Assets   Performance & Capital Financial & Accounting Technology	-
Sort   New A counts   Fortingman & Sport   New A count   Fortingman & Accounting Technology   Co.   A   5 % Software   47 /28%   15,09%   13,803   18,164   4.00   - 341,674   4.55,09%   5 more of the country of the	-
Armok Short-land Assist Performance & Capacit Firmocial & Acquanting Technology & Capacit Firmocial & Acquanting Technology & Capacit Firmocial & Acquanting Technology & Capacit Firmocial & Capacit	5) 451
Performance   Copacit Class Allowed Height Floriforcomment   Copacit Class Allowed Height Floriforcomment   Copacit Class Copa	
Secretarian   Largo   Distinct Projects   Expert   Distinct Projects   Expert   Distinct Projects   Largo   Dist	186
Available   Line   Deliter Projects   Line	-
Performance & Capacit Case Operation Configuration   Companies   Capacit Case Operator Configuration   Companies   Capacit Case Operator Configuration   Companies   Capacit Case Operator Configuration   Capacit Case Operator Case Capacit Case Operator Capacit Capacit Case Operator Capacit Capacit Case Operator Capacit Capa	-
Performance & Capacit Gas Delinter Projects   Performance & Capacit Gas Operator Coulification Compilance GD   Al François   Ceneral	-
Performance & Capacit Case Operator Coulification Compliance	-
Description   Porturns   Porturns   Performance & Capacit Gas Reinforcoment Program   CD   OR   Capacit Distribution   O.00%	-
Notes   Programs   Performance & Capacit Gas Reinforcement Program   GD   OR   G Distribution   O. D0%   O. 00%   O. 0	-
Programs   Performance & Capacit Gas Feleriery Program   CD   M   C Distribution   C Dist	-
Postamentare   Programs   Performance & Capacit Gas Telemetry Program   GD   M   General   Gold	
Postariate   Programs   Performance & Capacit Gas Telemetry Program   CD   D   C Distribution   C Distribution   D   C Distribution   D   D   C Distribution   D   D   C Distribution   D   D   D   D   D   D   D   D   D	6,496
Note   Programs   Performance & Capacit Gas Telemetry Program   CD   CD   W   CD Distribution   CD D	-
Designation   Programs   Performance & Capacit Gas Telemetry Program   CD   WA   C Distribution   C Distri	-
Destrict   New York   Actuals   Performance & Capacit Capacit Human Resources Technology CD   A   S Yr Software   Software   47.89%   15.09%   -   -   -   -   -   -   -   -   -	-
Semant   S	-
Semon   Short - Lived Assets   Performance & Capacit Lateral Preference & Capacit Lateral Mobile Radio & Real Time Communication Syst. OD A Systowner & 47.78% 15.09% 2.028 6.554 16.716 (332) 15.93 4.04 122.762 12.762	534
Description   Lings   Distinct Projects   Performance & Capacit Lastoon Prairie   Loring Distinct Project   Performance & Capacit Lastoon   Capacit Lastoo	
Note minimal   Large   Distinct Projects   Performance & Cappacit Land Mobile Radio & Real Time Communication Syst. O. M. A. 5 Vis flower   Software   Cappacit Land Mobile Radio & Real Time Communication Syst. O. M. A. 5 Vis flower   Software   Cappacit Land Mobile Radio & Real Time Communication Syst. O. M. A. 5 Vis flower   Cappacit Land Mobile Radio & Real Time Communication Syst. O. M. A. 6 General   47.78%   15.09%   2.028   65.54   16.716   (332)   15.393   4.04   122.742	2) 405 ) (119,081)
Exercised   Large Distinct Projects   Performance & Capacit Land Mebile Radio & Real Time Communication Systs CD   A   5 \( \) Software   5 \( \) Software   5 \( \) Software   15 \( \)	(119,001)
Agriculture   Communication   Variety   Definite Projects   Performance & Capacit Land Mobile Radio & Real Time Communication Systs CD   A   General   47.78%   15.09%   2.028   65.554   16.716   (332)   15.393   4.04   122.762	-
Exercise   Large Délatic Projects   Performance & Capacit Land Mobile Radio & Real Time Communication Syst. CD	1.344
Internation   Large   District Projects   Performance & Capacit   Layal & Companies   Capacit   Layal & Companies   Capacit   Layal & Companies   Capacit   Layal & Companies   Capacit   Layal & Capacit   Laya	1,344
Semak   Short-Lived Assets   Performance & Capacit Legal & Compilines Technology	3,433
Non-column   Short -   Investmance   Capacit Legal & Compilance Technology	3,433
Semode   Short-Lived Assets   Performance & Capacit Legal & Compliance Technology   CD   W   5 Yr Seftware   Software   71,22%   22,78%	67
Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr CD AA General General 4.7.89% 1.5.09% 0.00% 0.	
Rosentrater   Programs   Performance & Capacit Substation - New Distribution Station Capacity Progr ED   Al   E Distribution   E Distribution   63.66%   0.00%	1
Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED All E Distribution 6.5.5% 0.00% Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED All General General 6.5.54% 0.00% 2.075 3.552 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED All General General 68.27% 0.00% 2.075 3.552 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED All Transmission 1 Transmission 6.5.4% 0.00% 1.433 2.824 3.922 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00% 0.00% 1.433 2.824 3.922 - 35 7,968 838.690 Nosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED II Distribution 0.00%	
Nosentrater   Programs   Performance & Capacit Substation - New Distribution Station Capacity Progr ED   Al General   Genera	
Rosentrater Programs Performance & Capacit Substatation - New Distribution Station Capacity Progr ED AN General General 68.27% 0.00% . 2,075 3.552  Rosentrater Programs Performance & Capacit Substatation - New Distribution Station Capacity Progr ED AN Transmission Transmission 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacity Substation - New Distribution Station Capacity Progr ED ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacity Substation Capacity Progr ED ID ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacity Substation Capacity Progr ED ID ID E Distribution 6.554% 0.00% 1.433 2,824 3,922 . 35 7,968 838,690  Rosentrater Programs Performance & Capacity Substation Programs Pe	_
Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED All Transmission 65.5% 0.00% 1.43 2.824 3.92 35 7,988 638.690 Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED ID E Distribution 0.00% 0.00%	
Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED ID E Distribution 0.00% 0.00%	_
Rosentrater Programs Performance & Capacit: Substation - New Distribution Station Capacity Progr ED ID General General 0.00% 0.00%	_
Rosentrater Programs Performance & Capacit Substation - New Distribution Station Capacity Progr ED WA E Distribution 100.00% 0.00% 840,102 161,420 59 50 (769,215) 1,330,412 1,764,733	-
cosentrater Programs Performance & Capacit Substation - New Distribution Station - Opacity Progr ED WA General General 100.00% 0.00% - 7,227 571 7,684 15,655	-
Agaglisky Programs Performance & Capacit Electric Transportation ED WA E Distribution E Distribution 100.00% 0.00% 201,321 66,758 52,231 719,027 84,182 274,732 1,997,584	-
ossentrater Large Distinct Projects No Driver Strategic Initiatives - Clean Energy Fund 2 ED AN 5 Yr Software Software 68.27% 0.00% (380)	-
Assentrater Large Distinct Projects No Driver Strategic Initiatives - Clean Energy Fund 2 ED WA E Distribution E Distribution 100.00% 0.00% (692,862) - 559,645	-
tosentrater Large Distinct Projects No Driver Strategic Initiatives - Clean Energy Fund 2 ED WA General General 100.00% 0.00%	-
tosentrater Large Distinct Projects No Driver Strategic Initiatives - South Landing (Catalyst) - Clea ED WA E Distribution E Distribution 100.00% 0.00% 12,837 (334,680) 27,194 2,969 1,958,548	-
osentrater Large Distinct Projects No Driver Strategic Initiatives - Real Time Power System Simul ED AN General General 65.54% 0.00%	-
kosentrater Large Distinct Projects No Driver Strategic Inititatives - Real Time Power System Simul ED AN General General 68.27% 0.00%	-
Thackston Mandatory & Compiliance No Driver Strategic Initiatives - Upriver Park ED AN Production - Hydro Production - Hydro 65.54% 0.00% 1,935 1,058 26,386 659 - 2,506,120	-

										3,381,215	3,533,107	5,712,384	7,586,520	6,068,856	5,523,330	5,666,558	10,793,358
Witness	Plant Group for Testimony Purposes	Primary Investment Drive	r Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Mar 2022	WA - Natural Gas Apr 2022	WA - Natural Gas May 2022	WA - Natural Gas Jun 2022	WA - Natural Gas Jul 2022	WA - Natural Gas Aug 2022	WA - Natural Gas Sep 2022	WA - Natural Gas Oct 2022
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	3 Yr Software	Software	47.78%	15.09%	25,393	441	138	101	(174,135)		1,529	1,502
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	Atlas Atlas	CD CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%		-		-	244,454	-	-	
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	Hardware	Hardware	47.78%	15.09%	530	9	3	2	(2,397)	-	-	-
Thackston	Programs	Asset Condition	Base Load Hydro	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	853	-	-	-	-
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Base Load Hydro Base Load Hydro	ED ED	AN AN	General Production - Hydro	General Production - Hydro	68.27% 65.54%	0.00%					-			
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge 15 kV Bus Replacement	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-	-	-	-	-
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unit 3 Protection & Control Upgrade		AN	Production - Hydro	Production - Hydro	65.54%	0.00%		-		-	-			
Thackston Thackston	Large Distinct Projects  Large Distinct Projects	Asset Condition Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade Cabinet Gorge Unit 4 Protection & Control Upgrade		AA AN	General Production - Hydro	General Production - Hydro	47.78% 65.54%	15.09%		20				-		
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unwatering Pumps	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD	AA AN	General General	General General	47.78% 52.71%	15.09% 16.61%	1,244	5,733	(1,188)	34,907 6.441	7,456	11,805 2 945	26,301	2,675
Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD	AN ID	General	General	0.00%	0.00%				6,441		2,945		
Rosentrater	Programs	Asset Condition		CD	WA	General	General	77.22%	22.78%		-			278		1,869	
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%	•	-		•	-	*	•	•
Rosentrater	Programs	Asset Condition		ED	ID	General	General	0.00%	0.00%	-							
Rosentrater	Programs	Asset Condition		ED	WA	General	General	100.00%	0.00%	-	-				-	-	
Rosentrater Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	AA	General	General	0.00%	47.36% 50.19%	-	-	-	•	-	*	-	•
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	GD	AA ID	General General	General General	0.00%	50.19%	5,234	12,709	17,884		-		16,010	
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	OR	General	General	0.00%	0.00%								
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	WA	General	General	0.00%	100.00%	-	15,821	13,571	50,801	2,436	39,071	27,337	4,291
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Distribution Grid Modernization Distribution Grid Modernization	ED FD	AN ID	General E Distribution	General F Distribution	65.54% 0.00%	0.00%								
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	ID	General	General	0.00%	0.00%								
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-					-	•
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Distribution Minor Rebuild Distribution Minor Rebuild	ED ED	ID MT	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	•	-		-	-	-	-	-
Rosentrater	Programs	Asset Condition	Distribution Minor Rebuild	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-			-				
Rosentrater	Large Distinct Projects	Asset Condition		ED	ID	E Distribution	E Distribution	0.00%	0.00%	-	-	-		-	•	-	
Rosentrater Rosentrater	Large Distinct Projects Programs	Asset Condition Asset Condition	Distribution Transformer Change Out Program Downtown Network - Asset Condition	ED ED	WA WA	E Distribution E Distribution	E Distribution E Distribution	100.00% 100.00%	0.00%	-	-		-	-	-	-	
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AA	General	General	47.78%	15.09%			(180)					
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AA	Transportation	Transportation	47.78%	15.09%		-	(304)	-	-			
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN	General	General	52.71%	16.61%	333	-		4,326	- 16	-		
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD	AN ID	Transportation Transportation	Transportation Transportation	52.71% 0.00%	16.61%	31,502	103		4,748	16	18,651	1,759	1,125
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	WA	Transportation	Transportation	77.22%	22.78%	-	-	-	11,203	875	-	-	-
Rosentrater	Programs	Asset Condition		ED	AN	General	General	68.27%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED ED	AN AN	Transportation Transportation	Transportation Transportation	65.54% 68.27%	0.00%								
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	ID	Transportation	Transportation	0.00%	0.00%	-	-	-		-		-	
Rosentrater	Programs	Asset Condition		ED	WA	Transportation	Transportation	100.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD GD	AN AN	Transportation Transportation	Transportation Transportation	0.00%	68.81% 72.92%	•	-		-	-	-	-	-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	ID	Transportation	Transportation	0.00%	0.00%	-			-				
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	OR	Transportation	Transportation	0.00%	0.00%		-					-	
Rosentrater Rosentrater	Programs NEW (Actuals)	Asset Condition Asset Condition	Fleet Services Capital Plan Gas ERT Replacement Program	GD GD	WA ID	Transportation G Distribution	Transportation G Distribution	0.00%	100.00%	-	-		-	-	-	119,390	122,761
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%								
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	16,377	116,292	161,250		-			
Rosentrater Rosentrater	Programs	Asset Condition Asset Condition	Gas Regulator Station Replacement Program Gas Regulator Station Replacement Program	GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	•	-	•	•	-	•	•	•
Rosentrater	Programs Programs	Asset Condition		GD	WA	G Distribution	G Distribution	0.00%	100.00%	560	6,971	6,166	25,752	49,303	105,042	1,056	2,555
Thackston	Large Distinct Projects	Asset Condition	Generation DC Supplied System Update	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-		-	-	-
Thackston	Short-Lived Assets Short-Lived Assets	Asset Condition	HMI Control Software HMI Control Software	CD	AA AA	5 Yr Software	Software	47.78% 47.78%	15.09% 15.09%	153 513	74 249	85	53	42 141	33	23	10
Thackston Thackston	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	HMI Control Software HMI Control Software	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	513 1,505	249 729	285 835	178 523	141 414	110 324	78 229	35 101
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	5 Yr Software	Software	68.27%	0.00%	-	-	-	-		-	-	-
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-				-			
Thackston Thackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	KF_Fuel Yard Equipment Replacement KF_Fuel Yard Equipment Replacement	ED ED	AN AN	General Production - Thermal	General Production - Therm	68.27% 65.54%	0.00%	•	•	•	•	•		•	•
Rosentrater	Programs	Asset Condition	LED Change-Out Program	ED	ID	E Distribution	E Distribution	0.00%	0.00%				-				
Rosentrater	Programs	Asset Condition	LED Change-Out Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-	-	-	-	-	-
Thackston Thackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Little Falls Plant Upgrade Long Lake Plant Upgrade	ED ED	AN AN	Production - Hydro Production - Hydro	Production - Hydro Production - Hydro	65.54% 65.54%	0.00%								
Rosentrater	Other	Asset Condition	New Dollar Road Service Center	GD	WA	General	General	0.00%	100.00%					0			
Thackston	Large Distinct Projects	Asset Condition	Nine Mile Powerhouse Crane Rehab	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-					-	•
Thackston Rosentrater	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Post Falls Landing and Crane Pad Development Primary URD Cable Replacement	ED ED	AN ID	Production - Hydro E Distribution	Production - Hydro E Distribution	65.54% 0.00%	0.00%	•	-		-	-	-	-	-
Rosentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-			-				
Thackston	Programs	Asset Condition	Regulating Hydro	CD	AA	General	General	47.78%	15.09%		-					-	
Thackston	Programs	Asset Condition	Regulating Hydro	CD	AA AN	Hardware	Hardware	47.78%	15.09%	-	-		-	-	-	•	•
Thackston Thackston	Programs Programs	Asset Condition Asset Condition		ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%								
Thackston	Programs	Asset Condition		ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%				-	-			
Thackston	Programs	Asset Condition		ED	AN	Transmission	Transmission	65.54%	0.00%	-	-					-	•
Thackston Rosentrater	Programs Programs	Asset Condition Asset Condition		ED CD	AN AA	Transportation 3 Yr Software	Transportation Software	68.27% 47.78%	0.00% 15.09%	- 11 717	-	-	-	(429)		-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		CD	AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	11,717 9,407	864	2,457	1,037	(429)	2,607		
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	General	General	47.78%	15.09%	-	-		-	-	8,760	66	385
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	Hardware	Hardware	47.78%	15.09%	5,159	969	(476)	1,980	896	2,607	561	1,549
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC SCADA - SOO and BuCC	ED ED	AN AN	5 Yr Software Hardware	Software Hardware	68.27% 68.27%	0.00%	-	-	-	-	-	-	-	
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD	AA	General	General	47.78%	15.09%	735	230	683	1,154	(0)		8,893	6,361
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD	AA	Hardware	Hardware	47.78%	15.09%	7	1,679	7,141	51,240	25,168	1,185	1,363	1,818
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	AN ID	General General	General General	52.71% 0.00%	16.61%	-	-	-	=	68	56	742	•
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	WA.	General General	General General	0.00% 77.22%	0.00% 22.78%		-	-	-	-		4,035	33
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	ED	AN	General	General	65.54%	0.00%	-	-					-,033	-

										3,381,215	3,533,107	5,712,384	7,586,520	6,068,856	5,523,330	5,666,558	10,793,358
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Mar W	/A - Natural Gas Apr \	WA - Natural Gas May V	VA - Natural Gas Jun 2022	WA - Natural Gas Jul	WA - Natural Gas Aug 2022	WA - Natural Gas Sep 2022	WA - Natural Gas Oct
Rosentrater	Programs	Asset Condition			AN	General	General	68.27%	0.00%	-		-	-	-	-	-	
Rosentrater	Programs	Asset Condition				General	General	0.00%	0.00%		-		-	-	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition				E Distribution General	E Distribution General	100.00% 100.00%	0.00%								
Rosentrater	Programs	Asset Condition				General	General	0.00%	0.00%	-			-	-	-	-	
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture			General	General	0.00%	100.00%		-		87,610	27,753	22,351	1,216	
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition				General General	General General	65.54% 68.27%	0.00%		-						
Rosentrater	Programs	Asset Condition			AN	Transmission	Transmission	65.54%	0.00%								
Rosentrater	Programs	Asset Condition				E Distribution	E Distribution	0.00%	0.00%		-		-	-	-	-	-
Rosentrater Kensok	Programs Short-Lived Assets	Asset Condition Asset Condition				E Distribution General	E Distribution General	100.00% 47.78%	0.00% 15.09%	-	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects	Asset Condition				3 Yr Software	Software	47.78%	15.09%	140	0		62	16			
Rosentrater	Large Distinct Projects	Asset Condition	Telematics 2025		AA	General	General	47.78%	15.09%	978	2,072	469	-	-	•	-	24,299
Rosentrater Rosentrater	Programs Large Distinct Projects	Asset Condition Asset Condition			AN AN	Transmission Transmission	Transmission Transmission	65.54% 65.54%	0.00%	•	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects	Asset Condition				E Distribution	E Distribution	0.00%	0.00%		-						
Rosentrater	Programs	Asset Condition				E Distribution	E Distribution	0.00%	0.00%		-		-	-	-	-	
Rosentrater Rosentrater	Programs Programs	Asset Condition Customer Requested			WA ID	E Distribution E Distribution	E Distribution E Distribution	100.00%	0.00%				-		-	-	
Rosentrater	Programs			ED		E Distribution	E Distribution	100.00%	0.00%		-		-			-	
Rosentrater	Programs				WA	Transmission	Transmission	100.00%	0.00%							-	
Rosentrater Rosentrater	Programs					G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	•	-	-	-	-	-	-	-
Rosentrater	Programs Programs					G Distribution	G Distribution	0.00%	100.00%	1.103.350	1.578.763	1,782,851	2.202.793	2.745.119	1,728,424	1.329.751	1.374.235
Rosentrater	Other	Customer Requested	Rattlesnake Flat Wind Farm Project 115kV Integratio		AA	General	General	47.78%	15.09%	-	-		-			-	-
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integratio			General	General	65.54%	0.00%	•	-	-	-	-	-	-	-
Rosentrater Rosentrater	Other Other		Rattlesnake Flat Wind Farm Project 115kV Integratio Rattlesnake Flat Wind Farm Project 115kV Integratio			General Transmission	General Transmission	68.27% 65.54%	0.00%		-		-		-		-
Rosentrater	Other	Customer Requested	T&D Reimbursable	ED		Transmission	Transmission	65.54%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Other	Customer Requested				General	General	100.00%	0.00%	-	-		-	-	-	-	
Thackston Magalsky	Programs Short-Lived Assets					Production - Hydro 5 Yr Software	Production - Hydro Software	65.54% 47.78%	0.00% 15.09%	1.256	(20.663)	989	230,073	17,593	4.206	1.433	603
Magalsky	Short-Lived Assets					5 Yr Software	Software	100.00%	0.00%	-	(20,000)	-	-		4,200	- 1,455	-
Magalsky	Short-Lived Assets					2 Yr Software	Software	47.78%	15.09%		-		326,359	4,751	11,936	2,738	336
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets					3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	806	1,585	2,981	425	(131)		36.378	2,209
Magalsky	Short-Lived Assets					Hardware	Hardware	47.78%	15.09%	1	4	8	580	134	16	3	1
Magalsky	Short-Lived Assets					3 Yr Software	Software	47.78%	15.09%	-	-	-	-	-	-	26,813	13,227
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets					5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	1,062	1,281	534	180,911	1,647	7,537	331	547
Magalsky	Short-Lived Assets					Hardware	Hardware	47.78%	15.09%		-		278	3	12	1	1
Magalsky	Short-Lived Assets	Customer Service Qual	i Customer Transactional Systems		WA	5 Yr Software	Software	77.22%	22.78%	(7)					-		
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets					5 Yr Software 5 Yr Software	Software Software	100.00%	0.00%	-	-	-	-	-	-	-	-
Magaisky Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual				2 Yr Software	Software Software	47.78%	15.09%	1.430	112	480	615	156	532	100	
Kensok	Short-Lived Assets	Customer Service Qual			AA	3 Yr Software	Software	47.78%	15.09%	-			-	5,585	-	(5,585)	
Kensok	Short-Lived Assets	Customer Service Qual				5 Yr Software	Software	47.78% 47.78%	15.09%	7,872	5,074	5,442	14,809	(6,895)	7,940	17,559 35.500	1,797 432
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual				General Hardware	General Hardware	47.78%	15.09% 15.09%	2.227	1.552	1.779	3.726	(671)	6.544	35,500	432 978
Kensok	Short-Lived Assets	Customer Service Qual	i Enterprise Security			5 Yr Software	Software	65.54%	0.00%		-		-	- '	-	-	
Kensok	Short-Lived Assets	Customer Service Qual			AN AN	5 Yr Software	Software	68.27%	0.00%	•	-	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual				Transmission 5 Yr Software	Transmission Software	65.54% 47.78%	0.00% 15.09%		-				-		
Kensok	Short-Lived Assets					General	General	47.78%	15.09%		-		-	-	-	-	
Kensok	Short-Lived Assets					Hardware	Hardware	47.78%	15.09%	2,864	143	•	314	(44)	-	- 7.005	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets				OR OR	General General	General General	52.71% 0.00%	16.61% 0.00%		-		-		20,206	7,905	1,697
Kensok	Short-Lived Assets					5 Yr Software	Software	68.27%	0.00%	-	-	-	-	-	-	-	-
Kensok	Short-Lived Assets					General	General	65.54%	0.00%	-			-	-	-	-	•
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual				General Hardware	General Hardware	68.27% 68.27%	0.00%	-	-		-	-		-	
Kensok	Short-Lived Assets	Customer Service Qual	i Generation, Substation & Gas Location Security	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-	-	-	-	-	-
Kensok	Short-Lived Assets	Customer Service Qual	i Generation, Substation & Gas Location Security		AN	Production - Other	Production - Other	65.54%	0.00%	-	-	-	-	-	-	-	-
Kensok Kensok	Short-Lived Assets Other		i Generation, Substation & Gas Location Security i Telecommunication & Network Distribution location !			E Distribution General	E Distribution General	100.00% 47.78%	0.00%	-	-		-	-	-	-	10 298
Kensok	Other	Customer Service Qual	Telecommunication & Network Distribution location !	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	5,492
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		Washington Advanced Metering Infrastructure Project		WA WA	General Hardware	General Hardware	77.22% 77.22%	22.78% 22.78%	-	-	-	-	-	-	-	-
Rosentrater	Large Distinct Projects  Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec			5 Yr Software	Software	100.00%	0.00%								
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec			E Distribution	E Distribution	100.00%	0.00%				-	-		-	
Rosentrater	Large Distinct Projects	Customer Service Qual	i Washington Advanced Metering Infrastructure Projec	ED		General	General	100.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec			Hardware G Distribution	Hardware G Distribution	100.00%	0.00%	•	•	•	•	•	•	•	•
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec			General	General	0.00%	100.00%	-	-		-	-	-	-	
Howell	Wildfire					General	General	47.78%	15.09%	(290)	18	22	-	-	-	-	
Howell Howell	Wildfire Wildfire				AN AN	3 Yr Software Transmission	Software Transmission	68.27% 65.54%	0.00%	-	-	-	-	-	-	-	-
Howell	Wildfire					E Distribution	E Distribution	0.00%	0.00%						-		
Howell	Wildfire	Customer Service Qual	i Wildfire Resiliency Plan	ED	ID	General	General	0.00%	0.00%	-		-	-	-		-	-
Howell Howell	Wildfire					E Distribution	E Distribution	100.00%	0.00%	-	-	•	-	-	-	•	•
Howell Thackston	Wildfire Programs					General General	General General	100.00% 47.78%	0.00% 15.09%	343	285	269				-	
Thackston	Programs	Failed Plant & Operation	: Base Load Thermal Program	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-
Thackston Thackston	Programs Programs					General Production - Other	General Production - Other	68.27% 65.54%	0.00%	-	-	•	-	-	-	•	•
Thackston Thackston	Programs Programs					Production - Other Production - Thermal	Production - Other Production - Therm		0.00%		-					-	
Thackston	Programs			ED	AN	Transmission	Transmission	65.54%	0.00%	-		-	-	-		-	-

										3,381,215	3,533,107	5,712,384	7,586,520	6,068,856	5,523,330	5,666,558	10,793,358
Witness	Plant Group for Testimony Purposes	Prima: Investment		Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Mar W	/A - Natural Gas Apr 2022	WA - Natural Gas May 2022	WA - Natural Gas Jun 2022	WA - Natural Gas Jul 2022	WA - Natural Gas Aug 2022	WA - Natural Gas Sep 2022	WA - Natural Gas Oct 2022
Thackston	Large Distinct Projects	Failed Plant &	Operatic CS2 Single Phase Transformer	ED	AN	Transmission	Transmission	65.54%	0.00%								-
Rosentrater Rosentrater	Programs Programs			ED ED	AN ID	Transmission F Distribution	Transmission F Distribution	65.54%	0.00%		-				-	-	
Rosentrater	Programs			ED	WA	E Distribution	E Distribution	100.00%	0.00%						-		-
Rosentrater	Programs			GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	•	•	•	-	•		•	
Rosentrater Rosentrater				GD	WA	G Distribution	G Distribution	0.00%	100.00%	215.421	661.141	414.124	410.689	419.450	411.122	372.841	329.283
Rosentrater	Programs	Failed Plant &	Operatic Meter Minor Blanket	ED	ID	E Distribution	E Distribution	0.00%	0.00%			-	-	-	-		-
Rosentrater Rosentrater	Programs Large Distinct Projects			ED ED	WA AN	E Distribution Transmission	E Distribution Transmission	100.00% 65.54%	0.00%	•	•	•	-	•		•	•
Thackston	Large Distinct Projects			CD	AA	Hardware	Hardware	47.78%	15.09%			3,473					
Thackston	Large Distinct Projects			ED	AN	Production - Other	Production - Other	65.54%	0.00%			-			-		
Kensok Kensok	Programs			CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	5,456 1,178	8,582 145	9,281	1,257 1,196	344 335	3,016 3.188	3,004 1.432	2,006 284
Kensok Kensok	Programs Programs			ED	AN	Transmission	Transmission	47.78% 65.54%	0.00%	1,178	145	3,893	1,196	335	3,188	1,432	284
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Apprentice/Craft Training	CD	AA	General	General	47.78%	15.09%				6,118		-		
Thackston				ED	AN	General	General	68.27%	0.00%	-					-		
Thackston Thackston				ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%								
Thackston				ED	AN	Transportation	Transportation	68.27%	0.00%		-	-	-		-	-	-
Thackston				ED	ID	Transportation	Transportation	0.00%	0.00%	-	-	-	-	-	-	-	-
Thackston Thackston				ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%		-		-			-	
Thackston				ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-		-		-	
Rosentrater				ED	AN	Transmission	Transmission	65.54%	0.00%							-	
Rosentrater				ED	AN	5 Yr Software	Software	68.27%	0.00%	•	-	-	-	-	-	-	
Rosentrater Rosentrater				ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%								
Rosentrater				ED	AN	Hardware	Hardware	65.54%	0.00%		-					-	
Rosentrater				ED	AN	Hardware	Hardware	68.27%	0.00%		-	-	-	-		-	
Rosentrater Rosentrater				ED ED	ID WA	Transmission Transmission	Transmission Transmission	0.00%	0.00%		-		-			-	
Rosentrater				ED	AN	Transmission	Transmission	65.54%	0.00%				-	-			
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Elec Relocation and Replacement Program	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater				ED	WA	E Distribution	E Distribution	100.00%	0.00%	•	-	-	-	-	-	-	
Rosentrater Rosentrater			Complian Gas Cathodic Protection Program Complian Gas Cathodic Protection Program	GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%		-	-		-		-	
Rosentrater				GD	WA	G Distribution	G Distribution	0.00%	100.00%	1,694	5,658	2,112	654	2,849	3,118		185,474
Rosentrater			Complian Gas Facility Replacement Program (GFRP) Aldyl A Piç		ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater			Complian Gas Facility Replacement Program (GFRP) Aldyl A Pig Complian Gas Facility Replacement Program (GFRP) Aldyl A Pig		OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	1.444.623	593.827	2 700 035	2 604 037	1 254 793	2 590 791	2,815,091	860,143
Rosentrater				CD	AA	3 Yr Software	Software	47.78%	15.09%	1,444,023	373,027	2,700,033	2,004,037	1,234,773	2,370,771	2,013,071	
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Gas HP Pipeline Remediation Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%							-	
Rosentrater Rosentrater				GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater				GD	WA	G Distribution G Distribution	G Distribution  G Distribution	0.00%	100.00%	3,826	2,710	2,015	4,078	14,643	35,449	22,664	1,869
Rosentrater			Complian Gas Overbuilt Pipe Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-			-	-	-		-
Rosentrater				GD GD	OR	G Distribution	G Distribution	0.00%	0.00%	ž.,	-			-			
Rosentrater Rosentrater				GD	WA ID	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%	244	96	12,750	1,490	-	2,959	8,556	1,889
Rosentrater				GD	OR	G Distribution	G Distribution	0.00%	0.00%		-	-	-		-	-	-
Rosentrater				GD	WA	G Distribution	G Distribution	0.00%	100.00%	115,747	78,414	36,970	19,101	17,616	20,412	32,345	29,803
Rosentrater Rosentrater				GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater				GD	WA	G Distribution	G Distribution	0.00%	100.00%	38.055	85.796	81,282	146.610	119.669	137.642	244.926	93.636
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Gas Transient Voltage Mitigation Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-			-	-	-		-
Kensok				ED	WA	General	General	100.00%	0.00%	-					-		
Thackston Rosentrater	Mandatory & Compliance Mandatory & Compliance			ED ED	AN ID	Production - Hydro E Distribution	Production - Hydro E Distribution	65.54%	0.00%								
Rosentrater	Mandatory & Compliance			ED	WA	E Distribution	E Distribution	100.00%	0.00%		-					-	
Kensok				CD	AA	5 Yr Software	Software	47.78%	15.09%	150	184	227	31		120	317	37
Kensok Rosentrater				CD ED	AA AN	Hardware General	Hardware General	47.78% 65.54%	15.09%	183	223	276	38	-	145	385	45
Rosentrater				ED	AN	General	General	68.27%	0.00%				-	-			
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Protection System Upgrade for PRC-002	ED	AN	Transmission	Transmission	65.54%	0.00%	-	-	-	-	-	-	-	-
Thackston	Mandatory & Compliance			ED	AN	Transmission	Transmission	65.54%	0.00%	•	-	-	-	-	-	-	
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance			ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%								
Thackston	Mandatory & Compliance			GD	ID	G Distribution	G Distribution	0.00%	0.00%		-					-	
Thackston	Mandatory & Compliance			GD	OR	G Distribution	G Distribution	0.00%	0.00%		-	-	-			-	
Thackston Rosentrater	Mandatory & Compliance		Complian Use Permits Complian Saddle Mountain 230/115kV Station (New) Integratic	GD	WA AA	G Distribution General	G Distribution General	0.00% 47.78%	100.00% 15.09%		66	940 150 983	671	919 231	3,474	557 164 045	4,906 17 423
Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integration Complian Saddle Mountain 230/115kV Station (New) Integration		WA.	General	General	47.78% 77.22%	22.78%	1.379	151	150,983	162,857	231	320	(247,670)	(26,305)
Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integration		AN	General	General	65.54%	0.00%	-	-					(= 11, = 1-)	(==,===)
Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integration		AN	General	General	68.27%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integratic Complian Saddle Mountain 230/115kV Station (New) Integratic		AN AN	Transmission General	Transmission General	65.54% 68.27%	0.00%		-		-	-		-	
Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integratic		AN	Transmission	Transmission	65.54%	0.00%		-				-	-	
Rosentrater	Mandatory & Compliance	Mandatory &	Complian Saddle Mountain 230/115kV Station (New) Integration	:ED	WA	E Distribution	E Distribution	100.00%	0.00%		-	-	-	-	-	-	-
Rosentrater			Complian Saddle Mountain 230/115kV Station (New) Integration	ED	WA	General	General	100.00%	0.00%	-	-	-	-	-	-	-	-
Kensok Thackston			Complian Security Compliance Complian Spokane River License Implementation	CD FD	AA AN	Hardware Production - Hydro	Hardware Production - Hydro	47.78% 65.54%	15.09%		-	-	-	-	-	-	- -
Rosentrater			Complian Spokane Valley Transmission Reinforcement Project		AN	General	General	65.54%	0.00%		-				-	-	
Rosentrater			Complian Spokane Valley Transmission Reinforcement Project		AN	Transmission	Transmission	65.54%	0.00%	-	-	-	-	-	-	-	-
Rosentrater Rosentrater			Complian Spokane Valley Transmission Reinforcement Project		WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%		-	-	-	-	-	-	•
Kosentrater	mandatory & compliance	mandatory &	Complian Spokane Valley Transmission Reinforcement Project	ED	WA	General	General	100.00%	0.00%	-	-	-	-	-	-	-	-

										3,381,215	3,533,107	5,712,384	7,586,520	6,068,856	5,523,330	5,666,558	10,793,358
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	Allocation %	WA - Natural Gas Mar 2022	WA - Natural Gas Apr 2022	WA - Natural Gas May 2022	WA - Natural Gas Jun 2022	WA - Natural Gas Jul 2022	WA - Natural Gas Aug 2022	WA - Natural Gas Sep 2022	WA - Natural Gas Oct 2022
Rosentrater Rosentrater	Mandatory & Compliance	Mandatory & Complian	Transmission Construction - Compliance Transmission Construction - Compliance	CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09% 0.00%	- "	- "	-	- '	- '	-	-	- '
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Transmission Construction - Compliance	ED	WA	E Distribution	E Distribution	100.00%	0.00%		-	-	-	-	-		
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Transmission NERC Low-Risk Priority Lines Mitigation		AN	Transmission	Transmission	65.54%	0.00%		-			-			
Rosentrater Rosentrater			Tribal Permits & Settlements Tribal Permits & Settlements	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	-				-	-	-	
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Westside 230/115kV Station Brownfield Rebuild Pro	j ED	AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	
Rosentrater			Westside 230/115kV Station Brownfield Rebuild Pro		AN	Transmission	Transmission	65.54%	0.00%		-			-			
Rosentrater Thackston	Mandatory & Compliance Mandatory & Compliance		WSDOT Control Zone Mitigation WSDOT Franchises	ED ED	WA WA	E Distribution Intangible	E Distribution Intangible	100.00% 100.00%	0.00%	-				-	-	-	
Rosentrater			Spokane Smart Circuit	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-		-	-	-	-	-
Kensok			Basic Workplace Technology Delivery	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,929	3,934	5,578	8,647	3,214	8,992	6,157	5,733
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Basic Workplace Technology Delivery Basic Workplace Technology Delivery	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	3,929 8,353	3,934 7,866	5,578 11,284	8,647 17,303	3,214 6,428	8,992 17,984	6,157 12,314	5,733 11,466
Rosentrater	Other		Campus Repurposing Phase 2	CD	AA	General	General	47.78%	15.09%	-				-	-	-	2
Kensok	Short-Lived Assets		Control and Safety Network Infrastructure	CD	AA	General	General	47.78%	15.09%	-	2,611	13,445	188	•	*	-	•
Thackston Kensok	Large Distinct Projects Short-Lived Assets	Performance & Capacit Performance & Capacit	Data Center Compute and Storage Systems	ED CD	AN AA	Production - Other 5 Yr Software	Production - Other Software	65.54% 47.78%	0.00% 15.09%	4 102	2 857	5 492	19 647	1 685	8 540	8.903	258
Kensok	Short-Lived Assets		Data Center Compute and Storage Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	1,600	1,308	117	284	(2)	2	4	98,861
Kensok Kensok	Short-Lived Assets Large Distinct Projects	Performance & Capacit Performance & Capacit	Data Center Compute and Storage Systems	ED CD	AN AA	Production - Hydro 5 Yr Software	Production - Hydro Software	65.54% 47.78%	0.00% 15.09%	(199)	- 39	- 42	. 11	- 16	- 14	- 12	•
Kensok Kensok	Large Distinct Projects  Large Distinct Projects	Performance & Capacit Performance & Capacit		CD	AA AA	General	General	47.78%	15.09%	(199)	39 536	1,200	1,220	93	621	129	
Kensok	Large Distinct Projects	Performance & Capacit		CD	AN	General	General	52.71%	16.61%	-	-	-	-		-	-	
Kensok Kensok	Large Distinct Projects Large Distinct Projects	Performance & Capacit Performance & Capacit		CD	WA WA	General Hardware	General Hardware	77.22% 77.22%	22.78% 22.78%	-	-		-		-	-	•
Kensok Kensok		Performance & Capacit Performance & Capacit		ED	WA	E Distribution	E Distribution	100.00%	0.00%								
Rosentrater	Programs		Distribution System Enhancements	ED	AN	Transmission	Transmission	65.54%	0.00%		-			-	-	-	-
Rosentrater	Programs		Distribution System Enhancements	ED	ID	E Distribution	E Distribution	0.00%	0.00%		-		-	-	-	-	
Rosentrater Rosentrater	Programs Programs		Distribution System Enhancements  Downtown Network - Performance & Canacity	ED FD	WA WA	E Distribution  E Distribution	E Distribution E Distribution	100.00%	0.00%								
Kensok	Short-Lived Assets		Endpoint Compute and Productivity Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%		(5,318)	23,636		41,195	8,313	11,153	123
Kensok	Short-Lived Assets		Endpoint Compute and Productivity Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	1,822	638	1,474	26,587	2,497	3,754	7,548	(666)
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Endpoint Compute and Productivity Systems Endpoint Compute and Productivity Systems	CD ED	AA AN	Hardware 3 Yr Software	Hardware Software	47.78% 68.27%	15.09%	839	957	(29,670)	557	343,913	12,512	23,054	4,891
Kensok	Short-Lived Assets		Endpoint Compute and Productivity Systems	ED	AN	Hardware	Hardware	68.27%	0.00%						-		
Kensok	Short-Lived Assets	Performance & Capacit	Energy Delivery Modernization & Operational Efficie		AA	3 Yr Software	Software	47.78%	15.09%	1,113	541	320	180	270,577	10,882	3,810	5,100
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Delivery Modernization & Operational Efficie Energy Delivery Modernization & Operational Efficie		AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09% 15.09%	1,153	2,386	1,882	671 336	2,604	39	158,968 6,938	1,553 74
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficie		AN	5 Yr Software	Software	65.54%	0.00%				- 336		-	6,936	- 14
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficie		AN	5 Yr Software	Software	68.27%	0.00%	-		-	•	•	•	-	•
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Delivery Modernization & Operational Efficie Energy Delivery Modernization & Operational Efficie		AN WA	Hardware 5 Yr Software	Hardware Software	68.27% 100.00%	0.00%	-	-		-	-	-	-	-
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficie		WA	Hardware	Hardware	100.00%	0.00%						-	-	
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	CD	AA	General	General	47.78%	15.09%	835	1,364	455	267	357	493	84	(765)
Kinney Kinney	EIM FIM		Energy Imbalance Market Energy Imbalance Market	ED ED	AN AN	5 Yr Software 5 Yr Software	Software Software	65.54% 68.27%	0.00%	-	-		-	-	-	-	-
Kinney	EIM		Energy Imbalance Market	ED	AN	General	General	65.54%	0.00%								
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	AN	General	General	68.27%	0.00%					-	-	-	•
Kinney Kinney	EIM FIM		Energy Imbalance Market Energy Imbalance Market	ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%	-	-		-	-	-	-	-
Kinney	EIM		Energy Imbalance Market	ED	AN	Production - Other	Production - Other	65.54%	0.00%								
Kinney	EIM		Energy Imbalance Market	ED	AN	Transmission	Transmission	65.54%	0.00%	-		-	•	•	•	-	•
Kinney Kinney	EIM EIM		Energy Imbalance Market Energy Imbalance Market	ED ED	ID ID	E Distribution General	E Distribution General	0.00%	0.00%		-		-	-	-	-	-
Kinney	EIM		Energy Imbalance Market Energy Imbalance Market	ED	MT	E Distribution	E Distribution	0.00%	0.00%		-		-	-	-		
Kinney	EIM		Energy Imbalance Market	ED	MT	General	General	0.00%	0.00%						-		
Kinney Kinney	EIM FIM		Energy Imbalance Market Energy Imbalance Market	ED ED	WA WA	E Distribution General	E Distribution General	100.00% 100.00%	0.00%	-		•	•	•	*	-	•
Kinney	NEW (Actuals)		Energy Imbalance Market Modernization & Operatio		AN	5 Yr Software	Software	68.27%	0.00%								
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effic	i CD	AA	3 Yr Software	Software	47.78%	15.09%		-						
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effic		AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09% 15.09%	13,505	10,082	9,419	12,309	5,087	9,577	14,735	2,743
Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effic Energy Resources Modernization & Operational Effic		AA AN	2 Yr Software	Software	47.78%	0.00%				-	-	-		
Kensok	Short-Lived Assets	Performance & Capacit	Energy Resources Modernization & Operational Effic	i ED	AN	3 Yr Software	Software	65.54%	0.00%	-	-	-	-	-	-	-	-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effic		AN AN	3 Yr Software	Software	68.27%	0.00%		-			-	-	-	
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effic Energy Resources Modernization & Operational Effic		AN AN	5 Yr Software 5 Yr Software	Software Software	65.54% 68.27%	0.00%	•	-	•	•	•	•	-	•
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effic Energy Resources Modernization & Operational Effic		AN	Hardware	Hardware	65.54%	0.00%						-		
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effic		AN	Hardware	Hardware	68.27%	0.00%		-			-	-	-	
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effic Energy Resources Modernization & Operational Effic		AA AA	5 Yr Software 5 Yr Software	Software Software	0.00%	47.36% 50.19%								
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effic		AA	Hardware	Hardware	0.00%	47.36%								
Kensok	Programs			CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	16,573	-	-	-	-	-
Kensok Kensok	Programs Programs		Enterprise & Control Network Infrastructure Enterprise & Control Network Infrastructure	CD	AA AA	5 Yr Software General	Software General	47.78% 47.78%	15.09% 15.09%	191 47,306	237 63.613	(16,255) 6.418	10 224.820	140 61,990	162 13.856	92 58,915	2,121
Kensok	Programs		Enterprise & Control Network Infrastructure	CD	AA	Hardware	Hardware	47.78%	15.09%	2,737	1,142	2,043	1,083	416	1,088	685	73
Kensok	Programs	Performance & Capacit	Enterprise & Control Network Infrastructure	ED	AN	Transmission	Transmission	65.54%	0.00%	-	-	-		-		-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Enterprise Communication Systems Enterprise Communication Systems	CD	AA AA	1 Yr Software 3 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	7,872 14	12,597	1,973	5,443 27 795	555 67.885	776 64.480	776 23.589	138 3.772
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Enterprise Communication Systems Enterprise Communication Systems	CD	AA AA	5 Yr Software	Software Software	47.78%	15.09%	12,027	2,635	2,492	27,795	1,057	64,480 264	23,589	3,772
Kensok	Short-Lived Assets	Performance & Capacit	Enterprise Communication Systems	CD	AA	General	General	47.78%	15.09%	2,942	1,815	2,021	207	62,886	6,186	2,377	5,938
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Enterprise Communication Systems Enterprise Network Infrastructure	CD	AA AA	Hardware General	Hardware General	47.78% 47.78%	15.09% 15.09%	11	=	694 41,692	61,651 1,364	(61) 686	(32,485) 1,615	20,105 4,015	178 1,000
Kensok Kensok	Programs		Enterprise Network Infrastructure Environmental Control & Monitoring Systems	CD	AA AA	General	General	47.78%	15.09%	1,989	7,117	1,692	1,364	568	23,499	4,015	8,480
Kensok	Programs		Environmental Control & Monitoring Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-		11,484

										3,381,215	3,533,107	5,712,384	7,586,520	6,068,856	5,523,330	5,666,558	10,793,358
	Plant Group for	Primary			Jurisdic	Depreciation	Ser.Jur.Allocatio	WA - E -	WA - G -	WA - Natural Gas Mar	WA - Natural Gas Apr	WA - Natural Gas May	WA - Natural Gas Jun	WA - Natural Gas Iul	WA - Natural Gas Aug	WA - Natural Gas Sep	WA - Natural Gas Oct
Witness	Testimony Purposes	Investment Driver	Project (Business Case)	Service		Category	n Category	Allocation %	Allocation %	2022	2022	2022	2022	2022	2022	2022	2022
Kensok	Short-Lived Assets		ET Modernization & Operational Efficiency			2 Yr Software	Software	47.78%	15.09%							10,111	
Kensok	Short-Lived Assets		ET Modernization & Operational Efficiency		AA	3 Yr Software	Software	47.78%	15.09%	25	14			-		· · · · · · · · · · · · · · · · · · ·	2,175
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency	- Technok CD	AA	5 Yr Software	Software	47.78%	15.09%	1,304	189	15,962	23,398	18,632	4,307	2,590	(20)
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency	- Technok CD	AA	Hardware	Hardware	47.78%	15.09%	286	25	(15,962)	13	-	-	-	
Kensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency	- Technok ED	AN	5 Yr Software	Software	68.27%	0.00%		-			-		-	
Censok	Programs	Performance & Capacit	Fiber Network Lease Service Replacement	CD	AA	General	General	47.78%	15.09%	-	-	-	-	-	-	-	-
Censok	Programs	Performance & Capacit	Fiber Network Lease Service Replacement	ED	AN	Transmission	Transmission	65.54%	0.00%		-			-		-	
Censok	Short-Lived Assets	Performance & Capacit	Financial & Accounting Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	382	-	2,506	-	-	-	-	-
Censok	Short-Lived Assets	Performance & Capacit	Financial & Accounting Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	9,579	(4,034)	1,640	59,861	4,359	5,736	136	
ensok	Short-Lived Assets	Performance & Capacit	Financial & Accounting Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	175	(90)	(1,640)	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit	Gas Airway Heights HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%					-		-	7,326,944
Rosentrater	Large Distinct Projects	Performance & Capacit	Gas Cheney HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%		-			-		-	
Rosentrater	Large Distinct Projects	Performance & Capacit	Gas Operator Qualification Compliance	CD	WA	Transportation	Transportation	77.22%	22.78%	-	_	-	-	_	-	-	-
Rosentrater	Large Distinct Projects	Performance & Capacit	Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	47.36%		-			-		-	_
Rosentrater	Large Distinct Projects	Performance & Capacit	Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	50.19%	-	_	-	2.886	_	-	-	-
Rosentrater	Large Distinct Projects	Performance & Capacit	Gas Operator Qualification Compliance	GD	AN	Transportation	Transportation	0.00%	72.92%		-		-	77,339	483	-	-
Rosentrater	Programs	Performance & Capacit	Gas Reinforcement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	_	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit	Gas Reinforcement Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%		-			-		-	-
Rosentrater	Programs	Performance & Capacit	Gas Reinforcement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	26,303	91,773	73,128	119,868	42,159	20,294	25,402	23,071
Rosentrater	Programs	Performance & Capacit	Gas Telemetry Program	GD	AN	General	General	0.00%	72.92%				-			-	3,040
Rosentrater	Programs	Performance & Capacit	Gas Telemetry Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit	Gas Telemetry Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%		-			-		-	_
Rosentrater	Programs	Performance & Capacit	Gas Telemetry Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%		-			1,604	326	-	-
Rosentrater	NEW (Actuals)	Performance & Capacit	Gas Warden HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%		-			186,302	3,034	300	12,656
Kensok	Short-Lived Assets	Performance & Capacit	Human Resources Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	2,084	1	-	-	-	910	13,840	572
Kensok	Short-Lived Assets	Performance & Capacit	Human Resources Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%		12	31		-		-	-
Rosentrater	Large Distinct Projects	Performance & Capacit .	Jackson Prairie Joint Project	GD	AN	Gas Storage	Gas Storage	0.00%	68.81%	162,390	151,320	103,614	293,670	80,523	77,859	80,787	174,886
Rosentrater	Large Distinct Projects	Performance & Capacit .	Jackson Prairie Joint Project	GD	OR	Gas Storage	Gas Storage	0.00%	0.00%				-			-	-
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communic	ation Systi CD	AA	5 Yr Software	Software	47.78%	15.09%	-	-	-	5	(0)	2,240	216	(5)
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communic	ation Systi CD	AA	General	General	47.78%	15.09%	1,972	894	1,121	415	640	20,701	5,279	(105)
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communic	ation Systi CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-
Kensok	Large Distinct Projects	Performance & Capacit	Land Mobile Radio & Real Time Communic	ation Systi CD	AA	Transportation	Transportation	47.78%	15.09%	539	1			-		-	-
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%				52,556	(155)	) 353	108	(0)
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-	-	-	-	-	-
Kensok	Short-Lived Assets	Performance & Capacit	Legal & Compliance Technology	CD	WA	5 Yr Software	Software	77.22%	22.78%							-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr CD	AA	General	General	47.78%	15.09%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	AN	E Distribution	E Distribution	63.66%	0.00%							-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	AN	E Distribution	E Distribution	65.54%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	AN	General	General	65.54%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	AN	General	General	68.27%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	AN	Transmission	Transmission	65.54%	0.00%							-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	ID	E Distribution	E Distribution	0.00%	0.00%		-			-		-	_
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	ID	General	General	0.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-	-	-	-	-	-
Rosentrater	Programs	Performance & Capacit :	Substation - New Distribution Station Capa	city Progr ED	WA	General	General	100.00%	0.00%		-			-		-	_
Magalsky	Programs	Performance & Capacit	Electric Transportation	ED	WA	E Distribution	E Distribution	100.00%	0.00%							-	-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	AN	5 Yr Software	Software	68.27%	0.00%			-	-	-	-	-	
Rosentrater	Large Distinct Projects		Strategic Initiatives - Clean Energy Fund 2	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-	-	-	-	-	
tosentrater	Large Distinct Projects		Strategic Initiatives - Clean Energy Fund 2	ED	WA	General	General	100.00%	0.00%								
Rosentrater	Large Distinct Projects		Strategic Initiatives - South Landing (Catal	yst) - Clea ED	WA	E Distribution	E Distribution	100.00%	0.00%		-			-		-	-
Rosentrater	Large Distinct Projects		Strategic Initiatives - Real Time Power Sys		AN	General	General	65.54%	0.00%								
Rosentrater	Large Distinct Projects		Strategic Initiatives - Real Time Power Sys		AN	General	General	68.27%	0.00%								
Thackston	Mandatory & Compliance		Strategic Initiatives - Unriver Park	FD	AN	Production - Hydro	Production - Hydro	65 54%	0.00%	_	_	_			_	_	_

										5,347,911	6,120,804	64,639,128
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Nov 2022	WA - Natural Gas Dec 2022	WA - Natural Gas 2022 TOTAL
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	Atlas Atlas	CD	AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	43,744	99,322	(17,827) 244,454
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	General	General	47.78%	15.09%	-	-	-
Kensok	Short-Lived Assets	Asset Condition	Atlas	CD	AA	Hardware	Hardware	47.78%	15.09%	-		(2,189)
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Base Load Hydro Base Load Hydro	CD ED	AA AN	Hardware General	Hardware General	47.78% 68.27%	15.09% 0.00%			853
Thackston	Programs	Asset Condition	Base Load Hydro	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge 15 kV Bus Replacement	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Thackston	Large Distinct Projects	Asset Condition		ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Thackston Thackston	Large Distinct Projects Large Distinct Projects	Asset Condition Asset Condition	Cabinet Gorge Unit 4 Protection & Control Upgrade Cabinet Gorge Unit 4 Protection & Control Upgrade	CD ED	AA AN	General Production - Hydro	General Production - Hydro	47.78% 65.54%	15.09% 0.00%	•	•	2,301
Thackston	Large Distinct Projects	Asset Condition	Cabinet Gorge Unwatering Pumps	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	CD	AA	General	General	47.78%	15.09%	3,458	9,153	106,608
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	CD	AN	General	General	52.71%	16.61%	6,670	12,407	30,149
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	8,600	14,222	25,129
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	ED	AN	General	General	65.54%	0.00%		14,222	25,127
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	ED	AN	General	General	68.27%	0.00%			
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	ED	ID	General	General	0.00%	0.00%	-		-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Capital Tools & Stores	ED GD	WA AA	General General	General General	100.00%	0.00% 47.36%	-	•	
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	AA	General	General	0.00%	50.19%		3.932	55.768
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	ID	General	General	0.00%	0.00%			
Rosentrater	Programs	Asset Condition	Capital Tools & Stores	GD	OR	General	General	0.00%	0.00%			
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Capital Tools & Stores Distribution Grid Modernization	GD ED	WA AN	General General	General General	0.00% 65.54%	100.00% 0.00%	2,915	•	161,038
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	ID	E Distribution	E Distribution	0.00%	0.00%			-
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	ID	General	General	0.00%	0.00%	-		-
Rosentrater	Programs	Asset Condition	Distribution Grid Modernization	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Distribution Minor Rebuild Distribution Minor Rebuild	ED ED	ID MT	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%		-	
Rosentrater	Programs	Asset Condition	Distribution Minor Rebuild	ED	WA	E Distribution	E Distribution	100.00%	0.00%			
Rosentrater	Large Distinct Projects	Asset Condition	Distribution Transformer Change Out Program	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		-
Rosentrater	Large Distinct Projects	Asset Condition	Distribution Transformer Change Out Program	ED		E Distribution	E Distribution	100.00%	0.00%			-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Downtown Network - Asset Condition Fleet Services Capital Plan	ED CD	WA AA	E Distribution General	E Distribution General	100.00% 47.78%	0.00% 15.09%		-	(180)
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AA	Transportation	Transportation	47.78%	15.09%			(304)
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN	General	General	52.71%	16.61%	-		4,658
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	CD	AN	Transportation	Transportation	52.71%	16.61%	346		58,249
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	CD	ID WA	Transportation Transportation	Transportation Transportation	0.00% 77 22%	0.00% 22.78%		-	12,078
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	AN	General	General	68 27%	0.00%			12,070
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	AN	Transportation	Transportation	65.54%	0.00%	-		-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	ED	AN	Transportation	Transportation	68.27%	0.00%	-		-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	ED ED	ID WA	Transportation Transportation	Transportation Transportation	0.00% 100.00%	0.00%		-	
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	AN	Transportation	Transportation	0.00%	68.81%			
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	AN	Transportation	Transportation	0.00%	72.92%	-		-
Rosentrater	Programs	Asset Condition	Fleet Services Capital Plan	GD	ID	Transportation	Transportation	0.00%	0.00%			-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Fleet Services Capital Plan Fleet Services Capital Plan	GD GD	OR WA	Transportation Transportation	Transportation Transportation	0.00%	0.00%		1.948	244,099
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%		1,740	244,099
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%	-		-
Rosentrater	NEW (Actuals)	Asset Condition	Gas ERT Replacement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%			293,920
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Gas Regulator Station Replacement Program Gas Regulator Station Replacement Program	GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%		-	
Rosentrater	Programs	Asset Condition	Gas Regulator Station Replacement Program	GD		G Distribution	G Distribution	0.00%	100.00%	5.510	2.542	222.214
Thackston	Large Distinct Projects	Asset Condition	Generation DC Supplied System Update	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-		
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	CD	AA	5 Yr Software	Software	47.78%	15.09%	51,515	1,094	53,418
Thackston Thackston	Short-Lived Assets Short-Lived Assets	Asset Condition Asset Condition	HMI Control Software HMI Control Software	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	50,829 51,515	1,241 1,700	54,782 61,169
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	5 Yr Software	Software	68.27%	0.00%	51,515	1,700	- 01,109
Thackston	Short-Lived Assets	Asset Condition	HMI Control Software	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Thackston	Large Distinct Projects	Asset Condition	KF_Fuel Yard Equipment Replacement	ED	AN	General	General	68.27%	0.00%			-
Thackston Rosentrater	Large Distinct Projects Programs	Asset Condition Asset Condition	KF_Fuel Yard Equipment Replacement LED Change-Out Program	ED ED	AN ID	Production - Thermal E Distribution	Production - Therm E Distribution	65.54% 0.00%	0.00%		-	
Rosentrater	Programs	Asset Condition	LED Change-Out Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%			
Thackston	Large Distinct Projects	Asset Condition	Little Falls Plant Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-		-
Thackston	Large Distinct Projects	Asset Condition	Long Lake Plant Upgrade	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			-
Rosentrater Thackston	Other Large Distinct Projects	Asset Condition Asset Condition	New Dollar Road Service Center Nine Mile Powerhouse Crane Rehab	GD ED	WA AN	General Production - Hydro	General Production - Hydro	0.00% 65.54%	100.00% 0.00%	-		0
Thackston	Large Distinct Projects	Asset Condition	Post Falls Landing and Crane Pad Development	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Rosentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED	ID	E Distribution	E Distribution	0.00%	0.00%			
Rosentrater	Large Distinct Projects	Asset Condition	Primary URD Cable Replacement	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	476	-	476
Thackston	Programs	Asset Condition	Regulating Hydro	ED	AN	General	General	65.54%	0.00%			
Thackston	Programs	Asset Condition	Regulating Hydro	ED	AN	General	General	68.27%	0.00%	-	-	-
Thackston	Programs	Asset Condition	Regulating Hydro	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-	-	-
Thackston Thackston	Programs Programs	Asset Condition Asset Condition	Regulating Hydro Regulating Hydro	ED ED	AN AN	Transmission Transportation	Transmission Transportation	65.54% 68.27%	0.00%	-	-	-
I hackston Rosentrater	Programs Programs	Asset Condition Asset Condition	Regulating Hydro SCADA - SOO and BuCC	CD	AN AA	1 ransportation 3 Yr Software	Iransportation Software	68.27% 47.78%	0.00%		-	11 288
Rosentrater	Programs	Asset Condition	SCADA - SOO and Bucc	CD	AA	5 Yr Software	Software	47.78%	15.09%	124	1,224	17,720
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	General	General	47.78%	15.09%	23,412	48	32,672
Rosentrater	Programs	Asset Condition	SCADA - SOO and BuCC	CD	AA	Hardware	Hardware	47.78%	15.09%	601	2,875	16,861
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	SCADA - SOO and BuCC SCADA - SOO and BuCC	ED ED	AN AN	5 Yr Software Hardware	Software Hardware	68.27% 68.27%	0.00%	-	-	-
Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture	CD	AA	General	General	47.78%	15.09%	260,840	48,616	632,699
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD	AA	Hardware	Hardware	47.78%	15.09%	7,316	17,858	118,085
Rosentrater	Programs	Asset Condition	Structures and Improvements/Furniture	CD	AN	General	General	52.71%	16.61%	-	57,016	57,882
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	CD	ID WA	General General	General General	0.00% 77.22%	0.00% 22.78%	-	3.390	11,848
Rosentrater	Programs Programs	Asset Condition Asset Condition	Structures and Improvements/Furniture Structures and Improvements/Furniture	ED	AN	General	General	65.54%	22.78% 0.00%		3,390	11,848

										5,347,911	6,120,804	64,639,128
Witness Rosentrater	Plant Group for Testimony Purposes	Primary Investment Driver Asset Condition	Project (Business Case) Structures and Improvements/Furniture	Service FD	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Nov 2022	WA - Natural Gas Dec 2022	WA - Natural Gas 2022 TOTAL
Rosentrater	Programs Programs	Asset Condition Asset Condition		ED	ID	General	General	0.00%	0.00%		-	
Rosentrater	Programs	Asset Condition		ED	WA	E Distribution	E Distribution	100.00%	0.00%			
Rosentrater	Programs	Asset Condition		ED GD	WA OR	General	General	100.00%	0.00%	-	-	-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		GD	WA	General General	General General	0.00%	100.00%			161.844
Rosentrater	Programs	Asset Condition	Substation - Station Rebuilds Program	ED	AN	General	General	65.54%	0.00%			-
Rosentrater	Programs	Asset Condition		ED	AN	General	General	68.27%	0.00%	-		-
Rosentrater Rosentrater	Programs Programs	Asset Condition Asset Condition		ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%		-	
Rosentrater	Programs	Asset Condition		ED		E Distribution	E Distribution	100.00%	0.00%			
Kensok	Short-Lived Assets	Asset Condition	Technology Refresh to Sustain Business Process	CD	AA	General	General	47.78%	15.09%			-
Rosentrater	Large Distinct Projects	Asset Condition		CD	AA	3 Yr Software	Software	47.78%	15.09%			8,745
Rosentrater	Large Distinct Projects	Asset Condition		CD	AA	General	General	47.78%	15.09%	560	94	14,819
Rosentrater Rosentrater	Programs Large Distinct Projects	Asset Condition Asset Condition		ED ED	AN AN	Transmission Transmission	Transmission Transmission	65.54% 65.54%	0.00%	•	•	
Rosentrater	Large Distinct Projects	Asset Condition		ED	ID	E Distribution	E Distribution	0.00%	0.00%			
Rosentrater	Programs	Asset Condition	Wood Pole Management	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		-
Rosentrater	Programs	Asset Condition		ED		E Distribution	E Distribution	100.00%	0.00%	-		-
Rosentrater Rosentrater	Programs	Customer Requested		ED ED	ID WA	E Distribution E Distribution	E Distribution E Distribution	0.00%	0.00%	-		-
Rosentrater	Programs Programs			ED	WA	Transmission	Transmission	100.00%	0.00%			
Rosentrater	Programs	Customer Requested		GD	ID	G Distribution	G Distribution	0.00%	0.00%			
Rosentrater	Programs		New Revenue - Growth	GD	OR	G Distribution	G Distribution	0.00%	0.00%	-		-
Rosentrater	Programs	Customer Requested		GD	WA	G Distribution	G Distribution	0.00%	100.00%	1,905,929	2,344,849	20,108,393
Rosentrater	Other	Customer Requested	Rattlesnake Flat Wind Farm Project 115kV Integratio		AA	General	General	47.78%	15.09%	-		-
Rosentrater Rosentrater	Other Other		Rattlesnake Flat Wind Farm Project 115kV Integratio Rattlesnake Flat Wind Farm Project 115kV Integratio		AN AN	General General	General General	65.54% 68.27%	0.00%	•	•	•
Rosentrater	Other		Rattlesnake Flat Wind Farm Project 115kV Integratio		AN	Transmission	Transmission	65.54%	0.00%			
Rosentrater	Other			ED	AN	Transmission	Transmission	65.54%	0.00%			
Rosentrater	Other	Customer Requested		ED	WA	General	General	100.00%	0.00%			
Thackston	Programs			ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	-		-
Magalsky	Short-Lived Assets Short-Lived Assets			CD ED	AA	5 Yr Software 5 Yr Software	Software Software	47.78% 100.00%	15.09% 0.00%	672	282,380	537,964
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets			CD	WA AA	2 Yr Software	Software	47.78%	15.09%	1,493	1,280	348,894
Magalsky	Short-Lived Assets			CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	16,838
Magalsky	Short-Lived Assets	Customer Service Qual	i Customer Facing Technology Program	CD	AA	5 Yr Software	Software	47.78%	15.09%	1,258	188,005	227,849
Magalsky	Short-Lived Assets			CD	AA	Hardware	Hardware	47.78%	15.09%	3	354	1,133
Magalsky Magalsky	Short-Lived Assets Short-Lived Assets	Customer Service Qual		CD	AA AA	3 Yr Software 5 Yr Software	Software Software	47.78% 47.78%	15.09% 15.09%	730 10	1,189 127.343	41,959 326.566
Magalsky	Short-Lived Assets Short-Lived Assets			CD	AA	General	Sortware General	47.78%	15.09%	- 10	3,927	326,566
Magalsky	Short-Lived Assets			CD	AA	Hardware	Hardware	47.78%	15.09%	0	9,632	9,926
Magalsky	Short-Lived Assets			CD	WA	5 Yr Software	Software	77.22%	22.78%			77
Magalsky	Short-Lived Assets			ED		5 Yr Software	Software	100.00%	0.00%	-		-
Magalsky Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual	Customer Transactional Systems	GD CD	OR AA	5 Yr Software 2 Yr Software	Software Software	0.00% 47.78%	0.00% 15.09%		19.584	23.677
Kensok	Short-Lived Assets	Customer Service Qual		CD		3 Yr Software	Software	47.78%	15.09%		74.080	74.042
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	5 Yr Software	Software	47.78%	15.09%	9,139	36,679	118,946
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	General	General	47.78%	15.09%			35,932
Kensok	Short-Lived Assets	Customer Service Qual		CD	AA	Hardware	Hardware	47.78%	15.09%	2,769	4,835	58,097
Kensok Kensok	Short-Lived Assets Short-Lived Assets	Customer Service Qual Customer Service Qual		ED ED	AN AN	5 Yr Software 5 Yr Software	Software Software	65.54% 68.27%	0.00%	•	•	-
Kensok	Short-Lived Assets	Customer Service Qual		ED	AN	Transmission	Transmission	65.54%	0.00%			
Kensok	Short-Lived Assets		Facilities and Storage Location Security	CD	AA	5 Yr Software	Software	47.78%	15.09%	-		
Kensok	Short-Lived Assets			CD	AA	General	General	47.78%	15.09%		18,319	18,319
Kensok	Short-Lived Assets			CD	AA	Hardware	Hardware	47.78%	15.09%	-		4,108
Kensok Kensok	Short-Lived Assets Short-Lived Assets			CD GD	AN OR	General General	General General	52.71% 0.00%	16.61% 0.00%	(441)	615	29,983
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED	AN	5 Yr Software	General Software	68.27%	0.00%	-	-	-
Kensok	Short-Lived Assets			ED	AN	General	General	65.54%	0.00%	-	=	-
Kensok	Short-Lived Assets			ED	AN	General	General	68.27%	0.00%	•	•	•
Kensok	Short-Lived Assets			ED	AN	Hardware	Hardware	68.27%	0.00%	-	-	-
Kensok Kensok	Short-Lived Assets Short-Lived Assets			ED ED	AN AN	Production - Hydro Production - Other	Production - Hydro Production - Other	65.54% 65.54%	0.00%	-	-	-
Kensok	Short-Lived Assets			ED		E Distribution	E Distribution	100.00%	0.00%			
Kensok	Other		i Telecommunication & Network Distribution location :		AA	General	General	47.78%	15.09%	1,205	357	11,860
Kensok	Other	Customer Service Qual	Telecommunication & Network Distribution location 5	:CD	AA	Hardware	Hardware	47.78%	15.09%	643	191	6,325
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	General	General	77.22%	22.78%	-	159,556	159,556
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	Hardware	Hardware	77.22%	22.78%		•	
Rosentrater Rosentrater	Large Distinct Projects Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec i Washington Advanced Metering Infrastructure Projec			5 Yr Software F Distribution	Software F Distribution	100.00%	0.00%	-		
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec		WA	General	General	100.00%	0.00%			
Rosentrater	Large Distinct Projects	Customer Service Qual	i Washington Advanced Metering Infrastructure Projec	: ED	WA	Hardware	Hardware	100.00%	0.00%	-	-	-
Rosentrater	Large Distinct Projects	Customer Service Qual	i Washington Advanced Metering Infrastructure Projec	: GD		G Distribution	G Distribution	0.00%	100.00%	•	•	•
Rosentrater	Large Distinct Projects		i Washington Advanced Metering Infrastructure Projec			General	General	0.00%	100.00%	•	•	
Howell Howell	Wildfire Wildfire			CD ED	AA AN	General 3 Yr Software	General Software	47.78% 68.27%	15.09% 0.00%	-	•	(168)
Howell	Wildfire			ED	AN	3 Yr Sortware Transmission	Transmission	65.54%	0.00%		-	-
Howell	Wildfire			ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		
Howell	Wildfire			ED	ID	General	General	0.00%	0.00%			
Howell	Wildfire			ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Howell Thackston	Wildfire			ED CD	WA AA	General General	General General	100.00% 47.78%	0.00% 15.09%	-	-	3,803
Thackston Thackston	Programs Programs			CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	-	355	3,803 355
Thackston	Programs			ED	AN	General	General	68.27%	0.00%		333	- 355
Thackston	Programs	Failed Plant & Operation	: Base Load Thermal Program	ED	AN	Production - Other	Production - Other	65.54%	0.00%	-	-	-
Thackston	Programs			ED	AN	Production - Thermal	Production - Therm	65.54%	0.00%	-	-	-
Thackston	Programs	Failed Plant & Operation	Base Load Thermal Program	ED	AN	Transmission	Transmission	65.54%	0.00%	-		-

										5,347,911	6,120,804	64,639,128
Witness	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Nov 2022	WA - Natural Gas Dec 2022	WA - Natural Gas 2022 TOTAL
Thackston Rosentrater	Large Distinct Projects Programs	Failed Plant & Operation Failed Plant & Operation	CS2 Single Phase Transformer	ED ED	AN AN	Transmission Transmission	Transmission Transmission	65.54% 65.54%	0.00%		-	-
Rosentrater	Programs	Failed Plant & Operation		ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		-
Rosentrater	Programs	Failed Plant & Operation		ED		E Distribution	E Distribution	100.00%	0.00%		÷	
Rosentrater Rosentrater	Programs Programs		Gas Non-Revenue Program Gas Non-Revenue Program	GD GD	ID OR	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%			
Rosentrater	Programs			GD		G Distribution	G Distribution	0.00%	100.00%	428,607	229,884	4,317,433
Rosentrater	Programs	Failed Plant & Operation		ED	ID	E Distribution	E Distribution	0.00%	0.00%		÷	
Rosentrater Rosentrater	Programs Large Distinct Projects	Failed Plant & Operation	: Meter Minor Blanket : N Lewiston Autotransformer - Failed Plant	ED ED	WA AN	E Distribution Transmission	E Distribution Transmission	100.00% 65.54%	0.00%			
Thackston	Large Distinct Projects		Peaking Generation Business Case	CD	AA	Hardware	Hardware	47.78%	15.09%	-		3,473
Thackston	Large Distinct Projects			ED	AN	Production - Other	Production - Other	65.54%	0.00%	-	-	-
Kensok Kensok	Programs Programs			CD CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	12,282 2.619	42,960 4.084	97,480 20,953
Kensok	Programs			ED	AN	Transmission	Transmission	65.54%	0.00%	2,017	4,004	20,755
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Apprentice/Craft Training	CD	AA	General	General	47.78%	15.09%	-	•	6,118
Thackston	Mandatory & Compliance		Cabinet Gorge Dam Fishway	ED	AN	General	General	68.27%	0.00%	-		-
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance			ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%			-
Thackston	Mandatory & Compliance			ED	AN	Transportation	Transportation	68.27%	0.00%			-
Thackston	Mandatory & Compliance		Cabinet Gorge Dam Fishway	ED	ID	Transportation	Transportation	0.00%	0.00%			-
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance			ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%		-	-
Thackston	Mandatory & Compliance		Clark Fork Settlement Agreement	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Rosentrater	Mandatory & Compliance		Clearwater Wind Generation Interconnection	ED	AN	Transmission	Transmission	65.54%	0.00%			-
Rosentrater		Mandatory & Complian		ED		5 Yr Software	Software	68.27%	0.00%			-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian Mandatory & Complian		ED ED	AN AN	General General	General General	65.54% 68.27%	0.00%		-	-
Rosentrater		Mandatory & Complian	Colstrip Transmission	ED	AN	Hardware	Hardware	65.54%	0.00%			-
Rosentrater	Mandatory & Compliance	Mandatory & Complian		ED	AN	Hardware	Hardware	68.27%	0.00%			-
Rosentrater	Mandatory & Compliance	Mandatory & Complian		ED	ID	Transmission	Transmission	0.00%	0.00%			-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian		ED ED	WA AN	Transmission Transmission	Transmission Transmission	100.00% 65.54%	0.00%	-	-	-
Rosentrater	Mandatory & Compliance			ED	ID	E Distribution	F Distribution	0.00%	0.00%			
Rosentrater	Mandatory & Compliance		Elec Relocation and Replacement Program	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Rosentrater	Mandatory & Compliance		Gas Cathodic Protection Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%			-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance		Gas Cathodic Protection Program Gas Cathodic Protection Program	GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00% 100.00%	15,258	152,684	615,776
Rosentrater	Mandatory & Compliance		Gas Facility Replacement Program (GFRP) Aldyl A Pip		ID	G Distribution	G Distribution	0.00%	0.00%	15,250	132,004	
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Gas Facility Replacement Program (GFRP) Aldyl A Pip	GD		G Distribution	G Distribution	0.00%	0.00%			-
Rosentrater	Mandatory & Compliance		Gas Facility Replacement Program (GFRP) Aldyl A Pip		WA	G Distribution	G Distribution	0.00%	100.00%	1,523,015	251,797	17,114,541
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance		Gas HP Pipeline Remediation Program Gas HP Pipeline Remediation Program	CD GD	AA WA	3 Yr Software G Distribution	Software G Distribution	47.78% 0.00%	15.09% 100.00%			
Rosentrater	Mandatory & Compliance		Gas Isolated Steel Replacement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%			
Rosentrater	Mandatory & Compliance			GD		G Distribution	G Distribution	0.00%	0.00%			-
Rosentrater	Mandatory & Compliance		Gas Isolated Steel Replacement Program	GD	WA ID	G Distribution G Distribution	G Distribution G Distribution	0.00%	100.00%	5,533	3,176	102,643
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance		Gas Overbuilt Pipe Replacement Program Gas Overbuilt Pipe Replacement Program	GD GD		G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%			
Rosentrater	Mandatory & Compliance		Gas Overbuilt Pipe Replacement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	1,875	9,681	51,307
Rosentrater	Mandatory & Compliance	Mandatory & Complian		GD	ID	G Distribution	G Distribution	0.00%	0.00%			-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian Mandatory & Complian		GD GD	OR WA	G Distribution G Distribution	G Distribution G Distribution	0.00%	0.00%	18.517	20.798	709.579
Rosentrater	Mandatory & Compliance		Gas Replacement Street and Highway Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	10,517	20,790	709,579
Rosentrater	Mandatory & Compliance		Gas Replacement Street and Highway Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%			-
Rosentrater	Mandatory & Compliance		Gas Replacement Street and Highway Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	77,262	94,334	1,145,270
Rosentrater Kensok	Mandatory & Compliance Mandatory & Compliance		Gas Transient Voltage Mitigation Program High Voltage Protection (HVP) Refresh	GD ED	WA WA	G Distribution General	G Distribution General	0.00%	100.00%		-	-
Thackston	Mandatory & Compliance		Hydro Safety Minor Blanket	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			-
Rosentrater		Mandatory & Complian		ED	ID	E Distribution	E Distribution	0.00%	0.00%			-
Rosentrater	Mandatory & Compliance	Mandatory & Complian		ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Kensok Kensok	Mandatory & Compliance			CD	AA AA	5 Yr Software Hardware	Software Hardware	47.78% 47.78%	15.09% 15.09%		208 252	1,274 1,548
Rosentrater	Mandatory & Compliance			FD	AN	General	General	65.54%	0.00%		- 232	1,346
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Protection System Upgrade for PRC-002	ED	AN	General	General	68.27%	0.00%			-
Rosentrater			Protection System Upgrade for PRC-002	ED	AN	Transmission	Transmission	65.54%	0.00%			-
Thackston Thackston	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian Mandatory & Complian		ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54% 0.00%	0.00%	-	•	•
Thackston	Mandatory & Compliance	Mandatory & Complian		ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Thackston	Mandatory & Compliance	Mandatory & Complian		GD	ID	G Distribution	G Distribution	0.00%	0.00%			-
Thackston		Mandatory & Complian		GD		G Distribution	G Distribution	0.00%	0.00%			
Thackston Rosentrater	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian	Use Permits Saddle Mountain 230/115kV Station (New) Integration	GD	WA AA	G Distribution General	G Distribution General	0.00% 47.78%	100.00% 15.09%	2,050	4,930	20,288 509,176
Rosentrater	Mandatory & Compliance		Saddle Mountain 230/115kV Station (New) Integration Saddle Mountain 230/115kV Station (New) Integration		WA	General	General	77.22%	22.78%			(271,032)
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Saddle Mountain 230/115kV Station (New) Integration	:ED	AN	General	General	65.54%	0.00%			-
Rosentrater	Mandatory & Compliance		Saddle Mountain 230/115kV Station (New) Integration		AN	General	General	68.27%	0.00%		÷	
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance		Saddle Mountain 230/115kV Station (New) Integration Saddle Mountain 230/115kV Station (New) Integration		AN AN	Transmission General	Transmission General	65.54% 68.27%	0.00%	-	-	-
Rosentrater	Mandatory & Compliance Mandatory & Compliance		Saddle Mountain 230/115kV Station (New) Integration Saddle Mountain 230/115kV Station (New) Integration		AN	Transmission	Transmission	65.54%	0.00%		-	-
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Saddle Mountain 230/115kV Station (New) Integration	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Saddle Mountain 230/115kV Station (New) Integration	ED	WA	General	General	100.00%	0.00%	-		
Kensok Thackston	Mandatory & Compliance Mandatory & Compliance	Mandatory & Complian	Security Compliance Spokane River License Implementation	CD FD	AA AN	Hardware Broduction Hudro	Hardware Production - Hydro	47.78% 65.54%	15.09%	-	25,574	25,574
I hackston Rosentrater	Mandatory & Compliance Mandatory & Compliance		Spokane River License Implementation Spokane Valley Transmission Reinforcement Project		AN AN	Production - Hydro General	Production - Hydro General	65.54% 65.54%	0.00%		-	-
Rosentrater			Spokane Valley Transmission Reinforcement Project		AN	Transmission	Transmission	65.54%	0.00%	-	-	-
Rosentrater			Spokane Valley Transmission Reinforcement Project		WA	E Distribution	E Distribution	100.00%	0.00%	-	-	-
Rosentrater	Mandatory & Compliance	Mandatory & Complian	Spokane Valley Transmission Reinforcement Project	ED	WA	General	General	100.00%	0.00%	-	•	-

Witness Rosentrater										5,347,911	6,120,804	64,639,128
Rosentrater	Plant Group for Testimony Purposes	Primary Investment Driver	Project (Business Case)	Service	Jurisdic tion	Depreciation Category	Ser.Jur.Allocatio n Category	WA - E - Allocation %	WA - G - Allocation %	WA - Natural Gas Nov 2022	WA - Natural Gas Dec 2022	WA - Natural Gas 2022 TOTAL
Rosentrater	Mandatory & Compliance Mandatory & Compliance		Transmission Construction - Compliance Transmission Construction - Compliance	CD ED	AA AN	General Transmission	General Transmission	47.78% 65.54%	15.09% 0.00%		-	(160)
Rosentrater	Mandatory & Compliance		Transmission Construction - Compliance	ED	WA	E Distribution	E Distribution	100.00%	0.00%			
Rosentrater			Transmission NERC Low-Risk Priority Lines Mitigation		AN	Transmission	Transmission	65.54%	0.00%	•	•	-
Rosentrater Rosentrater	Mandatory & Compliance Mandatory & Compliance		Tribal Permits & Settlements Tribal Permits & Settlements	ED ED	AN ID	Transmission E Distribution	Transmission E Distribution	65.54%	0.00%	-	-	-
Rosentrater			Westside 230/115kV Station Brownfield Rebuild Proi		AN	General	General	65.54%	0.00%	-		
Rosentrater	Mandatory & Compliance		Westside 230/115kV Station Brownfield Rebuild Proj		AN	Transmission	Transmission	65.54%	0.00%			
Rosentrater	Mandatory & Compliance		WSDOT Control Zone Mitigation	ED	WA WA	E Distribution	E Distribution	100.00% 100.00%	0.00%	•	•	
Thackston Rosentrater	Mandatory & Compliance Large Distinct Projects	Mandatory & Complian 1 No Driver	WSDOT Franchises Spokane Smart Circuit	ED ED	WA	Intangible E Distribution	Intangible E Distribution	100.00%	0.00%			
Kensok	Short-Lived Assets		Basic Workplace Technology Delivery	CD	AA	5 Yr Software	Software	47.78%	15.09%	3,930	24,648	78,780
Kensok	Short-Lived Assets		Basic Workplace Technology Delivery	CD	AA	General	General	47.78%	15.09%	3,930	24,648	78,780
Kensok Rosentrater	Short-Lived Assets Other		Basic Workplace Technology Delivery	CD	AA AA	Hardware General	Hardware General	47.78% 47.78%	15.09% 15.09%	7,860	49,297	158,538
Kensok	Short-Lived Assets	Performance & Capacit	Campus Repurposing Phase 2 Control and Safety Network Infrastructure	CD	AA	General	General	47.78%	15.09%	-	173,755	189,999
Thackston	Large Distinct Projects	Performance & Capacit	Coyote Springs LTSA	ED	AN	Production - Other	Production - Other	65.54%	0.00%	-		
Kensok	Short-Lived Assets		Data Center Compute and Storage Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	36,688	5,336	97,981
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Data Center Compute and Storage Systems  Data Center Compute and Storage Systems	CD ED	AA AN	Hardware Production - Hydro	Hardware Production - Hydro	47.78% 65.54%	15.09% 0.00%	419	534	104,874
Kensok	Large Distinct Projects	Performance & Capacit		CD	AA	5 Yr Software	Software	47.78%	15.09%			77
Kensok	Large Distinct Projects	Performance & Capacit		CD	AA	General	General	47.78%	15.09%	-		25,817
Kensok	Large Distinct Projects	Performance & Capacit		CD	AN	General	General	52.71%	16.61%		283,279	283,279
Kensok Kensok	Large Distinct Projects Large Distinct Projects	Performance & Capacit Performance & Capacit		CD	WA WA	General Hardware	General Hardware	77.22% 77.22%	22.78% 22.78%	130,336 7,806	1,873 112	132,210 7,918
Kensok	Large Distinct Projects	Performance & Capacit		ED	WA	E Distribution	E Distribution	100.00%	0.00%	7,000	- 112	7,710
Rosentrater	Programs		Distribution System Enhancements	ED	AN	Transmission	Transmission	65.54%	0.00%	-		-
Rosentrater	Programs		Distribution System Enhancements	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		
Rosentrater Rosentrater	Programs Programs		Distribution System Enhancements Downtown Network - Performance & Capacity	ED ED	WA WA	E Distribution E Distribution	E Distribution E Distribution	100.00% 100.00%	0.00%			-
Kensok	Short-Lived Assets		Endpoint Compute and Productivity Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%	21.945	8.784	388.557
Kensok	Short-Lived Assets	Performance & Capacit	Endpoint Compute and Productivity Systems	CD	AA	5 Yr Software	Software	47.78%	15.09%	4,827	7,335	64,373
Kensok	Short-Lived Assets		Endpoint Compute and Productivity Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	12,784	(28,838)	354,270
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Endpoint Compute and Productivity Systems Endpoint Compute and Productivity Systems	ED ED	AN AN	3 Yr Software Hardware	Software Hardware	68.27% 68.27%	0.00%			-
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficier		AA	3 Yr Software	Software	47.78%	15.09%	41.303	11.475	627.003
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AA	5 Yr Software	Software	47.78%	15.09%	75,680	51,079	339,780
Kensok	Short-Lived Assets	Performance & Capacit	Energy Delivery Modernization & Operational Efficien	CD	AA	Hardware	Hardware	47.78%	15.09%	263	202	7,813
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Delivery Modernization & Operational Efficier Energy Delivery Modernization & Operational Efficier		AN AN	5 Yr Software 5 Yr Software	Software Software	65.54% 68.27%	0.00%			-
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		AN	Hardware	Hardware	68.27%	0.00%			
Kensok	Short-Lived Assets		Energy Delivery Modernization & Operational Efficien		WA	5 Yr Software	Software	100.00%	0.00%			
Kensok	Short-Lived Assets	Performance & Capacit	Energy Delivery Modernization & Operational Efficien	ED	WA	Hardware	Hardware	100.00%	0.00%	-		
Kinney Kinney	EIM EIM		Energy Imbalance Market Energy Imbalance Market	CD FD	AA AN	General 5 Yr Software	General Software	47.78% 65.54%	15.09%			3,899
Kinney	FIM		Energy Imbalance Market Energy Imbalance Market	ED	AN	5 Yr Software	Software	68.27%	0.00%			
Kinney	EIM		Energy Imbalance Market	ED	AN	General	General	65.54%	0.00%			
Kinney	EIM		Energy Imbalance Market	ED	AN	General	General	68.27%	0.00%	-		-
Kinney Kinney	EIM EIM		Energy Imbalance Market Energy Imbalance Market	ED ED	AN AN	Hardware Production - Hydro	Hardware Production - Hydro	68.27% 65.54%	0.00%			-
Kinney	EIM		Energy Imbalance Market Energy Imbalance Market	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%			
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	AN	Transmission	Transmission	65.54%	0.00%			
Kinney	EIM		Energy Imbalance Market	ED	ID	E Distribution	E Distribution	0.00%	0.00%	-		
Kinney Kinney	EIM EIM		Energy Imbalance Market Energy Imbalance Market	ED ED	ID MT	General F Distribution	General F Distribution	0.00%	0.00%	•	•	-
Kinney	EIM		Energy Imbalance Market Energy Imbalance Market	ED	MT	General	General	0.00%	0.00%	-		
Kinney	EIM	Performance & Capacit	Energy Imbalance Market	ED	WA	E Distribution	E Distribution	100.00%	0.00%	-		-
Kinney	EIM		Energy Imbalance Market	ED	WA	General	General	100.00%	0.00%	-		
Kinney Kensok	NEW (Actuals) Short-Lived Assets		Energy Imbalance Market Modernization & Operation Energy Resources Modernization & Operational Effici		AN AA	5 Yr Software 3 Yr Software	Software Software	68.27% 47.78%	0.00% 15.09%			(100)
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici			5 Yr Software	Software	47.78%	15.09%	11.343	32,990	160,125
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AA	Hardware	Hardware	47.78%	15.09%	- 11,545	957	2,065
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	2 Yr Software	Software	68.27%	0.00%	-		
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AN AN	3 Yr Software 3 Yr Software	Software Software	65.54% 68.27%	0.00%	-		-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AN	5 Yr Software	Software	65.27%	0.00%			
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	5 Yr Software	Software	68.27%	0.00%			
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	Hardware	Hardware	65.54%	0.00%	-		-
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AN	Hardware	Hardware	68.27% 0.00%	0.00%			-
Kensok Kensok	Short-Lived Assets Short-Lived Assets		Energy Resources Modernization & Operational Effici Energy Resources Modernization & Operational Effici		AA AA	5 Yr Software 5 Yr Software	Software Software	0.00%	47.36% 50.19%			
Kensok	Short-Lived Assets		Energy Resources Modernization & Operational Effici		AA	Hardware	Hardware	0.00%	47.36%			
Kensok	Programs		Enterprise & Control Network Infrastructure	CD	AA	3 Yr Software	Software	47.78%	15.09%	-	-	16,573
Kensok	Programs		Enterprise & Control Network Infrastructure	CD	AA AA	5 Yr Software	Software	47.78% 47.78%	15.09% 15.09%	7,594	72,263	(14,751) 573,138
Kensok Kensok	Programs Programs		Enterprise & Control Network Infrastructure Enterprise & Control Network Infrastructure	CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	7,594	12,263	573,138 14,069
Kensok	Programs		Enterprise & Control Network Infrastructure  Enterprise & Control Network Infrastructure	ED	AN	Transmission	Transmission	65.54%	0.00%	- 69		14,009
	Short-Lived Assets	Performance & Capacit	Enterprise Communication Systems	CD	AA	1 Yr Software	Software	47.78%	15.09%	(93,519)		(0)
Kensok	Short-Lived Assets		Enterprise Communication Systems Enterprise Communication Systems	CD	AA	3 Yr Software	Software	47.78%	15.09%	22,563	27,606	238,058
Kensok Kensok				CD	AA	5 Yr Software	Software	47.78%	15.09%	93,524	59,821	156,677
Kensok Kensok Kensok	Short-Lived Assets			CD	ΔΔ	General	General	47 700/	15 000/	2 470	2.410	
Kensok Kensok	Short-Lived Assets Short-Lived Assets Short-Lived Assets	Performance & Capacit	Enterprise Communication Systems Enterprise Communication Systems Enterprise Communication Systems	CD CD	AA AA	General Hardware	General Hardware	47.78% 47.78%	15.09% 15.09%	2,479 598	2,410 83,871	115,517 133,682
Kensok Kensok Kensok Kensok Kensok Kensok	Short-Lived Assets Short-Lived Assets Short-Lived Assets	Performance & Capacit Performance & Capacit Performance & Capacit	Enterprise Communication Systems Enterprise Communication Systems Enterprise Network Infrastructure	CD CD	AA AA	Hardware General	Hardware General	47.78% 47.78%	15.09% 15.09%	598 2,409	83,871 2,003	115,517 133,682 54,784
Kensok Kensok Kensok Kensok Kensok	Short-Lived Assets Short-Lived Assets	Performance & Capacit Performance & Capacit Performance & Capacit Performance & Capacit	Enterprise Communication Systems Enterprise Communication Systems	CD	AA	Hardware	Hardware	47.78%	15.09%	598	83,871	115,517 133,682

										5,347,911	6,120,804	64,639,128
	Plant Group for	Primary			Jurisdic	Depreciation	Ser.Jur.Allocatio	WA - E -	WA - G -	WA - Natural Gas Nov	WA - Natural Gas Dec	WA - Natural Gas
Witness	Testimony Purposes	Investment Driver	Project (Business Case)	Service	tion	Category	n Category	Allocation %	Allocation %	2022	2022	2022 TOTAL
ensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency - Technol	CD	AA	2 Yr Software	Software	47.78%	15.09%	-		10,11
ensok	Short-Lived Assets	Performance & Capacit	ET Modernization & Operational Efficiency - Technol	CD	AA	3 Yr Software	Software	47.78%	15.09%	20,902	17,269	40,53
ensok	Short-Lived Assets		ET Modernization & Operational Efficiency - Technol		AA	5 Yr Software	Software	47.78%	15.09%	120	88,910	161,894
ensok	Short-Lived Assets		ET Modernization & Operational Efficiency - Technol		AA	Hardware	Hardware	47.78%	15.09%	•	-	(14,22)
ensok	Short-Lived Assets		ET Modernization & Operational Efficiency - Technol		AN	5 Yr Software	Software	68.27%	0.00%	•	-	-
ensok	Programs		Fiber Network Lease Service Replacement	CD	AA	General	General	47.78%	15.09%		-	-
Censok	Programs		Fiber Network Lease Service Replacement	ED	AN	Transmission	Transmission	65.54%	0.00%		-	-
Censok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	•	-	3,32
Censok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	•	107,896	200,55
ensok	Short-Lived Assets		Financial & Accounting Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	(1,284
Rosentrater	Programs		Gas Airway Heights HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	197,195	343,641	7,867,78
Rosentrater	Large Distinct Projects		Gas Cheney HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%	-	-	
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	CD	WA	Transportation	Transportation	77.22%	22.78%	•	-	-
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	47.36%		-	
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	GD	AA	General	General	0.00%	50.19%	•	-	2,886
Rosentrater	Large Distinct Projects		Gas Operator Qualification Compliance	GD	AN	Transportation	Transportation	0.00%	72.92%	-	-	77,822
Rosentrater	Programs		Gas Reinforcement Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	•	-	-
Rosentrater	Programs		Gas Reinforcement Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%			
Rosentrater	Programs		Gas Reinforcement Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	31,379	17,477	555,256
Rosentrater	Programs		Gas Telemetry Program	GD	AN	General	General	0.00%	72.92%	•	-	3,040
Rosentrater	Programs		Gas Telemetry Program	GD	ID	G Distribution	G Distribution	0.00%	0.00%	-	-	-
Rosentrater	Programs		Gas Telemetry Program	GD	OR	G Distribution	G Distribution	0.00%	0.00%		-	
Rosentrater	Programs		Gas Telemetry Program	GD	WA	G Distribution	G Distribution	0.00%	100.00%	11,628	-	13,558
Rosentrater	NEW (Actuals)		Gas Warden HP Reinforcement	GD	WA	G Distribution	G Distribution	0.00%	100.00%		_ 1	202,293
Censok	Short-Lived Assets		Human Resources Technology	CD	AA	3 Yr Software	Software	47.78%	15.09%	806	5,026	24,186
Censok	Short-Lived Assets		Human Resources Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%		33,501	33,886
Rosentrater	Large Distinct Projects		Jackson Prairie Joint Project	GD	AN	Gas Storage	Gas Storage	0.00%	68.81%	144,826	179,243	1,469,277
Rosentrater	Large Distinct Projects		Jackson Prairie Joint Project	GD	OR	Gas Storage	Gas Storage	0.00%	0.00%	-	-	-
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communication Syst		AA	5 Yr Software	Software	47.78%	15.09%	•	-	2,457
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communication Syst		AA	General	General	47.78%	15.09%	4,861	1,264	38,766
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communication Syst		AA	Hardware	Hardware	47.78%	15.09%	•	-	-
Kensok	Large Distinct Projects		Land Mobile Radio & Real Time Communication Syst		AA	Transportation	Transportation	47.78%	15.09%	-	-	3,973
Kensok	Short-Lived Assets		Legal & Compliance Technology	CD	AA	5 Yr Software	Software	47.78%	15.09%	54	23,489	76,505
Kensok	Short-Lived Assets		Legal & Compliance Technology	CD	AA	Hardware	Hardware	47.78%	15.09%	-	-	-
Kensok	Short-Lived Assets		Legal & Compliance Technology	CD	WA	5 Yr Software	Software	77.22%	22.78%	•	10,936	10,936
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AA	General	General	47.78%	15.09%	-	-	0
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AN	E Distribution	E Distribution	63.66%	0.00%	•	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AN	E Distribution	E Distribution	65.54%	0.00%	•	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AN	General	General	65.54%	0.00%	•	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AN	General	General	68.27%	0.00%	-	-	
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		AN	Transmission	Transmission	65.54%	0.00%	•	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		ID	E Distribution	E Distribution	0.00%	0.00%	-	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		ID	General	General	0.00%	0.00%	•	-	-
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		WA	E Distribution	E Distribution	100.00%	0.00%	-	-	
Rosentrater	Programs		Substation - New Distribution Station Capacity Progr		WA	General	General	100.00%	0.00%	•	-	-
Magalsky	Programs		Electric Transportation	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	AN	5 Yr Software	Software	68.27%	0.00%	•	-	-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	WA	E Distribution	E Distribution	100.00%	0.00%			-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Clean Energy Fund 2	ED	WA	General	General	100.00%	0.00%	-		-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - South Landing (Catalyst) - Clea		WA	E Distribution	E Distribution	100.00%	0.00%	-		-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Real Time Power System Simu		AN	General	General	65.54%	0.00%	-		-
Rosentrater	Large Distinct Projects	No Driver	Strategic Initiatives - Real Time Power System Simu		AN	General	General	68.27%	0.00%	-		-
Thackston	Mandatory & Compliance	No Driver	Strategic Initiatives - Upriver Park	ED	AN	Production - Hydro	Production - Hydro	65.54%	0.00%	•	-	-

# ATTACHMENT C Avista Utilities Capital Additions Variance Explanation Forms

	Capital Additions Variance Explanation Forms							
		0000 As Filed	0000 4-4			\$500k &	A44l-	
		2022 As-Filed		Variance \$	Variance %	+/- 10% TTP	Attach-	
Witness	Business Cook	TTP (1) Gross Plant	TTP (1) Gross Plant	over/(under) Gross Plant	over/(under)	Threshold	ment C Pg#	
Witness Kensok	Business Case		\$ 2,094,785	\$ 1,281,306	1500/	met?	2	
Thackston	Basic Workplace Technology Delivery		. , ,		158%	yes		
	Cabinet Gorge Station Service	. , . ,	\$ -	\$ (7,761,859)	-100%	yes	13 18	
Thackston	Cabinet Gorge Unit 4 Protection & Control Upgrade	,	\$ 3,312,748	\$ 2,562,748	342%	yes		
Thackston	Clark Fork Settlement Agreement	\$ 4,839,609	\$ 3,501,188	\$ (1,338,421)	-28%	yes	19	
Magalsky	Customer Experience Platform Program	\$ 5,999,915	\$ 4,588,240	\$ (1,411,675)	-24%	yes	20	
Magalsky	Customer Transactional Systems	\$ 3,859,166	\$ 2,824,043	\$ (1,035,123)	-27%	yes	21	
Rosentrater		\$ 2,165,010	\$ 2,716,701	\$ 551,691	25%	yes	22	
	Distribution Minor Rebuild	\$ 11,499,986	\$ 15,056,011	\$ 3,556,025	31%	yes	23	
	Downtown Network - Performance & Capacity	\$ 1,100,000	\$ 358,877	\$ (741,123)	-67%	yes	28	
	Elec Relocation and Replacement Program	\$ 5,399,944	\$ 8,595,275	\$ 3,195,331	59%	yes	29	
Magalsky	Electric Transportation	\$ 2,775,000	\$ 1,997,584	\$ (777,416)	-28%	yes	34	
Kensok	Endpoint Compute and Productivity Systems	\$ 3,498,321	\$ 5,713,123	\$ 2,214,802	63%	yes	35	
Kensok	Energy Delivery Modernization & Operational Efficiency	\$ 5,560,672	\$ 8,762,727	\$ 3,202,055	58%	yes	38	
Kensok	Energy Resources Modernization & Operational Efficiency	\$ 2,727,599	\$ 2,205,670	\$ (521,929)	-19%	yes	45	
Kensok	Enterprise & Control Network Infrastructure	\$ 3,243,307	\$ 3,904,831	\$ 661,524	20%	yes	73	
Kensok	Enterprise Communication Systems	\$ 1,472,733	\$ 4,267,360	\$ 2,794,627	190%	yes	88	
Kensok	Enterprise Network Infrastructure	\$ 2,235,285	\$ 363,051	\$ (1,872,234)	-84%	yes	98	
Kensok	Enterprise Security	\$ 972,340	\$ 2,482,395	\$ 1,510,055	155%	yes	112	
Kensok	Fiber Network Lease Service Replacement	\$ 1,392,970	\$ 687,525	\$ (705,445)	-51%	yes	118	
Rosentrater	Fleet Services Capital Plan	\$ 7,904,640	\$ 6,911,885	\$ (992,755)	-13%	yes	128	
Rosentrater	Gas Above Grade Pipe Remediation Program	\$ 682,000	\$ -	\$ (682,000)	-100%	yes	130	
Rosentrater	Gas Airway Heights HP Reinforcement	\$ 9,634,502	\$ 7,867,781	\$ (1,766,721)	-18%	yes	131	
Rosentrater	Gas ERT Replacement Program	\$ -	\$ 778,042	\$ 778,042	100%	yes	134	
Rosentrater	Gas HP Pipeline Remediation Program	\$ 599,998	\$ -	\$ (599,998)	-100%	yes	147	
	Gas Isolated Steel Replacement Program	\$ 862,754	\$ 1,424,685	\$ 561,931	65%	yes	148	
	Gas Non-Revenue Program	\$ 9,295,000	\$ 10,657,765	\$ 1,362,765	15%	yes	149	
	Gas PMC Program	\$ 3.500.004	\$ 1,657,533	\$ (1,842,471)	-53%	yes	150	
	Gas Reinforcement Program	\$ 1,299,997	\$ 1,892,133	\$ 592,136	46%	ves	161	
	Gas Replacement Street and Highway Program	\$ 3,495,650	\$ 4,847,700	\$ 1,352,050	39%	yes	162	
	Gas Transient Voltage Mitigation Program	\$ 875,000	\$ -	\$ (875,000)	-100%	ves	163	
Thackston	Generation DC Supplied System Update	\$ 550,001	\$ 18,486	\$ (531,515)	-97%	yes	166	
Kensok	Identity and Access Governance (IAG)	\$ 672,255	\$ -	\$ (672,255)	-100%	yes	167	
Rosentrater	, ,	\$ 2,749,992	\$ 4,340,369	\$ 1,590,377	58%	yes	173	
Thackston	KF Fuel Yard Equipment Replacement	\$ -	\$ 31,118,690	\$ 31,118,690	100%	yes	174	
Kensok	Land Mobile Radio & Real Time Communication Systems	\$ 3,569,746	\$ 299,516	\$ (3,270,230)	-92%	yes	188	
	N Lewiston Autotransformer - Failed Plant	\$ 5,554,506	\$ 4,394,085	\$ (1,160,421)	-21%	ves	194	
	New Revenue - Growth	\$ 73,429,598	\$ 98,845,434	\$ 25,415,836	35%	yes	195	
Thackston	Nine Mile HED Battery Building	\$ 800.001	\$ -	\$ (800,001)	-100%	yes	196	
Thackston	Nine Mile Powerhouse Crane Rehab	\$ 1,699,988	\$ 1,018,790	\$ (681,198)	-40%	yes	197	
	Protection System Upgrade for PRC-002	\$ 80,000	\$ 2,772,398	\$ 2,692,398	3365%	ves	198	
	Saddle Mountain 230/115kV Station (New) Integration Project I		\$ 13,416,440	\$ (6,546,093)	-33%	ves	199	
Thackston	Spokane River License Implementation	\$ 629,226	\$ 107,452	\$ (521,774)	-83%	yes	200	
	Spokane Valley Transmission Reinforcement Project	\$ 2,000,000	\$ 3,037,762	\$ 1,037,762	52%	-	201	
	Strategic Initiatives - Clean Energy Fund 2	\$ 2,000,000	\$ 555,858	\$ 555,858	100%	yes	201	
Thackston	0,	\$ 225,225	\$ 3,823,802	\$ 3,598,577	1598%	yes	216	
	Strategic Initiatives - Upriver Park					yes		
	Structures and Improvements/Furniture Substation - New Distribution Station Capacity Program	\$ 3,639,388 \$ 5,765,300	\$ 6,384,231 \$ 4,266,887	\$ 2,744,843	75% -26%	yes	217 238	
	, , ,		. , ,	\$ (1,498,413)		yes		
	Substation - Station Rebuilds Program	\$ 12,998,326	\$ 10,685,595	\$ (2,312,731)	-18%	yes	239	
	Transmission Construction - Compliance	\$ 2,111,069	\$ 4,125,981	\$ 2,014,912	95%	yes	240	
	Transmission Major Rebuild - Asset Condition	\$ 5,680,751	\$ 3,549,326	\$ (2,131,425)	-38%	yes	245	
	Transmission NERC Low-Risk Priority Lines Mitigation	\$ 2,554,255	\$ 1,146,219	\$ (1,408,036)	-55%	yes	248	
Rosentrater	Westside 230/115kV Station Brownfield Rebuild Project	\$ -	\$ 3,292,230	\$ 3,292,230	100%	yes	249	

Вι	JSII	NESS	<b>CASE</b>	NAN	ΛE:
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Basic Workplace Technology	

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Basic Workplace Technology business case responds to five essential functions that equip our staff to optimize our business and be responsive to our customers. The five essential functions include: Employee Onboard; Contractor Onboard; Job Function Change; Exchange of equipment; and General Additions. This requires a need to keep a small amount of inventory to meet business value timeframes.

The Basic Workplace Technology Business case was originally funded for 2022 at \$800,000. The demand for basic workplace technology is hard to control and historically the business case is spending above the funding level and transfers-to-plant \$1.2 -\$1.4 million annually. In 2022, this business case transferred approximately \$2M, which represents a variance of approximately \$1.28M of over transfers. A variety of factors contributed to additional transfer-to-plant amount:

- an increase in employee/contractor onboards. The Company experienced a higher attrition rate of employees and contractors than ever before.
- a return to the office in a hybrid working scenario requiring the addition of technology hardware (docking stations, wireless headsets, mouse/keyboard and monitors) for a large number of employees to allow for remote and office working moving forward.
- the completion of the Windows 10 upgrade project, where remaining inventory was transferred to this business case.
- vegetation management group needing radios for contract crews with no cell phone service.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the following Capital Planning Group change request documents that represent changes to the plan from the filed general rate case amount. These change requests represent additional spend that was needed, that will ultimately result in additional transfers-to-plant and go into more details regarding the reasons for the additional funding:

		1,281,000
No CR	Unplanned Transfer from 2021 Purchase	60,000
BWT - CR03	Vegitation Mgmt.	50,000
BWT - CR03	Win 10	385,000
BWT - CR02	Hybrid Workers	55,000
BWT - CR02	Onboarding Employees and Contractors	445,000
BWT - CR01	Hybrid Workers	186,000
BWT - CR01	Onboarding Employees and Contractors	100,000

BUSINESS CASE OWNER SIGNATURE:

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The Basic Workspace technology business case enables the issuance of new technology equipment to users which allows them to perform their job functions with the greatest efficiency. The absence of this equipment would render the user unable to perform their duties effectively, resulting in significant inefficiencies. The Company does not have a method to quantify such a broad indirect saving. Therefore, no indirect savings are included.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

DIRECTOR SIGNATURE:

X DocuSigned by:  - 1/5 - 1/5 - 1/8884.31 (69958427)	Docusigned by:  Jim (order /000/ 48/2/104449

### 1.0 CHANGE REQUEST CR01 6.22

Previous Requests	Requested	Approved
5-Year Plan	\$1,360,000	\$800,000
CR01	\$186,000	\$986,000

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
06-2022	\$474,691	\$800,000	\$186,000	\$986,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	6/29/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The average spend over the last two years in this business case has been \$1.2 million. Current 2022 spend is forecast to be similar to previous years, and as a result this business case will need an increase in funding. Please refer to the original business case for further details surrounding the types of costs included.

The immediate need for funding increase relates to efforts of the Workplace 2022 program. The program has resulted in workers returning to the office in various capacities, including as hybrid workers. After considering employee experience, the company chose to provide secondary technology kits for people working in a hybrid capacity.

There are roughly 800 hybrid workers identified within the company as of April, 2022. Each of these Hybrid workers has the opportunity to request a secondary technology kit as of June 3<sup>rd</sup>, 2022. These secondary technology kits could include any combination of the following:

- docking station
- wireless headset
- mouse/keyboard
- monitor

Currently there are 200 Secondary Technology requests in queue, which is increasing daily. This is identified as our backlog of work. Additionally, we can assume that new onboards working in a hybrid capacity may choose to receive additional technology. In some cases, this could nearly double the technology demand on a per-employee onboard basis. The cost for these equipment is \$122,000.

Running in parallel to the Secondary Technology requests is a project to return CSRs to each of our call center locations. This work effort will provide the CSR team members with a secondary work location in-office, as they will continue to work from home primarily. The result is a

request for 150 docking stations, keyboards, and mice. The estimated cost for this equipment is \$64,000.

Based on the current hybrid technology demand, the business case needs funding to accommodate purchase and delivery of these items. If supply exceeds demand after all secondary kits are fulfilled the equipment will be used for onboard primary kits, and subsequent requests for secondary kits. We are seeking a funding increase of \$186,000 to accommodate this new demand for secondary technology.

This business case does anticipate needing to request additional funding later in 2022 in order to meet our expected spend of \$1.3 million. Our request will be re-evaluated in guarter 3.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The purchase of this secondary technology is needed as soon as possible, as employees are beginning to return to the office and will be working both at home and at the office. In addition, in order to stay ahead of supply chain issues and the typical cadence of work within this business case funding is requested at this time. If this request is not approved, it could impact the employee experience.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see section 1.1.1

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

As a result of these requests and the overall volume of work the Basic Workplace Technology team as, staff augmentation was required.

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Dave Husted	BC Owner	/ k 2%	Jun-10-2022
Jim Corder	BC Sponsor	Documents  James & Lorder	Jun-10-2022
	FP&A	COOL HID TO MAR	

7:41 AM PDT

8:23 AM PDT

### 1.0 CHANGE REQUEST CR02 9.22

Previous Requests	Requested	Approved
5-Year Plan	\$1,360,000	\$800,000
CR01	\$186,000	\$986,000
CR02	\$500,000	

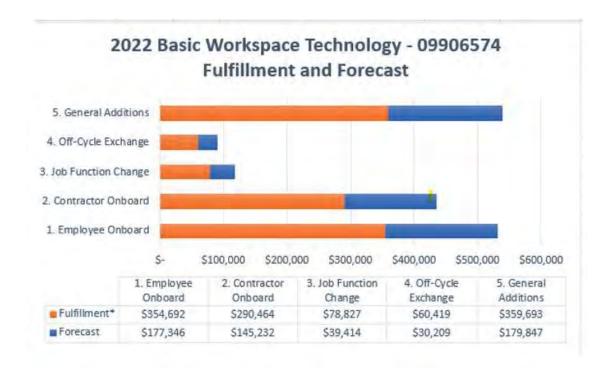
Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
09-2022	\$1,029,480	\$986,000	\$500,000	\$1,486,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	8/31/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

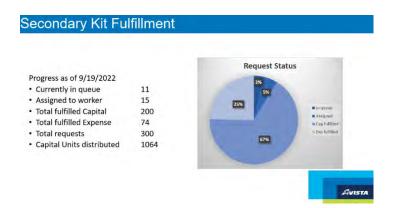
### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The business case dashboard (below) illustrates the five business driver categories and the associated year to date spend. The categories record the fulfillment activity and cost, this data is used to calculate the end of year forecast. The forecast total is roughly \$500,000, matching this change request.



The forecast includes technology products, contractor service, and employee labor. The technology products are purchased in lots to maintain inventory levels that ensure requests can be fulfilled in a timely manner. Supply chain issues have made forecasting more difficult this year, product ship/receive timeframes are highly volatile. The YTD spend represents an unexpected product receipt in August of \$141,903.

Furthermore, the return to office and hybrid worker has increased demand for basic workplace technology. The hybrid worker has increased the number of workplace locations, creating the need for additional (secondary) technology products. The company-wide hybrid worker estimate is 800, the business case has received 300 secondary technology requests and fulfilled 274. Change order 01 included \$186,000 for secondary technology. This change request (CR02) includes \$55,000 for secondary technology. Most of the secondary technology fulfillments are recorded in category (5) General Additions. The record of secondary technology activity to date is below:





Breakdown of Secondary technology product unit counts as of end of August:

- 316 docking stations
- 148 wireless headsets
- 319 mice/keyboards
- 214 monitors

This business case does anticipate one more request for funding in the final quarter of 2022. Technology products purchased in the Endpoint Compute Business Case will be repurposed to meet inventory and fulfillment demand in Basic Workplace Technology.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The purchase of this secondary technology is needed as soon as possible, as employees are beginning to return to the office and will be working both at home and at the office. In addition, to stay ahead of supply chain issues and the typical cadence of work within this business case funding is requested at this time. If this request is not approved, it could impact the employee experience.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see section 1.1.1

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

As a result of these requests and the overall volume of work the Basic Workplace Technology team has, staff augmentation was required.

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Dave Husted	BC Owner	Down Austral	Sep-20-2022
Jim Corder	BC Sponsor	James B Corder	Sep-20-2022
	FP&A	7(0)77-87740-440	

3:58 PM PDT 1:59 PM PDT

### 1.0 CHANGE REQUEST CR03 10.22

Previous Requests	Requested	Approved
5-Year Plan	\$1,360,000	\$800,000
CR01	\$186,000	\$986,000
CR02	\$500,000	\$1,486,000
CR03	\$535,000	

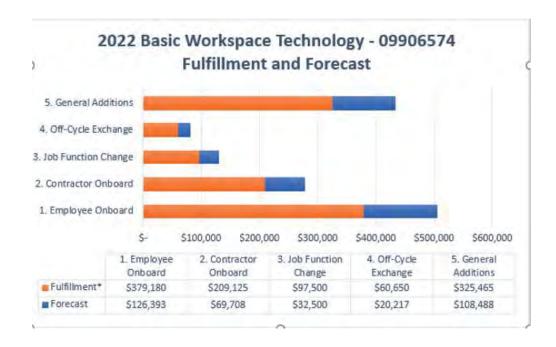
Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
10-2022	\$1,193,082	\$1,486,000	\$535,000	\$2,021,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	10/28/2022

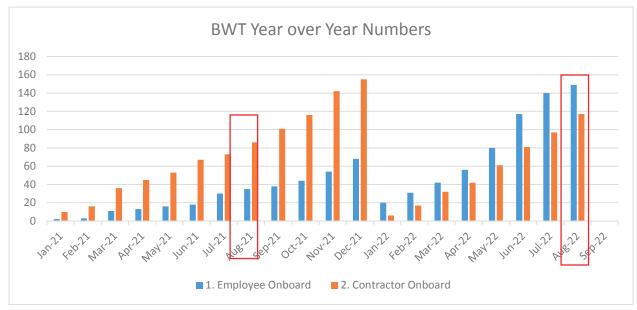
## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The business case dashboard (below) illustrates the five business driver categories and the associated year to date spend. The categories record the fulfillment activity and cost, this data is used to calculate the end of year forecast.



The forecast includes technology products, contractor service, and employee labor. The technology products are purchased in lots to maintain inventory levels that ensure requests can be fulfilled in a timely manner. Supply chain issues have made forecasting more difficult this year, product ship/receive timeframes are highly volatile. There has also been an increase in employee and contractor onboard requests compared to previous years, which is creating an unforeseen increase in funding needs. The increase in onboarding is largely due to overall higher employee attrition the Company has been experiencing over the last few years. The chart below illustrates this increase.



In addition, The Windows 10 Phase 3 project is closing and had a surplus inventory of laptops, monitors and other hardware items that are not needed. The most appropriate use for this inventory is in the Basic Workplace Technology business case. This inventory will be used to fulfill the existing use cases in this business case, such as new hires and continuing deployment of secondary technology kits. In order to accommodate this transfer, we request \$385,000 in funding be transferred from the Endpoint Compute and Productivity business case into the Basic Workplace Technology business case.

Finally, the vegetation management group requested the use of radios for their contractor crews for use in areas with no cell phone service. This group has not had access to radios for the last several years, and this has been identified as a safety risk. The total amount for these radios is roughly \$50,000. The total request for increase in funding is \$535,000.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Basic workplace is already utilizing the surplus inventory, if this transfer is not approved the business case will risk being over budget. In addition, the surplus hardware will not be appropriately accounted for within each of the business cases. Avista would also be impacted as well by potentially not having enough inventory to deploy to new employee/contractor onboards, as lead times for much of the product in Basic Workplace has been difficult to predict recently.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see section 1.1.1

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

No Impacts. Due to supply chain issues, the inability to use already purchased inventory from a different business case could result in employees and contractors not receiving hardware necessary to perform day to day work functions.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

If the Basic Workplace Technology business case is not able to use these additional inventory, then the company would incur additional expense as this inventory would need to be written off to expense. Avista would also be impacted as well by potentially not having enough inventory to deploy to new employee/contractor onboards, as lead times for much of the product in Basic Workplace has been difficult to predict recently.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This transfer is prudent as it allows the business to utilize surplus inventory.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date	
Dave Husted	BC Owner	Doze Austral	Oct-18-2022	8:37 AM PDT
Jim Corder	BC Sponsor	Louising will be seen from the	Oct-18-2022   8	:09 AM PDT
	FP&A	T02E4572 (4448		

BUSI	<b>NESS</b>	CASE	NAN	ΛE:

Cabinet	Gorge Stat	ion Service	
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANG rd with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?	ìΕD
☐ Yes	⊠ No	If yes, please attach revised business case.	
DIEVSEE	YDI AINI THE	TRANSEER TO DIANT VARIANCE OF GREATER THAN \$500,000 AND ±/-10% FOR THE	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Cabinet Gorge Station Service equipment is original and was installed in 1951. The project objective is to improve the level of service, operability, reliability, and redundancy of station service power at the HED by replacing the following components; Transformers, Power Centers, Motor Control Centers, Load Centers, Emergency Generators, Emergency Load Centers, and various breakers.

This project underspent in 2022 because it was put on hold in June of 2020 and new core team was initiated in July 2021. Since the project paused over one year, the original spending forecasts and transfer to plant dates forecasted are no longer valid. The new team was assembled to resolve key project issues and determine a path to completion.

During the course of the project restart, the project team experienced material delays associated with supply chain issues and resource constraints which pushed costs to FY 2023. See referenced FCRs below.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

During FY 2022, the project team submitted two Funds Change Requests which gave back \$1,000,000 due to resource availability, and the engineered component specification process had taken additional unplanned time impacting material order dates. Additionally, increased material lead-times pushed some material delivery to FY 2023 and FY 2024. See FCR 1 & 2 submitted with this explanation form.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The replacement of this equipment will result in continued safe operation of Cabinet Gorge HED, ensuring we provide reliable and affordable energy to our customers. The calculated indirect savings considers the condition of the asset, the probability of failure, the probable consequence of failure and other risk factors such as personnel and public safety, environmental impacts, and unplanned outages and repairs. Due to the delay of this project, any indirect savings will be realized in 2024 and beyond.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

x Chris Clemens

**DIRECTOR SIGNATURE:** 

<u> X Alexis Alexan</u>der

### 1.0 CHANGE REQUEST #1 - 10/14/2022

Previous Requests	Requested	Approved
5-Year Plan	\$0	\$0

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
09-2022	\$1,041,085	\$5,371,800	-\$500,000	\$4,871,800

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	10/17/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Several tasks were delayed on this project including; panel fabrication due to resource availability and the engineered component specification process has taken additional unplanned time which has impacted material order dates. Because of these delays, spending in 2022 will be reduced. Some panel fabrication and material delivery will be shifted into 2023 and will increase funding requirements accordingly.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Some Work will be deferred to 2023.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Additional supporting information available on request.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

No business functions will be impacted other than additional funds will be needed in 2023 to cover the funds given back in 2022.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

Funds were released to be utilized on other projects since they would not be spent on the Station Service project in 2022.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Station Service replacement project is still a valid use of funds and is required to mitigate component failure and unplanned outages due to the system age.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative is still valid.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Chris Clemens	BC Owner	Chris Clemens	10/17/2022

### 1.0 CHANGE REQUEST #2 - 12/05/2022

Previous Requests	Requested	Approved
5-Year Plan	\$0	\$0

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
12-2022	\$1,389,812	\$4,871,800	-\$500,000	\$4,371,800

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	12/9/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Cable and conduit actual costs were lower than engineering estimates by \$402,000. Additionally, cable tray material lead-time has pushed the delivery to 2023. This moved \$100,000 to the 2023 budget for a total impact of -\$502,000 to the 2022 budget.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The intent of this FCR is to document the difference between estimated and actual costs, as well as noting some work has been deferred to 2023. The team has been aware of project budget risk for some time, but could not actualize the costs until quotes and lead-times were final.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Current spend end of November is \$1,389,812.

Power Centers, Transformers, Wire, and additional panel material totaling \$2,416,000 will arrive in December 2022, project labor and overheads will comprise the remaining expected spend for December which totals \$2,982,000.

Additional supporting information available on request.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

No business functions will be impacted other than additional funding will be needed in 2023 to cover the funding requirements shifted to 2023.

## Cabinet Gorge Station Service (30405102)

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
  - Funds were released to be utilized on other projects since they would not be spent on the Station Service project.
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
  - The Station Service replacement project is still a valid use of funds and is required to mitigate component failure and unplanned outages due to the system age.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.
  - The justification narrative is still valid.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Chris Clemens	BC Owner	Chris Clemens	12/5/22

#### **BUSINESS CASE NAME:**

 $\bowtie$  No

☐ Yes

Cabinet Gorge Unit 4 Protection & Control Upgrade	
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAN	IGED
SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

If yes, please attach revised business case.

The Cabinet Gorge Hydroelectric Dam was designed for base load operation, but today is called on to not only provide load but to quickly change output in response to the variability of wind generation, changing customer loads and other regulating services needed to balance the system load requirement and assure transmission system reliability. In order to respond to these new demands, it is necessary to upgrade protection and controls equipment at the dam.

The Cabinet Gorge Unit 4 Protection & Control Upgrade project was prioritized for installation and commissioning being placed into plant in late 2021, with small closing costs trailing into early 2022. However, this project was dependent on the completion of other work occurring at Cabinet Gorge, which was not completed in time for the planned start of the Cabinet Gorge Unit 4 Protection & Control Upgrade project. Therefore, the start had to be delayed a few months with the project going into service in April 2022, rather than late 2021 as originally planned.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

This business case was monitored by a steering committee made up of a cross-department group who met each month through its execution. Although this business case variance was an issue of timing, if there had been significant cost overruns, it would have been discussed at the steering committee and a decision on the best path forward would have been made.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Maintenance costs will not be reduced, however, unit reliability will be improved through decreased outages. Because this project was placed into service within a few months of the originally planned date (Dec. 2021 to Apr. 2022), the reported indirect offset assuming a risk cost reduction for decreased outages can continue to be expected. Indirect savings relate to the condition of the asset, the probability of failure, the probable consequence of failure and other risk factors such as personnel and public safety, environmental impacts, and unplanned outages and repairs.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

#### **BUSINESS CASE OWNER SIGNATURE:**



#### **DIRECTOR SIGNATURE:**

Alexis	Digitally signed by Alexis Alexander
X Alexander	Date: 2023.03.15 13:43:29 -07'00'

BUSINESS	CASE NAM	E:
Clark Fo	rk Settlem	ent Agreement
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Clark Fork Settlement Agreement (CFSA) and License include funding commitments to help achieve long-term resource goals in the Clark Fork and related watersheds. Some items are relatively predictable each year; many others are dynamic, depending on potential projects, natural resource conditions and evolving resource management goals. Most projects are implemented with collaborating agencies and Tribes, often with multiple funding sources.

Each year's budget is established internally at Avista in late summer prior to the actual capital work plan approved by the signatories to the CFSA the following March. In addition, resource conditions, permitting and other issues impact work plan implementation each year. As a result, regular "truing up" is required, often in April and again in September/October time frames.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The CFSA governance is multi-faceted and includes over 20 other parties, including the States of Idaho and Montana, various federal agencies, five Native American tribes, and numerous Non-Governmental Organizations. In addition, we coordinate with numerous internal stakeholders, such as GPSS and Power Supply. Many funding decisions require the approval of the CFSA Management Committee.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no direct or indirect offsets associated with this project. Avista is required to comply with all terms of the License. Non-compliance would risk Avista's operational flexibility and could cause FERC to re-open the License resulting in significant financial impacts. Avista would suffer reputational risks in not complying with the License and its attendant agreements.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**DIRECTOR SIGNATURE** 

**BUSINESS CASE OWNER SIGNATURE:** 

Signed by, Ott, Monica

BUSINESS CASE	NAME:	
Customer Expe	erience Platform (CXP) Progra	m
	·	DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED 021 for the 2022-2027 5 year planning cycle)?
□ Yes ⊠ N	Io If yes, please attach re	vised business case.
PLEASE EXPLAIN CURRENT REPOR		RIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE
systems to ena Significant wor Customer 360 Email Campaig Application Pr inquiries via so The transfer to business case: delayed from 2	ble a more seamless and impro- k was completed and transferr Dashboard (C360) Production on transition (furnace filter process Automation, and Social social media). In plant variance observed was Inbound Voice Channel (replan	Platform is to bring together a multitude of disparate specialty oved customer experience across all Avista's supported channels red to plant in 2022 and includes, but not limited to the following: a Deployment, CSR Email Communication Automation, Questline program communications), Electric Vehicle Charger Commercial Care integration (enable ability to respond and track customer primarily due to the delay of the following projects within the accement of the call center inbound voice calling system) was as delay was necessary to accommodate call center change
	RUDENT for example, stakehol	RUNS AND THE DECISION TO CONTINUE TO INVEST IN THE lder meeting approval, CPG funds change requests (please attack
spend for this business case I	ousiness case came in under b eadership team would seek ap	business case for 2022. More specifically, the total capital audget in 2022. If a significant cost overrun were to occur, the oproval from both the Customer Experience Platform uests would also be routed through the Capital Planning Group
ARE THERE REVI	SED OFFSETS ASSOCIATED WIT	ΓΗ THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are no re offsets forecas		this change as the delays in schedule did not impact costs
	the information contained in he information is true, correct	this response for this specific business case, and to the best of t, and comprehensive.
	DWNER SIGNATURE:	DIRECTOR SIGNATURE:
× Watt	Kallanau.	Y Newhallplack

RI	ISIN	IFSS	CASE	NΔN	ΛF·

Customer Transactional Systems (CTS) Program				
		PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGE with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	GED	
☐ Yes	⊠ No	If yes, please attach revised business case.		

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The purpose of the Customer Transaction System program is to enhance and maintain the systems used to support the day-to-day operational needs of our customers, internal users, third party partners and our regulators. Significant work was completed and transferred to plant in 2022 and includes, but not limited to the following: Real time address validation, Account closing bill generation enhancements, Payment Plan and Payment Arrangement enhancements, FCS Mobile Solution Upgrade, Meter Data Extract Enhancements, Field Activity & Service Order Management (SOM) processing improvements.

The transfer to plant variance observed was due to the delay of the following projects within the business case: CC&B application upgrade (Oracle version update) & Meter Data Management application upgrade (Oracle version update). These projects were delayed to a go-live in February 2023. This delay was required to accommodate other technology implementations taking place concurrently and to reduce risk to business operations.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

No costs overruns were associated with this business case for 2022. More specifically, the total capital spend for this business case came in under budget in 2022. If a significant cost overrun were to occur, the business case leadership team would seek approval from both the Customer Transactional Systems Governance team and additional capital requests would also be routed through the Capital Planning Group for approval.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no revised offsets associated with this change as the business case does not include forecasted offsets. This is because the business case addresses a required investment to implement updates from software providers and regular security patches to ensure customer data is protected. Additionally, this investment is required to meet business requirements to service Avista customers (such as billing and customer support), maintain compliance with state and federal rules and regulations, and to meet the requests of our third-party partners

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:	DIRECTOR SIGNATURE:	
3/14/2023		
X Matt Halloran	X hushallydych	

Signed by: Halloran, Matt

**BUSINESS CASE NAME:** 

X Hutto Whata

Distribution Grid Modernization -ER 2470		
	REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED cord with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
☐ Yes ⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Distribution Grid Modernization Program seeks to systematically evaluate and address aging infrastructure to improve Avista's 11,300 circuit miles of overhead and underground primary electric distribution infrastructure. The goals of the program are to address service reliability and cost avoidance through the replacement of equipment and materials that have increased energy losses, improvement of line losses, load balancing, and the addition of devices and equipment that improve circuit efficiency. In 2022, the Grid Modernization program estimated transfers to plant (TTP) to be \$2,165,000 which was equal to the 2022 Budget Amount. Beacon 12F2 construction commenced in April 2022 and the project was placed into Service. What was not accounted for in the 2022 TTP forecast was a \$454k balance in Construction Work in Progress (CWIP) that accrued leading up to FY 2022 that was realized in plant when the project was placed into service. This was not forecasted, thus the major contributor to the variance. A second contributing factor to the variance was \$45k of Grid Modernization follow-up work per scope on the Rathdrum 233 circuit.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

There were no significant cost overruns incurred in design or construction for this project. This Business Case and associated projects are monitored through the year and reviewed by the established Steering Committee. If a cost overrun were to occur, a discussion and decision would direct appropriate corrective actions.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The Company estimated O&M offsets related to the planned work in this business case for 2022 at approx. \$27k. However, based on the actual work and efficiencies gained, the Company is able to update the estimated O&M offset to approx. \$115k.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE: Heather Webster DIRECTOR SIGNATURE:

X David Howell

BUSINESS CASE NAME:
Distribution Minor Rebuild
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?
☐ Yes ☐ No If yes, please attach revised business case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:
Distribution Minor Rebuild is an ongoing program that focuses on keeping the distribution system in a reliable condition for customers and safe conditions for workers. It ensures responsiveness to unplanned damages on distribution assets not related to weather events, as well as small customer driven rebuilds. Throughout the entire distribution system minor rebuilds or replacements of asset units are needed to maintain system reliability and safety.
This business case transfers to plant monthly based on actual spend.
Our budget need for 2022 was forecasted as \$11.5m. In May we had an approved budget increase of \$1.375m that put our spend budget at \$12.875m to account for union retro pay that was due to contract ratification that was split between multiple business cases.  In July we had spent 69% of our budget and forecasted that our spend amount for the year would be closer to \$15m. This was based on the work shown in updated capital spends, higher costs from inflation, and future projections. We were spending more than initially anticipated and submitted a request for an additional \$2.3m to bring our spend to \$15.175m. This same scenario occurred again in in October when we had hit 82% of our budget and there was still work that needed to be completed to ensure the reliability and safety of our system. So, in November we made a request for an increase of \$1.325m that once approved put our budget at \$16.5m.
Overall, our variance was due to an unforeseen increase in workload that had to be completed to maintain reliability and safety for our customers and an unprecedented rise in inflation.
EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):
Any decisions to continue investment in the Business Case/Project were first determined and then requested at the director level in our Operations Round Table (ORT) meeting. An in-year change request was then completed and approved by the Business Case Owner and Sponsor and sent to the Capital Planning Group (CPG) for final approval.
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
None. Due to the way this program functions (transfers to plant monthly) there are no offsets associated.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

X Katie Snyder

X David Howell

### 1.0 CHANGE REQUEST 10/13/2022

Previous Requests	Requested	Approved
5-Year Plan	\$13,000,000	\$11,500,000
CR-1	\$1,375,000	\$12,875,000
CR-2	\$1,325,000	\$16,500,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
10-2022	\$12,695,458	\$15,175,000	\$1,325,000	\$16,500,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	10/19/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

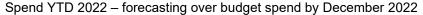
The Dx Minor Rebuild forecast for the end of the year is nearly \$15,000,000 based on the work shown in updated capital spends and our projections. We are requesting more funds due to higher costs from inflation. Overall, we are spending more than initially anticipated.

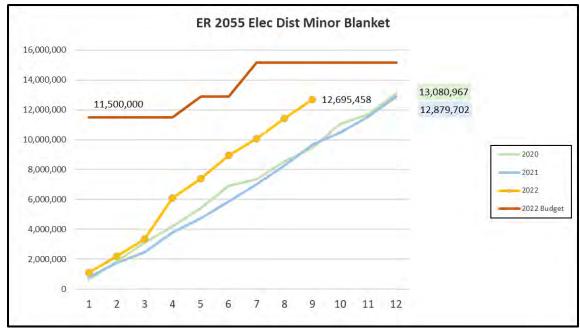
## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Distribution Minor Rebuild work is one of the many components that support the overall reliability of the distribution system as well as responsiveness to customer requested service demands and system safety. Safety is of utmost concern for linemen and the general public, and the minor rebuild business case provides the funding for work such as replacement of a car-hit pole in the alley, a broken cross-arm, a burned-up transformer, and other safety related projects. In addition, if the business case is not funded, this will also affect the ability to respond to customers' needs for modifications to their electrical service. It is acknowledged some minor rebuilds left unrepaired will not result in immediate catastrophic failures to the distribution system, but over time an adverse accumulation of unrepaired assets would greatly put line workers and the public at risk as minor asset failures begin to deteriorate within areas of the distribution system.

### Minor Rebuild

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.





# 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

Distribution Minor Rebuild reaches across multiple departments in Engineering and Operations. The business involves operation area engineers, local customer project coordinators, and construction technicians who work directly with customers and perform all the designs for the business. Once the minor projects are designed and ready for construction, field personnel such as a Foremen, Journeyman Linemen, Line Servicemen, Meter men, Equipment Operators execute the work.

Not receiving the additional funding would have a significant impact on business functions and processes as other areas would be responsible for the work and it would also impact the ability to respond to customers' needs for modifications to their electrical service.

## 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The other alternative that was considered is not requesting additional funding for the business case however, the needed work will continue to occur. These costs would need to be covered under other business cases. The body of work within the Distribution Minor Rebuild business case consists of very small unplanned projects across the entire distribution system in response to a variety factors (customer requested, trouble related work, deteriorated pole replacements, and general rebuilds), therefore the alternatives are generally not available to analyze. Typically, as each project arises, any alternatives available for individual rebuild projects are evaluated during the design phase by the designer.

### Minor Rebuild

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Distribution Minor Rebuild business maintains flexibility for the utility to address small, unplanned asset failures and customer driven modifications to the distribution system but, excludes fixes to the system considered to be maintenance. While the work is unplanned, minor rebuilds to the distribution system occur on a regular basis every year to maintain system reliability and safety. The Distribution Minor Rebuild business case provides a solution for the utility to address those small unplanned asset failures and customer driven modifications to the distribution system. Safety is of utmost concern for linemen and the general public, and the minor rebuild business case provides the funding for work. Some minor rebuilds left unrepaired may not result in an immediate catastrophic failure. Over time an adverse accumulation of unrepaired assets would greatly put line workers and the public at risk as minor asset failures begin to deteriorate pockets of the distribution system.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative previously submitted is still valid with this change request of additional funding. The scope of the business case has not changed. This request is asking for additional funding due to an overspend forecast.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Katie Snyder	BC Owner	Katie Snyder	10/14/2022
David Howell	BC Sponsor	David Howell	10/14/22
	FP&A		

Вι	JSI	NESS	CASE	NAME:
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formance & Capacity
NG PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
s, please attach revised business case.
ER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE D:
performed under this business case that does not TTP monthly: the Vault in this project occurs when major milestones are met that cause part of the system It." We did not meet a major milestone in 2022 due to lack of cross-departmental plus lack of available crew time. We expect to commission the next part of the bork) in 2023 if all goes well, which will allow us to TTP all spend in the project up to
CANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE example, stakeholder meeting approval, CPG funds change requests (please attach
t overruns, just schedule delays due to lack of resources.
ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
e offsets, other than a slight delay to when they may be fully realized (due the project). That being said, we are no longer doing patrol work during e system that has been commissioned, so some of the offsets are being

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

**DIRECTOR SIGNATURE:** 

X David Howell

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CAPITAL ADDITIONS VARIANCE EXPLANATION FORM
BUSINESS CASE NAME:
Electric Replacement and Relocation
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?
☐ Yes ☐ No If yes, please attach revised business case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:
The Electric Replacement and Relocation program, also known as Road Moves, is driven by compliance that is mandated by the "Franchise Agreement" contracts with the city, state entities and permits entered by railroad owners. With road moves, as soon as the spend happens and the work is complete it provides an immediate benefit to the customer.
Our transfer to plant variance from what was filed in 2021 for 2022 was due to an unprecedented increase of mandatory work required in our service territories. At the beginning of 2022 the approved budget and forecasted TTP was approx. \$5.4m. By Jul 2022 we had already TTP \$6.8m and needed to request an increase. The increase put our annual budget and forecasted TTP at \$8.4m. In July 2022 the TTP had reached \$7.9m and it was apparent, based on the scope of the work remaining for 2022, that another increase was needed. An increase of \$1.7m was requested and resulted in an annual budget/TTP total of \$10.1m. Two more increases were requested in 2022 – one in October for \$400,000 and one in November for \$1m when it was apparent based on the actual spend and TTP accrued thus far and the work remaining in 2022 that an increase would be needed. The result was an annual budget and anticipated TTP amount of \$11.5m.
The increases in spend were needed to complete mandated work. Had we not been able to complete work requested by local entities and railroad owners we would have fallen out of compliance mandated by the franchise agreement.
EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):
Each increase was first discussed at the Operations Round table with the director, Business case owner, and others with knowledge of what jobs have been completed and will need to be completed. Once a decision to submit an change request was made it was presented to the CPG for final approvals.
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.				
None.				

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

XKatie Snyder

**DIRECTOR SIGNATURE:** 

X David Howell

## Electric Replacement and Relocation

### 1.0 CHANGE REQUEST #4 11-09-22

Previous Requests	Requested	Approved
5-Year Plan	\$6,400,000	\$5,400,000
In Year - CR	\$3,000,000	\$3,000,000
In Year - CR	\$400,000	\$400,000
In Year - CR	\$1,000,000	

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
011/2022	\$10,368,108	\$10,500,000	\$1,000,000	\$11,500,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	11/16/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

This business case has a total expected spend of \$11.5M for this year. The major contrubutors to this is the Downtown Network has with several City of Spokane driven jobs that still need to be completed.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

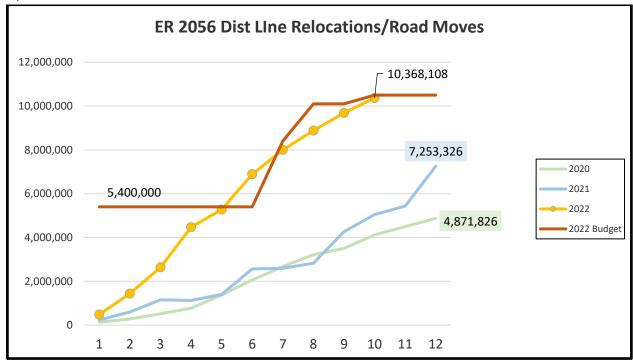
This program has been funded for several years and ensures compliance with our Franchise agreements and/or Railroad permits. If funding is not available, we will be out of compliance with our Franchise agreements and/or Railroad permits.

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.

The Electric Relocations business is unplanned work, contractually obligated, and adds high risk to the company if not completed, no alternative analysis is considered. This program is demand driven and unplanned work. Funding allocation is based on historical spending trends.

## Electric Replacement and Relocation

### Spend YTD 2022



# 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

If funded, the outcome of this Business Case will have minimal impact on existing operations. This funding has been in place for several years to maintain compliance with our franchise agreements and Railroad permits. If not funded, the work is required to maintain compliance with our franchise agreements and/or railroad permits and will need to occur.

## 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The work covered by this funding is mandatory to maintain compliance with our franchise agreements and/or Railroad permitting. Because the Electric Relocations business is unplanned work, contractually obligated, and adds high risk to the company if not completed, no alternative analysis is considered. This program is demand driven and unplanned work.

## 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The work covered by this funding is mandatory to maintain compliance with our Franchise Agreements and/or Railroad permitting.

## Electric Replacement and Relocation

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative previously submitted is still valid with this change request of additional funding. The scope of the business case has not changed. This request is asking for additional funding due to an overspend forecast.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Katie Snyder	BC Owner	Katis Snyder	11/09/2022
David Howell	BC Sponsor	David Howell	11/10/22
	FP&A		

### **CAPITAL ADDITIONS VARIANCE EXPLANATION FORM**

BUSINESS CASE NAME:	
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Signed by: Farley, Rendall

BUSINESS CASE NAME:		
Electric Transportation	(Washington)	
	·	22), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED the 2022-2027 5-year planning cycle)?
□ Yes ⊠ No If	yes, please attach revised b	usiness case.
PLEASE EXPLAIN THE TRA CURRENT REPORTING PEI		OF GREATER THAN \$500,000 AND +/-10% FOR THE
comprehensive Transpo 077, including investme support, load managem \$2,775,000 compared t This is explained primar	ortation Electrification Plan a nts in charging infrastructur ent, and fleet advisory servi o an actual of \$1,997,584, re ily by a lower number of cor	beneficial electrification in alignment with the Company's and accompanying programs authorized by tariff schedule re, education and outreach, community and low-income ices. In 2022, transfer to plant was estimated at esulting in a variance of \$777,416 less than estimated.  Impleted DC fast charging installations. Delayed ding supply chain disruptions and protracted negotiations.
		t contracts and property easements.
	or example, stakeholder me	AND THE DECISION TO CONTINUE TO INVEST IN THE setting approval, CPG funds change requests (please attach
substantially and is bein	g monitored closely, with ov	h the cost of materials and labor has increased versight provided by a sponsor committee. Costs and a detailed annual reports provided to the UTC.
ARE THERE REVISED OFFS	ETS ASSOCIATED WITH THIS	CHANGE IN PLANT ADDITIONS? Please explain.
associated with electric		ase. Indirect benefits include beneficial revenue growth ds and reduced emissions and air pollution from the blic.
	mation contained in this res nation is true, correct, and c	sponse for this specific business case, and to the best of comprehensive.
BUSINESS CASE OWNER S	IGNATURE:	DIRECTOR SIGNATURE:
3/14/202 X	3	X Kuchallydych

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#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

R	1151	NFSS	CASE	NΔN	۸F٠

Endpoin	t Compute	and Productivity Systems	
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAN	IGED
SINCE FILE	D (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Endpoint Compute and Productivity Systems business case include, but are not limited to, technology required day-to-day to automate and enable business processes, such as Personal Computer (PC) hardware and their operating systems, various handheld devices, printers, configuration and management systems for all endpoints, productivity tools (e.g. Office 365), etc.

The Endpoint Compute and Productivity Systems business case had planned to transfer-to-plant approximately \$3.5M when Avista filed the 2022 Washington GRC. This business case ended up transferring approximately \$5.7M to plant in 2022. This resulted in additional transfers-to-plant of approximately \$2.2M.

The main reason for this variance is Microsoft O365 Licenses – This project is to support the capital costs associated with Microsoft licensing and was originally budgeted as capital in 2021, however a review of the licensing term shifted the cost to January 2022.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE

PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the projects listed above were prudently documented and approved. Please see additional governance documentation located in the Business Case Change Request Endpoint CR0101.2022 attached.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

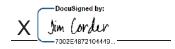
The indirect savings associated with this business case are related to avoided costs associated with lost work time by employees for having to use manual systems and tasks to communicate. The above projects and additional transfers-to-plant did not change these expected indirect offsets.

my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 



**DIRECTOR SIGNATURE:** 



### **Endpoint Compute and Productivity Systems**

#### 1.0 CHANGE REQUEST #CR01 01/2022

Previous Requests	Requested	Approved
5-Year Plan	\$5,516,000	\$3,480,000
CR01	\$1,791,073	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
01-2022	\$0	\$3,480,000	\$1,791,073	\$5,271,073

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	1/31/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Purchase of Microsoft Office licenses was originally planned during the 2021 budget year based on the fact that the previous year's agreement started at the end of December 2018. During processing the final paperwork for the Microsoft renewal it was discovered this contract will start January 1, 2022. Therefore, payment for this invoice will be made in January of 2022. This is an unplanned expense in the 2022 budget year, and the business case is requesting an additional \$1,791,073 in funding to cover this cost.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This cost is necessary to provide access to a variety of crucial tools Avista uses to function on a day to day basis, including Exchange and Teams for email, phone and meetings. If this request is not funded, the business case will instead need to delay planned high priority in progress project work, such as the Rugged Refresh project or the Microsoft Product Updates project. Both of these projects are updating versions of the Microsoft operating system which is end of support this year and is crucial to meet Avista's security and operating standards.

- 1.1.3 Please reference analysis or information that support the problem and attach to this document.
- 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

If this funding request is not approved, it will impact Endpoint Compute's ability to purchase necessary hardware for the Rugged Refresh and Windows 10 Phase 3 project, both of which

### **Endpoint Compute and Productivity Systems**

are replacing devices that are end of support this year. It could also impact staffing levels within the Endpoint Compute business case.

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

Justification narrative is still valid.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Walter Roys	Jan-12-2022
Jim Corder	BC Sponsor	James B Corder	Jan-14-2022
	FP&A	/002L40/210/48	

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):48 AM PS

James B Corder

James B (order 7000E4972\*G4448...

Jan-14-2022 | 9:48 AM PST

#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

#### **BUSINESS CASE NAME:**

Energy Delivery Modernization and Operational Efficiency			
FOR THE C	CURRENT RI	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAN	GED
SINCE FILE	D (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
⊠ Yes	□ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Energy Delivery Modernization and Operational Efficiency (EDMOE) as a business case supports both existing and new technologies leveraged by the Energy Delivery business areas including Gas Engineering & Operations, Electric Engineering & Operations, Asset Management & Supply Chain, Facilities, Fleet Operations & Metering.

The Energy Delivery Modernization and Operational Efficiency (EDMOE) business case had planned to transfer-to-plant approximately \$5.56M when Avista filed the 2022 Washington GRC. EDMOE ended up transferring approximately \$8.76M to plant in 2022. This resulted in a difference in transfers-to-plant of approximately \$3.2M.

The following projects make up most of the additional transfers-to-plant:

- ESRI License The purchase of this license was an unplanned capital addition that was targeted to hit in 2021, however, due to timing of purchase was moved into 2022 of approximately \$1.85M.
- Schneider ELA 2022 This project is to support the capital costs associated with the Schneider licensing and was originally budgeted as expense and deemed to be capital during 2022. The unplanned cost of this shift from expense to capital is approximately \$894k.
- GIS Enhancements Package 2 The delay in the ADMS project is allowing our teams to work on our GIS Enhancement backlog at a greater rate than forecast and resulted in approximately \$330K in transfers-to-plant to support. Conversely, this results in a reduction to the ADMS and an increase to EDMOE.
- AMI Enhancements/AMI Development environment -Unplanned additional work for the Washington AMI system of approximately \$115k.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the attached change request and governance documents for further detail on the above items:

- 1. EDMOE CPG Change Request January 2022.
- 2. EDMOE CPG Change Request #2 05-17-22

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Most of the increased transfer to plant was a shift in timing of one month that represents a license that is needed to continue with automated processes. Therefore, the original indirect offsets calculated for this business case have no changes due to the above increase in transfers-to-plant.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

DocuSigned by:

Mike Mudge

4400BE3C52404B4...

**DIRECTOR SIGNATURE:** 

X Hossiin Mkdu \_\_\_\_\_

### Energy Delivery Modernization & Operational Efficiency Technology

### 1.0 CHANGE REQUEST #1- [01/2022]

Previous Requests	Requested	Approved
5-Year Plan	\$4,650,000	\$4,950,000
CR #1	\$1,800,000	

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
01-2022	\$0	\$4,950,000	\$1,800,000	\$6,750,000

Type of Change	In-year Update		
Primary Reason for Change	Timing Change, Externally Driven		
Response needed by	1/19/2022		

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The purchase of the ESRI licenses was originally planned during the 2021 budget year, since the previous agreement started at the end of December. During processing the final paperwork for the ESRI renewal, it was discovered this contract was to start January 1, 2022. This means payment for this invoice will be due in the 2022 budget year. This is an unplanned expenditure in the 2022 budget year, and the business case is requesting an additional \$1,800,000 in funding to cover this necessary renewal.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

These licenses are necessary to provide access to our Geospatial Information System (GIS) used to manage our Electric Distribution System and our Gas System on a day to day basis. If this request is not funded, the business case would need to delay planned project work, such as the Distribution Integrity Management Program (DIMP), as well as delay the Advanced Distribution Management System (ADMS) project (outside of this business case). Both projects are a priority and align with our strategy to provide safe, reliable, and affordable energy solutions.

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.

Advanced Distribution Management System (ADMS) Business Case Justification Narrative:
 OMS ADMS Business Case Justification Narrative

### Energy Delivery Modernization & Operational Efficiency Technology

- 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.
- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative is still valid. This is a timing change.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Michael Mudge	BC Owner	-Downsigned by. Mike Muchyo	Jan-19-2022
Josh DiLuciano	BC Sponsor	Jose Diluciano	Jan-19-2022
Hossein Nikdel	BC Sponsor	Hossein Mkdel	Jan-19-2022
Heather Rosentrater	BC Sponsor	Document in:	Jan-19-2022
	FP&A	1877AASERST MITE	

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### Energy Delivery Modernization and Operational Efficiency

#### 1.0 CHANGE REQUEST #2 - 05-17-22

Previous Requests	Requested	Approved			
5-Year Plan	\$4,650,000	\$4,950,000			
CR-01	\$1,800,000	1,800,000			
CR-02	\$2,400,000				

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
01-2022	\$3,762,021	\$6,750,000	\$2,400,000	\$9,150,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	5/31/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

This change request consists of the following changes and is requesting to be an offset to the ADMS business case release due to this work being completed by the same resources as the ADMS business case:

Work	Amount
Schneider ELA	\$ 872,000
GIS Enhancement Backlog	318,000
TWACs Upgrade	423,000
MV90 Upgrade	72,000
PCI Logging	450,000
AiDash Outage Forecasting	150,000
AMI Enhancements	115,000
Total Change Request	\$ 2,400,000

Each of the above are described below in detail:

The Schneider ELA was originally budgeted as expense and deemed to be capital. The cost of this shift from expense to capital is \$872K and should be funded from the EDMOE business case. This change is to support the capital costs associated with the Schneider licensing. These licenses

### Energy Delivery Modernization and Operational Efficiency

support our electric and gas network design capabilities, fiber network management and Gas Control room functionality.

The delay in the ADMS project is allowing our teams to work on our GIS Enhancement backlog at a greater rate than forecast and requires \$318K in funding to support. These enhancements support our Gas and Electric field operations.

The move of the TWACS upgrade (\$423K) and MV90 upgrade (\$72K) from 2021 into 2022 was not in our original EDMOE budgets for 2022. This request is to support that work.

PCI Logging is an opportunity to modernize our transmission logging, replace Crow and prepare for Generation to move from paper-based logging into a digital solution. This work is estimated at \$450K and will be performed largely by the PCI operations team with support from PCI the vendor.

AiDash – Outage Forecasting – \$150K. This is an opportunity to create a standardized mechanism for measuring the potential impact of a weather forecast on our electric distribution system. There is a need to have a system that can monitor, alert, and provide a forecast of expected outages and associated restoration times. This tool will monitor and alert Avista stakeholders when potential wide scale events are likely to occur to allow for appropriate planning.

AMI Enhancements/AMI Development environment - \$115K. This work is coming in above expected spend. This work supports the AMI Smart meter solution and includes upgrade, enhancement and environment costs. Costs are coming in higher than forecast for this work.

The impact on Transfers-to-Plant is an increase of \$0.9M for a total of \$8.5M in 2022, an increase of \$2.5M for a total Transfer of \$5.9M in 2023, and a reduction of \$2.4M for a total Transfer of \$3.4M in 2024.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The Schneider ELA purchase is necessary to continue to use and develop with the Schneider Electric Design solution. Non payment would eliminate this capability, thus preventing the continuing design of our Electric and Gas Distribution systems, management of the fiber network and Gas Control room functions.

Under funding the GIS enhancement package would delay the ability of the team to support our Energy Delivery teams that rely on the GIS solution for their work. Additionally, these teams would need to be reduced in size to meet budget. These teams would then need to be increased to support ADMS work when it commences, putting at risk our ability to support the ADMS work.

The TWACS and MV90 head ends (Meter head ends that support obtaining meter reads for billing purposes) are past support and are at risk both from a security and an operational point of view. If not funded, these solutions will continue to pose both a security and operational risk.

The logging of Transmission events today is done in Crow. With the implementation of PCI in support of EIM we have an opportunity to eliminate CROW and more tightly couple our logging of events with the Transmission Outage Management Solution (TOMS) increasing efficiency and reducing the potential for error. If not performed, we will need to continue to support this work in CROW and navigate duplicating information already found in TOMS.

For AiDash, if we don't do this, Avista will continue the status quo of individual judgement calls of weather forecast risk assessment and outage event preparation will continue to be an event that takes place only hours before impact of weather.

If AMI Enhancement/Development environment work is underfunded we will delay the opportunity to improve AMI meter reading, keep up with upgrades and risk operating on unsupported software and hardware solutions.

### Energy Delivery Modernization and Operational Efficiency

1.1.3 Please reference analysis or information that support the problem and attach to this document.

All detailed documentation is being housed within the ET PMO documentation process and can be provided upon request.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

For the GIS enhancement work, the resources were originally forecast on the AMDS project and thus are directly offset by a reduction in the costs in the ADMS business case.

The PCI logging work is intended to eliminate the need for CROW and thus will be offset by a reduction in CROW licensing and support. (\$15K/year)

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

This is the best and least cost alternative due to the efficient use of current resources. There would be additional costs to releasing resources and rehiring for the ADMS project as well as time lost and risk of not being able to rehire resources with experience.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This investment is still prudent as it is a shift of funds from the ADMS business case due to resources completing a backlog of work instead of working on the ADMS project.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Justification narrative will need to be updated to reflect the changes in scope. This will be done as a part of the 5 year planning process and complete by August 1<sup>st</sup>.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Michael Mudge	BC Owner	Mike Modge	May-18-2022
Josh DiLuciano	BC Sponsor	Housing and by	May-18-2022
Hossein Nikdel	BC Sponsor	Hossein Nkdel	May-18-2022
Heather Rosentrater	BC Sponsor	EREZOTTESTATE. Uscustymal vy:	May-18-2022
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#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Energy Resources Modernization and Operational Efficiency (ERMOE)								
FOR THE C	CURRENT RE	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAI	NGED					
SINCE FILE	D (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	_					
☐ Yes	⊠ No	If yes, please attach revised business case.						

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Energy Resources Modernization and Operational Efficiency (ERMOE) Technology Business Case sponsors the technology related applications that support the Energy Resources business areas operational and strategic initiatives. This business case is necessary to maintain the applications and licenses necessary to meet internal and external business processes and objectives, as well as strategic focus areas.

This business case planned to transfer approximately \$2.7M to plant in 2022 and ended up transferring approximately \$2.2M, with a variance of approximately \$522k under-transferred. There are a few scenarios that occurred in Q4 of 2022 that have impacted Transfer to Plant.

- 1. <u>378k Aurora & Plexos License renewal:</u> The capital portion of the Aurora and Plexos License renewal (2-year agreement) was forecasted and planned to transpire In December of 2022, for the amount of \$378k. There was a timing error related to the journal entry and the entire license purchase posted in January of 2023. This resulted in an under transfer of \$378k in 2022 and subsequently increased the 2023 TTP estimate by that amount.
- 2. <u>180k Oracle Primavera Cloud (OPC) Unifier</u>: The Oracle Phase 2 Unifier project did not TTP in 2022 due to the risk associated to the limited testing capacity and availability at the end of the year. The amount of time needed to fully test and work through resolution in each iteration was greater than forecasted in addition to the vendor that was out of the office the last week of the year. The TTP occurred the first week of January when the team could ensure they would be able to successfully implement the required deliverables and business need. OPC was originally estimated at 250k at Initiation and was reduced to 180k after further planning. The project transferred to plant in January at 180k (including warranty and closing costs).

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. The following business case change requests and governance documents are attached with further details surrounding the above explanations.

- ERMOE In Year Business Case Funds Change Request 2023
- ERMOE BC Governance January 2023
- Message from Project Accounting regarding Aurora Plexos licenses
- Oracle Phase 2 Unifier Steer Co slides December 2022

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

The above lag in transfers-to-plant does not impact indirect offsets that have been calculated for applications such as the Avista Decision Support System or the Nucleus Energy, Trading and Risk Management System projects.

**BUSINESS CASE OWNER SIGNATURE:** 

Docusigned by:

Shan Hormer

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**DIRECTOR SIGNATURE:** 



# **Energy Resources Modernization and Operational Efficiency (ERMOE) Technology**

Business Case Governance & Financial Overview

January 2023

Leianne Raymond / Brian Hoerner

## **Agenda**





## **Business Case Financial Summary**

Actuals through: 12/31/22

Current or Previous Year?	Previous •	2022 Business Case Financials					
Business Case	CPG Approved Spend	YTD Actual Spend	Forecast Spend	Exp. Annual Spend	Variance	% CPG Apprv. Spent	
Energy Resources Modernization &	\$2,800,000	\$2,376,708	\$0	\$2,376,708	\$423,292	84.88%	
Grand Total	\$2,800,000	\$2,376,708	\$0	\$2,376,708	\$423,292	84.88%	



## Financials by Quarter - 2022

Current or Previ	ous Year? 1 Previous Actuals	Forecast	2022 Project Act	uals/Forecasts as of 1/17/2	2023		7
				Actual			
				2022			Grand Total
Business Case	Project +	Phase	Q1	Q2	Q3	Q4 <b>.</b>	
Energy	ADSS Enhancements 2022 Pkg. 2 (5/16/22-12/31/22)	Execution		\$271,234	\$310,666	\$529,450	\$1,111,35
Resources	Aurora & PLEXOS License Renewal: 2 years - 09806242	Closing				\$164,738	\$164,73
Modernizatio	Nucleus Enhancements Package 2022 - 09906980	Execution	\$152,619	\$210,807	\$194,830	\$159,835	\$718,09
	GPSS Maximo Expansion 2022 - 09907000	Execution	\$29,083	\$44,332	\$41,304	\$61,085	\$175,80
	Oracle Primavera Phase 2: Unifier - 09806230	Execution		\$172	\$24,410	\$59,643	\$84,22
	LIMS/WeighWiz/LabWiz Upgrade 2022 - 09806226	Execution		\$11,282	\$32,769	\$44,751	\$88,80
	Stackvision Upgrade 2022 - 09806238	Execution				\$16,657	\$16,65
	Oracle Primavera Implementation (OPC): Phase 1 - 098.	. Complete	\$1,895				\$1,89
	Nucleus Enhancements Package 2021 - 09906798	Complete	\$14,589				\$14,58
	GPSS Mobile Solution - Maximo Anywhere 09806019	Complete	(\$1,365)				(\$1,365
	GPSS Maximo Expansion 2021 - 09906800	Complete	\$2,583				\$2,583
	ABB Sendout System Replacement (Plexos) - 09906887	Complete	(\$660)				(\$660
	Total	-	\$198,743	\$537,827	\$603,980	\$1,036,158	\$2,376,700
Grand Total			\$198,743	\$537,827	\$603,980	\$1,036,158	\$2,376,700



## **Variances**

- ❖Aurora Plexos Licenses 2 year annually paid agreement
- Aurora Plexos License Agreement Capital estimate provided (with tax) \$377,597
- Aurora Plexos License Posted Actuals in 2022 = \$164,738
- Aurora Plexos License Variance = \$212,859
  - Only the 1st year's invoice posted to project, per error with journal entry.
  - It will get corrected this month, but now will hit 2023.

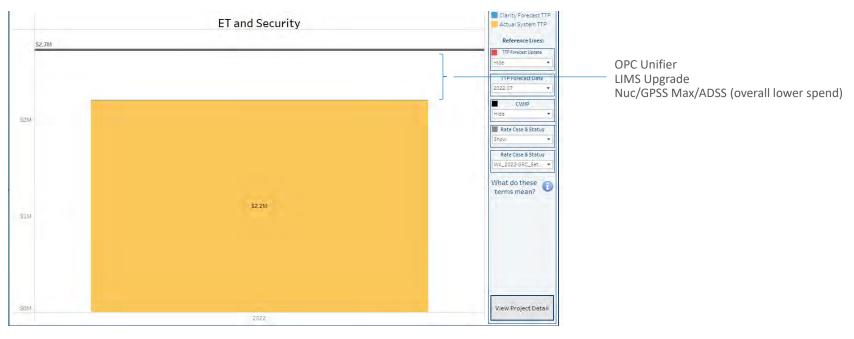
When we have software agreements that are paid on an annual basis for 2 or more years, PA has to create a journal entry to post the full capitalized portion (based on the agreement) to capital project and offset to a liability account. When the annual invoices are paid, they are to coded to the liability account and not the project.

### ❖OPC Phase 2 Unifier

- Oracle PS and labor estimate higher than actuals
- Oracle invoice posted in January 2023 instead of December



## **Transfer to Plant (TTP) Forecast**



Project:	(AII)		<b>V</b>		from both the table below and the bar chart above.  r and click the '-' to roll-up and the '+' to drill-down  Year (Table): 2022   How to download this data					data 🕦		۲,				
Business Fu	ER + Desc	BI + Desc	Project	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 🗜	Total
ET	5019 -	18W02 -	ADSS Enhancements 2022 Pkg. 2 (5/												\$1,111,350	\$1,111,350
Subfunction		Energy	Stackvision Upgrade 2022 -											\$10,121	\$6,535	\$16,657
	Resources Resources . Modernizati. 19W01 -		Oracle Primavera Implementation (0	\$700	\$1,195											\$1,895
			GPSS Maximo Expansion 2022 -												\$158,484	\$158,484
		Energy	Nucleus Enhancements Package 202	\$21,161	\$41,958	\$89,500	\$66,814	\$62,420	\$81,573	\$33,713	\$63,467	\$97,650	\$18,180	\$75,173	\$66,483	\$718,092
		Resources Modern & Op	Nucleus Enhancements Package 202	\$174	\$14,415											\$14,589
		Efficiency	GPSS Mobile Solution - Maximo Any	\$78		\$1,517										\$1,595
		CDAA	GPSS Maximo Expansion 2021 - 099	\$183,093	\$576											\$183,669
			ABB Sendout System Replacement (	\$1,351	(\$2,010)											(\$660)
Grand Total				\$206,556	\$56,134	\$91,017	\$66,814	\$62,420	\$81,573	\$33,713	\$63,467	\$97,650	\$18,180	\$85,294	\$1,342,852	\$2,205,670



## **Project Status Reports**

Project	Phase &	Year of Latest	Status Report Update	Key Accomplishments	Upcoming Activities	Budget Status	Schedule Status	Scope Status
Aurora & PLEXOS License Renewal: 2 years - 09806242	Closing	2023						
ADSS Enhancements 2022 Pkg. 2 (5/16/22- 12/31/22) - 09806227	Execution	2023	-Time cards for this project shut down in favor of the new 2023 ADSS project.	-TTP accepted -SIA Approved -Release – Hotfix 8.0.1 deployed	-Complete Closing documents -NIA in progress -TFS story 499328			
GPSS Maximo Expansion 2022 - 09907000	Execution	2022	-Time keeping has switched from this 2022 project (09907000) to the 2023 project (09907194)	-Barcoding feature now available for useSIA approved -TTP processed -NIA Network Impact assessment filed	-Complete on Closing documents -NIA			
LIMS/WeighWiz/LabWiz Upgrade 2022 - 09806226	Execution	2023	-1.13.23 LIMS core team meeting -1.12.23 Meeting with 3log to review upgrade	-CR 09806226-CR02 approved 10.31.22 -CR 09806226-CR03 approved 12.09.22 -12.1.22 Steerco	-1.25.23 LIMS January steerco -SIA Story 501276 -NIA Story 511534			
Nucleus Enhancements Package 2022 - 09906980	Execution	2021	Update -Time keeping has switched from this 2022 project (09906980) to the 2023 project (09907193)	-SIA Approved	-Complete Approval to close documents -NIA			
Oracle Primavera Phase 2: Unifier - 09806230	Execution	2023	-Unifier Admintraining	-NIA Approved -SIA Approved -12.15.22 Unifier Steerco	-1.17.23 Steerco for Jan -Complete TTP with new form now that training is completed			
Stackvision Upgrade 2022 - 09806238	Execution	2023	-1.13.23 meeting with Data vendor SRSS	-Upgrade complete, required reporting for 10.22.22 done11.10.22 Next steps meeting -SIA approved	NIA -determine where to extend this project or move remaining work on data delivery to new project			



## **2023 Financial Forecast**

Current or Previous Year?	Current ▼	2023 E	Business Case Financia	lls		7
Business Case	CPG Approved Spend	YTD Actual Spend	Forecast Spend	Exp. Annual Spend	Variance	% CPG Apprv. Spent
Energy Resources Modernization &	\$2,800,000	\$0	\$2,896,592	\$2,896,592	(\$96,592)	0.00%
Grand Total	\$2,800,000	\$0	\$2,896,592	\$2,896,592	(\$96,592)	0.00%
		·			, · · ,	

Current or Previ	ious Year? (i) Current • Actuals	Forecast	2023 Project Actuals	/Forecasts as of 1/17/2	2023		7 4
				Forecast			
				2023			Grand Total
Business Case	Project	Phase 2	Q1	Q2	Q3	Q4	
Energy	Aurora & PLEXOS License Renewal: 2 years - 09806242	Closing	\$2,392				\$2,392
Resources	ADSS Expansion 2023 - 09806250	Execution	\$408,168	\$229,768	\$226,775	\$205,289	\$1,070,001
Modernizatio	GPSS Maximo Expansion 2023 - 09907194	Execution	\$18,557	\$75,093	\$86,584	\$69,767	\$250,000
	LIMS/WeighWiz/LabWiz Upgrade 2022 - 09806226	Execution	\$31,906	\$3,455			\$35,361
	Nucleus Enhancements Package 2022 - 09906980	Execution	\$11,552				\$11,552
	Nucleus Expansion 2023 - 09907193	Execution	\$228,258	\$244,376	\$243,566	\$233,800	\$950,001
	Oracle Primavera Phase 2: Unifier - 09806230	Execution	\$92,556				\$92,556
	Stackvision Upgrade 2022 - 09806238	Execution	\$3,445				\$3,445
	GPSS Log Books	Queued				\$51,283	\$51,283
	Hazardous Waste Tracking (Intelex)	Queued		\$30,063	\$34,791	\$35,147	\$100,000
	Matterport Subscription	Queued		\$14,912	\$25,087		\$40,000
	Oracle Primavera Cloud (OPC) - Phase 3	Queued		\$57,592	\$109,625	\$82,783	\$250,000
	Stackvision Upgrade 2023 (Q2)	Queued		\$16,233	\$8,767		\$25,000
	Stackvision Upgrade 2023 (Q4)	Queued				\$15,000	\$15,000
	Total		\$796,835	\$671,492	\$735,195	\$693,069	\$2,896,592
Grand Total			\$796,835	\$671,492	\$735,195	\$693,069	\$2,896,592



## **Five Year Plan (2023-2027)**

Year	Requested Amount	CPG Approved Amount	Requested vs. Approved Variance	% of allocation received	Current Forecast	CPG Approved vs. Forecast Variance	Details
2024	\$3,025,000	\$2,800,000	\$225,000	93%	\$3,668,672		Added Aurora/Plexos License Renewal / Stackvision Upgrade
2025	\$2,940,000	\$2,800,000	\$140,000	95%	\$2,960,080		Ignition added and Stackvision Upgrade (large upgrade – Saas?)
2026	\$3,395,000	\$3,250,000	\$145,000	96%	\$3,877,259	(\$627,259)	Added Aurora/Plexos License Renewal / Gurobi License Renewal
2027	\$3,060,000	\$2,800,000	\$260,000	92%	\$2,985,000	(\$185,000)	
2028							
Total	\$15,492,400	\$11,650,000	\$770,000	93%	\$13,491,012	(\$1,841,012)	



## 5 Year Roadmap – 2024

			Projects 2023+				7 4
				2024			Grand Total
Business Case	Project	Goal	Q1	Q2	Q3	Q4	Grand Total
Energy	ADSS Expansion Package 2024	Run the Business	\$239,900	\$340,055	\$246,977	\$364,068	\$1,191,000
Resources	Aurora & PLEXOS License Renewal 2024	Run the Business				\$398,954	\$398,954
Modernization &	GPSS Log Books	Run the Business	\$226,912	\$41,805			\$268,717
Operational Effi	GPSS Maximo Expansion 2024	Run the Business	\$1,218	\$69,255	\$95,677	\$93,850	\$260,000
	Ignition (HMI) Expansion 2024	Run the Business	\$6,653	\$49,380	\$53,724	\$75,244	\$185,000
	LIMS/WeighWiz/LabWiz Upgrade - 2024	Run the Business		\$17,543	\$22,457		\$40,000
	Nostradamus Upgrade- 2024	Run the Business		\$13,625	\$26,375		\$40,000
	Nucleus Expansion Package 2024	Run the Business	\$299,929	\$251,178	\$214,708	\$234,185	\$1,000,000
	Oracle Primavera Cloud (OPC) - Phase 4	Grow the Business		\$33,364	\$110,100	\$106,536	\$250,000
	Stackvision Upgrade 2024 (Q1)	Run the Business	\$13,155	\$6,846			\$20,000
	Stackvision Upgrade 2024 (Q4)	Run the Business				\$15,000	\$15,000
	Total		\$787,765	\$823,052	\$770,018	\$1,287,837	\$3,668,672



## 5 Year Roadmap - 2025/2026

### 2025

Business Case	Project	Goal	2025	Grand Total
Energy	ADSS Expansion Package 2025	Run the Business	\$1,225,500	\$1,225,500
Resources	GPSS Maximo Expansion 2025	Run the Business	\$269,579	\$269,579
Modernization &	Ignition (HMI) Expansion 2025	Run the Business	\$185,000	\$185,000
Operational Effi	Nucleus Expansion Package 2025	Run the Business	\$1,050,000	\$1,050,000
	Oracle Primavera Cloud (OPC) Unifier License Renewal	Run the Business	\$100,000	\$100,000
	Oracle Primavera Cloud Expansion 2025	Run the Business	\$50,000	\$50,000
	Stackvision Upgrade 2025	Run the Business	\$80,000	\$80,000
	Total		\$2,960,080	\$2,960,080

### 2026

Business Case	Project	Goal	2026	Grand Total
Energy	ADSS Expansion Package 2026	Run the Business	\$1,300,000	\$1,300,000
Resources	Aurora & PLEXOS License Renewal 2026	Run the Business	\$410,923	\$410,923
Modernization &	GPSS Maximo Expansion 2026	Run the Business	\$285,000	\$285,000
Operational Effi	Gurobi Optimization License Renewal 2026 (5 year)	Run the Business	\$441,334	\$441,334
	Ignition (HMI) Expansion 2026	Run the Business	\$185,000	\$185,000
	LIMS/WeighWiz/LabWiz Upgrade - 2026	Run the Business	\$70,000	\$70,000
	Nostradamus Upgrade- 2026	Run the Business	\$60,000	\$60,000
	Nucleus Expansion Package 2026	Run the Business	\$1,075,000	\$1,075,000
	Oracle Primavera Cloud Expansion 2026	Run the Business	\$50,000	\$50,000
	Total		\$3,877,259	\$3,877,259



## 5 Year Roadmap -2027/2028

### 2027

			Projects 2023+	٦
Business Case	Project	Goal	2027	Grand Total
Energy	ADSS Expansion Package 2027	Run the Business	\$1,350,000	\$1,350,000
Resources	GPSS Maximo Expansion 2027	Run the Business	\$295,000	\$295,000
Modernization &	Ignition (HMI) Expansion 2027	Run the Business	\$190,000	\$190,000
Operational Effi	Nucleus Expansion Package 2027	Run the Business	\$1,100,000	\$1,100,000
	Oracle Primavera Cloud Expansion 2027	Run the Business	\$50,000	\$50,000
	Total		\$2,985,000	\$2,985,000

2028

**TBD** 



## **Decision Log - 2023**

Month	Decision	Action	Approval	Date Approved
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				



## **Decision Log - 2022**

Month	Decision	Action	Approval	Date Approved
January	SteerCo addition to represent LIMS	Added Tom Dempsey	SteerCo Team	01/2022
February	NA			
March	NA			
April	NA			
May	Remove Nucleus Replacement (ETRM) from ERMOE	Remove Nucleus Replacement (ERM) from ERMOE - (Megan requested in 5-year planning, and Scott agreed)	SteerCo Team	05/22
June	NA			
July	NA			
August	NA			
September				
October	Add Aurora Plexos License Renewal in 2022? Or, remove and return funds to CPG?	Proceed with license renewal in 2022	Holland, Dempsey, Hoerner, Lang	10/17/22
November	NA			
December	NA			



## Q&A

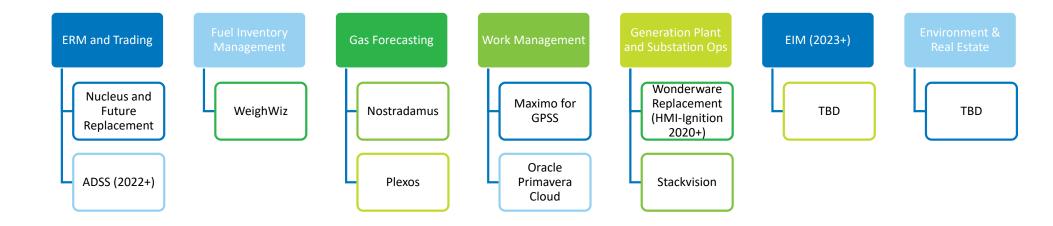


Thank you!



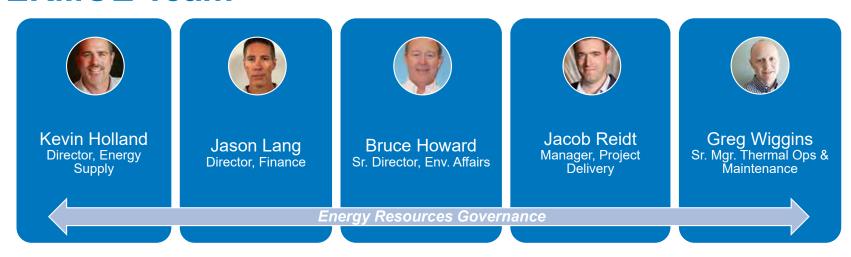
## **ERMOE Overview**

The Energy Resources Business Program supports the application-related technology initiatives for all areas within Energy Resources. These areas include Power Supply, Gas Supply and Generation Production Substation Support (GPSS).





## **ERMOE Team**







## Energy Resources Modernization & Operational Efficiency (ERMOE) Technology

#### 1.0 CHANGE REQUEST #1 - 01/23/23

Previous Requests	Requested	Approved
5-Year Plan	\$3,072,400	\$2,800,000
CR#1	\$212,854	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
01/2023	\$355,911	\$2,800,000	\$212,854	\$3,012,854

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Internally Driven
Response needed by	2/15/2023

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The capital portion of the Aurora and Plexos License renewal (2-year agreement) was forecasted and planned to transpire In December of 2022, for the amount of \$377,597. Per the capital licensing process, a Capital Project Request (CPR) and corresponding Charter was submitted, a project number was assigned on 11/17/22, and was provided to IT Finance / Procurement for purchase and coding that same day.

When project actuals for December 2022 were received, only \$164,743 posted, which is \$212,854 less than our estimate. Upon inquiry to Projects & Fixed Assets Accounting (PFAA) and IT Finance as to the large variance, it appears that the full capital portion did not get posted to the project in December and a distribution correction needed to be made. This was an error related to the journal entry associated with the payment terms and offset liability coding.

Fortunately, this can be corrected, but unfortunately, due to timing, the remainder of the license purchase is now posted in January of 2023, a new budget year. ERMOE had the funds preserved for the purchase to occur in the 2022 budget year but does not have enough funding for the 2023 budget year to absorb these costs. This reduced the Transfer to Plant (TTP) for 2022 and now adds that amount (\$212,854) to our forecasted 2023 TTP. This Change Request is to secure the funding necessary to replenish the 2023 unplanned costs associated with the Aurora/Plexos license renewal purchase.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The license purchase posted in January and ERMOE does not have funding to absorb these costs. This creates a funding concern for the other planned and prioritized projects in the ERMOE Business Case.

## Energy Resources Modernization & Operational Efficiency (ERMOE) Technology

1.1.3 Please reference analysis or information that support the problem and attach to this document.

PFA had performed an AP distribution for the invoice of \$164,743 moving it out of capital and to the liability account in January 2023 and posting the full amount from the journal entry into January 2023 GL period. These transactions and the history are recorded in the GL.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

O&M was not impacted.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The desire is to make the correction to the 2022 financials, but the timing of the budget closure impacted the ability to make those changes.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The investment is still prudent, this is timing driven.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative is still valid, as this is timing driven.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Brian Hoerner	BC Owner	-Docusianalis. Brian Heenner	
Scott Kinney	BC Sponsor	Docusgratus  Scott Editoria	
	FP&A		



# **Oracle Primavera Phase 2: Unifier Steering Committee**

Update
December 15th, 2022

**Confidential – For Discussion Purposes Only** 

## **Agenda**

- Dashboard & Financials Review
- Deliverables Status
- Schedule Review
- Risks/Issues Review
- Questions



## AVISTA.

## **ET and Security Project Dashboard**

Business Unit	Business Functi	Business Case	Project Mana∕ger	Project ¼ ▼	Project Phase	Project Forecas	Planned Project	Accounting Year	Point in Time
ET ▼	ET Subfuncti ▼	Energy Reso ▼	Surface, Ryan ▼	Oracle Prima ▼	Execution 🔻	Include ▼	Planned ▼	2022 🔻	12/15/2022
		•				•			7

									Ľ
Business Case	Project	Project Number	Phase	LTD Budget	LTD Actuals	YTD Spend	Estimate To Comple	Estimate At Compl	Variance
Energy Resources	Oracle Primavera Phase 2: Unifier - 09806230	09806230	Execution	\$250,000	\$68,125	\$68,125	\$172,064	\$240,188	\$9,812
Modernization & O	Total			\$250,000	\$68,125	\$68,125	\$172,064	\$240,188	\$9,812
Grand Total				\$250,000	\$68,125	\$68,125	\$172,064	\$240,188	\$9,812

Breakdown	Project Financials 🚜 "						
	<u>Actual</u>	<u>Forecast</u>	<u>Total</u>				
AFUDC	\$504	\$1,500	\$2,004				
ET Labor	\$18,671	\$36,748	\$55,418				
Non-ET Labor	\$3,464	\$3,059	\$6,523				
Other	\$56	\$757	\$813				
Product	\$14,606	\$0	\$14,606				
Prof Services	\$30,825	\$130,000	\$160,825				
Totals	\$68,125	\$172,064	\$240,188				

Project	Project Manager	Phase	Latest TTP Date	Status Report Update	Key Accomplishments	Upcoming Activities	Budget Status	Schedule Status	Scope Status
Oracle Primavera Phase 2: Unifier - 09806230	Surface, Ryan	Execution	12/15/2022	-12.8.22 SSO issues for the admin resolved -12.6.22 SSO meeting with Oracle to work on issue 12.7.22 Meeting with Oracle on Cost breakdown Structure.	-9.20.22 Oracle Unifier initial Workbook session with Oracle and the GPSS team -10.17.22 Oracle Primavera Phase 2 - Unifier Stee	-SIA Story 521227 -NIA Story 524240 -12.14.22 Touch base with Oracle on Go li			



# Oracle Primavera Phase 2: Unifier— Project Scope/Deliverables

- Primavera Unifier Licenses (3-Year term) (Purchased)
- Implementation and Testing of Oracle Primavera Unifier solution
  - Workbook for Oracle configuration (completed 10.4.22)
  - Initial walk through with Oracle (Completed 10.18.22)
- User Acceptance Testing (Completed 12.15.22, verification of changes 12.29.22)
- Go Live (1.05.23)
- Training (Train the trainer and admin training to take place in early 2023)
- Network Impact Assessment (NIA in progress)
- Security Impact Assessment (SIA nearly complete)
- 30-day post-implementation warranty
- Operational Handoff



### **Oracle Primavera Phase 2: Unifier Timeline**





# **Oracle Primavera Phase 2: Unifier- Risks**

Rank	RISKS/ISSUES	Probability	Impact	Impacted Areas	Mitigation Strategy
1	<b>Risk</b> – Vendor schedule aligns with Avista team	LOW	HIGH	Resource, Schedule	Work with Oracle and PM AJ Erdman resource availability. AJ is aware of our timeline.
2	<b>Risk</b> - Resource Constraints (internally and externally)	LOW	HIGH	Resource, Schedule	Working closely with the Oracle team, AJ Erdman, and the GPSS team. Amanda Hester to ensure we have the resources available to keep to our schedule.
3	Risk - A09 budget approval	LOW	LOW	Schedule	Per Brian H we are good in A09 for the initial planned licenses/Users.



# **Questions?**

# Thank you for your support!



#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Enterpri	se Control	and Network Infrastructure	
FOR THE C	CURRENT RE	PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAN	GEC
SINCE FILE	D (on reco	d with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Technology investments under the Enterprise and Control Network Infrastructure business case are needed to expand and maintain network assets for Avista's safety, control, customer-facing, and back-office systems. This is in support of system reliability and business productivity throughout our service territory, ensuring our ability to appropriately respond to the needs of our customers.

For the tracking year of 2022, the Enterprise Control and Network Infrastructure business case planned to transfer-to-plant approximately \$3.2M in project work while transferring approximately \$3.9M. This resulted in transferring \$661k more than expected. This business case is a program with many projects, and thus this over transfer is a net result of approximately 28 projects over and under transfer to plant amounts. Projects started in 2022 were hampered with product lead times that extended project schedules out 8-12 months longer than originally planned during business case planning activities which resulted in additional costs to projects set to TTP during the year. The largest over transfers occurred in the following projects.

- ECNI MW Sandpoint Baldy to Mt Spokane (MRP4) 09906760 VDR increased approximately \$476,000.
- ECNI MW Refresh -Monumental to Mt. Spokane (MRP)— This project transferred approximately \$230k more than estimated.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Support documentation:

- MRP3-MRP4\_SteerCo Slide Deck 6.7.22
  - Sandpoint Baldy to Mt Spokane—Slide 6 discusses issues and highlights of the project overall and indicates that this phase of the project will be closed at the end of the year. This is an unplanned change to the project transfer to plant date that is noted in slide 9. Thus, even though this project is not over budget, it was broken down into a smaller unexpected transfer to plant phase that increased the 2022 transfers by approximately \$476k.
  - Monumental to Mt. Spokane Slide 5 discusses issue and highlights of the project overall. Slide 9 shows the financial variance and transfer to plant expected dates. Slide 9 shows the financial variance during June at a\$367k more than expected and transfer to plant expected date of August 2022.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

This business case is due to sunset in 2023. There are not any changes to the indirect offsets that would be calculated for this business case based on the over transfer amount listed above.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 







# Microwave Refresh Projects

Steering Committee Meeting June 7, 2022

### **Project Manager: Tim Davey**

## Microwave Refresh SteerCo Agenda

- 1. Review Notes From Previous Meeting
- 2. Review Microwave Refresh Program Dashboard
- 3. Review Financial Summary
- 4. Review Risks and Issues
- 5. Schedule Milestones
- 6. Next Steering Committee Meeting Friday, July 8, 2022



# **Microwave SteerCo Previous Meeting Notes**

ATTENDEES: Craig Figart, Shawna Kiesbuy, Bryan Rask, Randy Spacek, Dan Israel, Paulo Tabino, Jeff Holter, Tim Davey, Kristi Tofino

#### MRP3

- Scope, schedule and budget are on track for all projects.
- SIA for all three projects is the only outstanding item and is in progress.
  - Final pieces for the West Twin Cottonwood Butte SIA were received this week and will be submitted to Security. Once this one is done the SIAs for the remaining links will be much quicker.
- No decisions needed.

#### MRP4

- Scope, schedule and budget on track for most projects.
  - Budget for Monumental Mt. Mt. Spokane is impacted at this point. Change request has been submitted in Clarity.
     ACTION: Provide a few bullets (via email) explaining what was originally forecasted and what is driving the increase in labor and AFUDC. CR and Status Report contain explanation
- ACTION: Follow-up with Gary Pellham to find out if the SARs that were upgraded at Flagstaff and Monumental are in scope of the new
  project being spun up to have SCI upgrade the SAR OS. Complete FSM and MMM were not in the scope of Gary's project
- Sandpoint Baldy Sandpoint Office
  - ACTION: Follow-up with Bob Marshall to determine if Avista has been paying for road maintenance at Sandpoint Baldy. Complete
     Avista road maintenance fees are not included in the current lease for SPB.
  - Consider bringing a Regional Business Manager (Todd Kiesbuy) into the conversation on the renewal of the road use permit.
  - ACTION: Schedule a meeting to further discuss the Sandpoint Baldy Sandpoint Office project. Include Shawna, Bryan, Paulo and Dan. Complete - Meeting held with NE leadership and engineers



### **MRP3 Dashboard**

# **Project Manager:** Exh. TCB-4 **Davey**

Project	Scope	Schedule	Budget	Phase	% Complete	Highlights
MRP3 – Microwave Refresh West Twin to Cottonwood Butte				Closing	99%	<ul> <li>Security Impact Assessment is complete</li> <li>Work still to be completed:         <ul> <li>Approval to close document</li> </ul> </li> </ul>
MRP3 – Microwave Refresh West Twin to Pullman Svc Center				Closing	99%	<ul> <li>Work still to be completed:         <ul> <li>Security Impact Assessment (SIA)</li> <li>Approval to Close Document</li> </ul> </li> </ul>
MRP3 – Microwave Expansion West Twin to Mica Peak				Closing	99%	<ul> <li>Work still to be completed:         <ul> <li>Security Impact Assessment (SIA)</li> <li>Approval to Close Document</li> </ul> </li> </ul>











### **MRP4** Dashboard

### **Project Manager: Tim Davey**

Project	Scope	Schedule	Budget	Phase	% Complete	Highlights
MRP4 – Microwave Refresh Colville Mt. to Colville BPA sub				Closing	90%	<ul> <li>Work still to be completed:         <ul> <li>Install of Out of Band wireless antennas and test</li> <li>Update as-built drawings</li> <li>Security Impact Assessment</li> <li>Approval to Close document</li> </ul> </li> </ul>
MRP4 – Microwave Refresh Monumental Mt. to Mt. Spokane				Execution	80%	<ul> <li>Site prep work is complete at FSM, MMM, and MSP</li> <li>MOP testing and cutover preparation/rehearsal in the lab is ongoing with telecom and NE</li> <li>Security has implemented the firewall changes needed for the network traffic on the new link.</li> <li>On 6/8, the space diversity antennas for the legacy MW system will be replaced by new antennas for the Nokia MW equipment at MMM and MSP. The new Nokia MW link will be operating in parallel with the legacy MW link.</li> <li>Migration of traffic from the legacy microwave link to the new Nokia link will occur in multiple measured steps beginning on 6/22 with the FSM LMR traffic. Traffic migration will occur over several weeks to minimize risk and downtime for systems.</li> <li>Upcoming work: <ul> <li>Continue MOP testing and cutover preparation/rehearsal in the lab.</li> <li>Complete field test plan and validation in the lab for each migration</li> <li>Notification to and coordination with all parties impacted by as routers are reconfigured and traffic is migrated from the legacy link to the new.</li> </ul> </li> </ul>









Project	Scope	Schedule	Budget	Phase	% Complete	Highlights
MRP4 – Sandpoint Baldy to Sandpoint Office (Site Rebuild)				Planning	30%	<ul> <li>The City of Sandpoint has indicated they will transfer ownership and responsibility for SPB to Bonner County. The impact of this new development is not known, but it will likely delay the timing of renewal of the access road permit with IDL.</li> <li>Todd McLaughlin is investigating the process/possibility of Avista pursuing our own temporary use permit from IDL.</li> <li>We are exploring the possibility of "phasing" this project so that the ECNI business case can be closed at the end of the year.</li> <li>We are still waiting for drawings and a quote for a light-weight version of the concrete comm shelter previously ordered for SPB from Thermobond.</li> <li>Smeads Bench has been identified as the site that will use the Thermobond shelter already purchased. Shelter costs already incurred (\$210K) have been transferred to the Cabinet Gorge to Smeads Bench MW Refresh project.</li> <li>Next steps include:         <ul> <li>Investigate temporary road use permit and road maintenance plan.</li> <li>with IDL</li> <li>Order a new lighter weight shelter that can be safely transported and used at SPB</li> <li>Issue Road Improvements RFP</li> <li>Re-Issue Construction RFP for SPB links when design changes and site are finalized.</li> </ul> </li> </ul>
MRP4 – Sandpoint Baldy to Mt. Spokane				Planning	25%	<ul> <li>We are exploring the possibility of "phasing" this project so that the ECNI business case can be closed at the end of the year.</li> </ul>











### **MSP-MMM Implementation Steps**

# **Project Manager:** Exh. TCB-4 **Davey**

- Effort 1: DC Plant Refresh at MMM Complete
- Effort 2: Upgrade Nokia SAR OS at FSM and MMM Complete
- Effort 3: Site prep
  - 1. MSP Complete
  - 2. FSM Complete
  - 3. MMM Complete
- Effort 4: Phase 1 Radio Refresh (team @ MSP, team @ MMM, includes Day Wireless) Scheduled for 6/8/22
  - No outage expected
- Effort 5: Implement MSP-MMM-FSM PUB expansion (team @ MMM, team @ FSM) Scheduled for 6/22/22
  - FSM LMR outage –1 day
  - Fallback of using existing legacy mw with original configs on routers
- Effort 6: Cutover: MMM LMR, KET Corp and KET SG routers to PUB (team @ MMM, team @ KET) Schedule TBD
  - Outage MMM LMR 2 hrs
  - Outage KET Corp 4 hrs
  - Outage KET SG 4 Hrs
  - Fallback of using existing legacy mw with original configs on routers



### **MSP-MMM Implementation Steps**



- Effort 7: Cutover: KET GEN router and KET IMACS T1 to PUB (team @ MMM, team @ MSP) Schedule TBD
  - Outage KET IMACs T1 4hrs includes:
    - Kettle Falls SCADA
    - Kettle Falls TM
    - Kettle Falls (Kettlf2)
    - Colville SCADA
    - Spirit SNP SCADA DNP
    - Spirit TM
  - KET GEN 4hrs Includes PI
  - Fallback of using existing legacy mw with original configs on routers
- Effort 8: Cutover: CVM LMR and CBP Com routers to PUB (team @ MMM, team @ CVM & CBP) Schedule TBD
  - Outage estimate CVM LMR 4hrs
  - Outage estimate CBP comm router 4hrs
  - Fallback of using existing legacy mw with original configs on routers
- Effort 9: Phase 2 Radio Refresh (team @ MSP, team @ MMM, outage; includes Day Wireless) Schedule TBD
  - Migrate traffic to Main antennas brief outage/interruption for all traffic

# **MRP3 & MRP4 Financial Summary**

Project	TTP Date	Actual Costs to date (Thru 5/31/22)	Estimate to Complete (ETC)	Estimate at Completion (EAC)	Total Approved Budget	Variance Trend
MRP3 - Microwave Refresh West Twin to Cottonwood Butte	2/3/2021	\$1,225,355	\$1,500	\$1,226,855	\$1,236,262	\$9,407
MRP3 - Microwave Refresh West Twin to Pullman Service Center	2/3/2021	\$721,177	\$526	\$721,703	\$724,770	\$3,067
MRP3 - Microwave Expansion West Twin to Mica Peak	3/18/2021	\$854,370	\$614	\$854,984	\$867,903	\$12,919
MRP4 - Microwave Refresh Monumental Mt. to Mt. Spokane	6/24/2022	\$885,505	\$270,567	\$1,156,072	\$788,543	-\$367,529
MRP4 - Microwave Refresh Colville Mt. Colville BPA Sub	12/16/2021	\$518,948	\$47,990	\$566,937	\$570,383	\$3,446
MRP4 - Microwave Refresh Sandpoint Baldy to Sandpoint Office (Site Rebuild)	8/30/2023	\$623,583	\$1,468,753	\$2,092,336	\$1,898,545	-\$193,791
MRP4 - Microwave Refresh Sandpoint Baldy to Mt. Spokane	8/30/2023	\$301,217	\$577,117	\$878,334	\$893,591	\$15,257



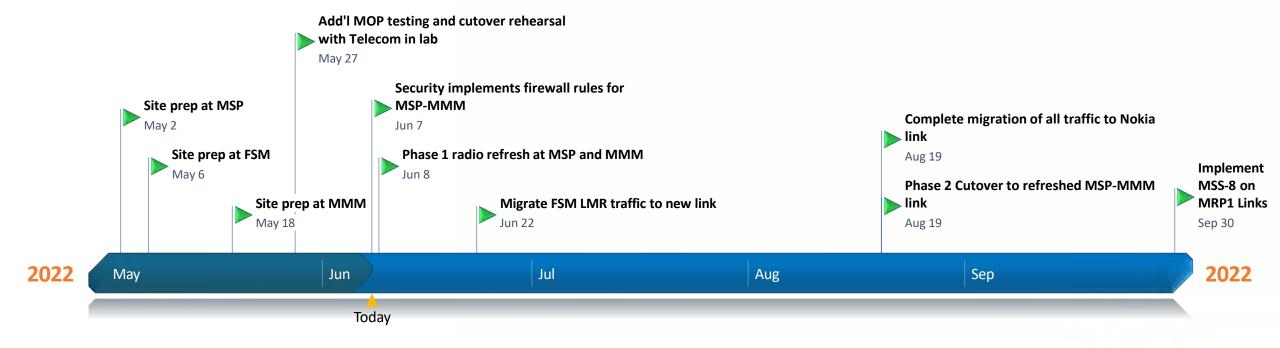
### **MRP4 Risks & Issues**

# **Project Manager:** Exh. TCB-4 Davey

RISKS/ISSUES	Probability	Impact	Impacted Areas	Mitigation
RISK – Resources with limited system experience and knowledge slows completion of work	HIGH	HIGH	Schedule	Provide oversight and mentorship from knowledgeable system resources
RISK – Resource availability due to conflicts with other priority projects	MED	HIGH	Schedule Budget	Work with product owners and ET managers to secure Network Engineering and Telecom resources when needed for the construction and implementation tasks. Communicate schedule to all and as well as progress and issues. Communicate and coordinate any changes in schedule.
RISK – Vendor delays and/or mistakes in equipment delivery	MED	HIGH	Schedule	Confirm anticipated delivery dates from vendors. Validate that all equipment received matches equipment ordered. Investigate options to expedite procurement. Challenge vendor to improve delivery dates. Consider deployment of lab equipment if absolutely necessary.
<b>RISK</b> – Adverse winter weather at mountain top sites limits access	LOW	HIGH	Schedule Budget	Begin construction and implementation work as soon as possible at all sites. Monitor whether conditions carefully and assess impact. Compact schedule if possible.
Risk – COVID-19 impacts and response initiatives impacting lab testing, supply chain (equipment delivery), and productivity levels (social distancing)	LOW	HIGH	Schedule Budget	Adhere to all recommended practices to ensure safety of all working on the project. Adjust to impacts in real time and communicate as appropriate.

### **MSP-MMM Timeline**

# **Project Manager:** Exh. TCB-4 Davey



# **Decision Ledger**

Decision Proposed	Steering Committee Decision	Impacted Area	Financial Impact (\$)	Date
PG&A to arrange and facilitate and informal meetings with Clark Communications and State of Idaho to discuss the PG&A report or engage Avista legal team to start?	APPROVED - Arrange informal meetings with Clark Communications and State of Idaho with the assistance of GP&A.	Schedule	\$0	8/25/20
As a good neighbor/good will gesture, offer to purchase upgraded antenna for Clark Communications if necessary?	APPROVED - Offer to purchase upgraded antenna for Clark Communications of necessary.	Budget Schedule	\$10K	8/25/20
Permission to purchase communication shelter for Sandpoint Baldy in Planning in order to meet project schedule	APPROVED - Sandpoint Baldy Site Rebuild – approval to purchase shelter in planning.	Budget Schedule	\$228K total \$57K in 2020	9/25/20
Change Order from Day Wireless for change in construction approach to complete tower build at West Twin.	APPROVED - Change in construction approach for tower at West Twin to eliminate need for large vehicles to navigate road to tower site.	Budget Schedule	\$165K	11/13/20
Refresh or move existing LMR equipment at Sandpoint Baldy	DECISION POSTPONED pending discussion with Business case guidance team.	Schedule Budget	\$30-\$35K	3/26/21
Extend MSP tower 5' to provide ice shielding to unprotected microwave antennas	APPROVED: Extend Mt. Spokane tower 5 feet to provide ice shielding to unprotected microwave antennas.	Scope Schedule Budget	\$15-\$25K	3/26/21



# **Decision Ledger**

Decision Proposed	Steering Committee Decision	Impacted Area	Financial Impact (\$)	Date
Purchase additional Nokia MSS-8s for the lab to mock up MRP4 Links and permanent ongoing lab use	The Steering Committee deferred to Jeff and Shawna for approval of the purchase if the business case budget allowed for it. Shawna and Jeff have given approval to move forward with the purchase.	Budget	\$67K	4/29/21
Temporarily use a router from the lab to support the T1 needed for outage mitigation at SPO	Recommendation of Steering Committee is to use a router from the spares inventory if available. If no spares available, purchase a new router.	Budget	Borrow – \$0 Purchase - \$10K	4/29/21
Alter Sandpoint Baldy Site Re-Build Design and Requirements	APPROVED: Alter Sandpoint Baldy site re-build Design and Requirements.	Scope Schedule Budget	Approximately \$1.6M of estimated costs for SPB-SPO and SPB-MSP is moved from 2021 ENCI budget to 2022 budget	6/29/21
Mitigation For Lack of Space in CBP Communication Shelter for MRP4 Equipment	<b>APPROVED:</b> Option 1: Install a temporary communication shelter for the MRP4 equipment at CBP	Budget	Estimated \$20-\$35K for delivery, additional construction, 1-year lease on 8x10 shelter	9/20/21

#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Enterpr	ise Commur	nication Systems	
FOR THE	CURRENT RE	PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAI	NGED
SINCE FILE	ED (on recor	d with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	_
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Enterprise Communication Systems business case provides continuous communication among our staff and customers throughout our service territory. However, to do it effectively, we require communication technology for greater agility, flexibility, and scalability to enable many business processes, such as  $24 \times 7 \times 365$  communication with our gas and electric customers by telephone, fax, or email. Additionally, email, instant messaging, text and collaboration platforms support a digital workforce that has the ability to work from any location.

This business case transferred to plant approximately \$2.8M more than anticipated. The source of this variance is due to several projects (such as Contact Center SIP and Outbound Call Campaign) whose transfer to plant dates shifted from 2021 to 2022 due to complexity of the work causing schedule delays. In addition, more funding was required for the Microsoft Teams Voice project due to unanticipated need for Teams Voice licensing and increases in professional services costs, which increased the total transfer to plant amount by \$165k. Finally, a new unplanned project to increase the hybrid capabilities of conference rooms was requested mid-year, and transferred to plant in late 2022 for approximately \$575k.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the following CPG change request documents for further details surrounding the items above:

- Enterprise Communications In Year Business Case Funds Change Request 4.22 Hybrid Capabilities of Conference Rooms.
- Enterprise Communications In Year Business Case Funds Change Request 7.22 Microsoft Teams Voice Project Increases.
- Enterprise Communications In Year Business Case Funds Change Request 8.22

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

This business case has indirect offsets related to an estimation of having to revert to manual processes instead of using the communication devices such as email, virtual meeting systems (Microsoft Teams), Mobile phones and Call Center phone systems. These additional transfers to plant do not impact the indirect offsets originally calculated in this filing.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

DIRECTOR SIGNATURE:





#### 1.0 CHANGE REQUEST CR01 4.6.22

Previous Requests	Requested	Approved
5-Year Plan	\$2,755,510	\$2,020,000
CR01	\$575,000	\$2,595,000

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
04-2022	\$888,321	\$2,020,000	\$575,000	\$2,595,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	4/20/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Avista's Workplace 2022 program has resulted in employees and contractors returning to work using a either a fully in-person, fully remote or a hybrid schedule. As a result, it's possible for meeting attendees to be present both in person in conference rooms as well as virtual via conferencing tools such as Teams. To have the best meeting and employee experience possible, all conference room technology should be updated so that virtual and in-person meeting attendees are able to see everyone, as well as equally collaborate with the meeting.

The objective is to have the same functionality in all conference rooms in order to satisfy the expected employee experience.

Conference room technology improvements have not been funded since March 2020, which has resulted in technology failing and being incompatible with current hybrid meeting technology.

In addition to Avista's standard conference rooms, the Avista Boardroom audiovisual (AV) equipment has been outdated for some time. A refresh of this technology was being discussed in 2020, but was delayed at the time due to the pandemic and remote working. With the switch to hybrid meetings, it has become even more important to have update to date AV and videoconferencing technology available in the Boardroom.

In order to accommodate the purchase of camera technology for the majority of Avista conference rooms as well as a refresh of the AV in the Boardroom, the Enterprise Communications business case is requesting \$575,000 in additional funding.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The purchase of this technology is needed as soon as possible, as employees are beginning to return to the office and will be participating in hybrid meetings. If this request is not approved, it could result in an inferior hybrid meeting experience.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

The analysis of funding needed is based on the plan to install Owl cameras and Meeting HQ devices in 90 conference rooms across all Avista offices. These cameras have been tested and determined to offer the best camera experience for those participating in hybrid meetings.

Conference Room AV Costs			
	<b>Costs Per Unit</b>		
	Including Labor	# of Units	total
Owls and HQ Devices	\$4,000	90	\$360,000
TV Monitors	\$1,500	90	\$135,000
Boardroom AV Refresh	\$80,000	1	\$80,000
Total Change Request			\$575,000

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

There are no business functions impacted.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

A variety of AV technology options were discussed, considered and tested, and the Owl Labs products were found to offer the best experience for hybrid meetings. Below are alternate options for funding based on decreasing the scope of work.

**Option 1** - Replace AV technology in 90 conference rooms, including the Boardroom, across Avista territory as well as replace projectors and screens with TV displays where needed.

**Option 2** – Replace AV technology in 90 conference rooms, including the Boardroom, across Avista territory but do not replace projector and screens unless they are in a failed state or in need of repair.

**Option 3** - Replace AV technology in a smaller number of conference rooms.

Replacing anything less than the full amount of conference rooms will put at risk the objective of creating a consistent employee experience in each conference room.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This is a prudent investment for the company as it will ensure that remote participants in meetings are able to participant in meetings equally to those in the room. The article below discusses why this is important.

https://hbr.org/2021/06/what-it-takes-to-run-a-great-hybrid-meeting

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Walter Rogs	Apr-20-2022
Jim Corder	BC Sponsor	James B Corder	May-19-2022
	FP&A	/CUZL-107.2 TU** 18	

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#### 1.0 CHANGE REQUEST CR01 7.22

Previous Requests	Requested	Approved
5-Year Plan	\$2,755,510	\$2,020,000
CR01	\$575,000	\$2,595,000
CR02	\$165,000	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
07-2022	\$1,759,696	\$2,595,000	\$165,000	\$2,760,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	7/29/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The Microsoft Teams Enterprise Voice project discovered the need to purchase Teams Phone Standard licenses in order for Teams Enterprise Voice softphone to function. This license is an add on to Avista's M3 Microsoft license bundle (which currently includes Skype for Business licenses). This was an unplanned expense in the project.

While there are no direct license offsets at this time due to the Skype for Business licenses being included in the M3 bundle, Avista's software compliance analyst was able to secure a discount for the Teams Phone Standard licenses that reduced the cost by approximately 30%. This discount required Avista to purchase the licenses by June 30th. Total cost of this license purchase was \$164,884.

### 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The purchase of these licenses was necessary to the functionality of Microsoft Teams Voice, which Avista needed to move to for outbound calling as Skype for Business is being deprecated. If this request is not approved, then additional work within the Enterprise Communication business case could be at risk of needing to pause, which could impact contractor labor.

### 1.1.3 Please reference analysis or information that support the problem and attach to this document.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

These licenses also will impact 2022 expense costs by \$4,500 and 2023-2024 costs by \$18,000 per year. We expect that some of this cost will be offset by decommissioning the current Skype for Business servers, which currently also have licenses. Teams Voice is in the cloud and does not require server licenses.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

Alternatives to the licenses were not discussed, as they are necessary for Avista to move to Teams Enterprise Voice.

- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Walter Koys	Aug-02-2022
Jim Corder	BC Sponsor	James & Corder	Aug-02-2022
	FP&A	TIONEASTE DACAS.	

2:08 PM PDT 3:58 PM PDT

#### 1.0 CHANGE REQUEST CR03 8.22

Previous Requests	Requested	Approved
5-Year Plan	\$2,755,510	\$2,020,000
CR01	\$575,000	\$2,595,000
CR02	\$165,000	\$2,760,000
CR03	\$533,000	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
08-2022	\$1,817,391	\$2,760,000	\$533,000	\$3,293,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	8/31/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The Enterprise Communications Business case has encountered the need for additional funding for several ongoing as well as new projects.

- Contact Center Updates \$30,000
  - This project was unplanned and requested as a result of the Contact Center plan
    to return to the office. It is requesting the removal of no longer in use desk phones
    as well as general improvements to prepare the Contact Center offices for
    business functionality.
- Kollective Product Update \$60,000
  - This project was unplanned in the business case, as we received notice from the vendor recently that the product would be end of life this year and Avista would need to find a new platform to host video media.
- Cell boosters
  - The Communications business case has received a number of requests for Cell Booster technology that was previously unplanned in the business case. This includes:
    - Colville Truck Cell Boosters Colville is in need of updating the cell phone boosters in their fleet trucks. There are areas in the Colville service territory that are known for poor and or no cell phone and radio service. There have been request to get the radio system improved but that is a much larger project than updating the cell phone boosters in the trucks. A test of the cell booster technology in one of their trucks was successful

This request is for a project to install boosters in all trucks. There are 22 trucks and cost would be \$1500 each, for a total cost of \$33,000.

- Boulder Park and Moscow Substation Current cell service is very poor and spotty at both locations, and it's important for there to be a secondary form of communication available at this power plant. Cell Service at the Boulder Park plant in particular is an open safety issue. Estimated cost to install boosters at these locations is \$30,000.
- iOS Refresh \$130.000
  - Apple is releasing iOS version 16 in September, and with this news they have announced that iPhones 6s and 7 will not support the new version and therefore would be prone to cyber attack because the older operating system is no longer supported. Any phone using an unsupported iOS version will be blocked from connecting to Avista networks. Avista has approximately 100 of these devices currently in the environment. This request is to refresh these older devices so that they can receive important security updates provided by iOS version upgrades and that employees can continue to use the phones for business functions.
- Outbound Call Campaign Technology Refresh \$250,000
  - This project was planned in the 2021 budget year, and originally forecast to complete in early 2022. Due to a variety of challenges, the project has continued to require work from a variety of teams outside of Communication systems, which has caused increased unplanned labor costs in the business case.

These requests would increase the transfer to plants amount for each project within this business case.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Several of these requested work items are safety issues, or are needed to help prevent cyber attack risk. Additional work is needed to support unplanned labor costs, which if not funded could put at risk Avista's contracted labor group.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

The business case reviewed forecast project costs to determine the requested amount.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

Not funding this request would likely result in project work being slowed or halted, which would potentially impact staffing on these projects.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

Not Applicable.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This investment is still prudent.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change to justification narrative.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Dussigned by. (Valter Roys	Aug-15-2022
Jim Corder	BC Sponsor	nonnecessis	Aug-15-2022
	FP&A	7207 (0.27) 2749	

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#### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Enterp	rise Networl	Infrastructure	
FOR THE	CURRENT RI	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CH	ANGED
SINCE FIL	ED (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

This business case provides back office and customer-facing communication network access and infrastructure investments for all enterprise-wide business productivity applications and corporate systems.

For the tracking year of 2022, the Enterprise Network Infrastructure business case planned to transfer-toplant approximately \$2.2M in project work, while actually transferring approximately \$363k. This resulted in an under-transfer amount of approximately \$1.9M.

The main driver to the transfer-to-plant variance was a lack of resource prioritization and capacity in alignment with the projects within the business case. In addition, projects that started in 2022 were hampered with hardware lead times that extended project schedules out 8-12 months longer than originally planned. These constraints compounded through the year, resulting in changes to the business case funding. During the months of July through October, the business case governance team approved the submission of funding change requests (see attached documents) to release a total of \$2,118,801 of spend from the business case. This release of spend aligns with projects being pushed from 2022 into 2023 and an overall related decrease in transfers-to-plant. Most of these projects have not started yet or have started late in 2022 resulting in most of the project spend and transfers-to-plant being reforecast into 2023. However, through prudent governance of this business case, capital funding that was not able to be spent this year (and ultimately transferred-to-plant), was released for other areas of the business to utilize.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

There are no significant cost overruns as this business case and projects contained therein were delayed with hardware lead times. All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Attached are the change requests documenting the release of funding through 2022 which is a direct correlation to the transfer to plant variance:

- 1. ENI Business Case CR 2022 July
- 2. ENI In Year -Business Case Funds Change Request August 2022
- 3. ENI In Year -Business Case Funds Change Request September 2022
- 4. ENI\_In Year -Business Case Funds Change Request\_October 2022
- 5. ENI In Year -Business Case Funds Change Request November 2022

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The transfer to plant variance for this business case is a result of under delivering on the forecasted project work due to constraints as described above. There are no revisions to the offsets since the work is still set to complete in 2023.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

#### Enterprise Network Infrastructure

#### 1.0 CHANGE REQUEST 1 – 07.15.2022

Previous Requests	Requested	Approved
5-Year Plan	\$10,525,000	\$10,525,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
07-2022	\$180,675	\$3,000,000	-\$586,248	\$2,413,752

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Internally Driven
Response needed by	7/20/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

This change request is for a release of funds due to projects being pushed from starting in Q1 2022 to Q3 and Q4 2022. The amount being released equates to the project costs being moved into 2023. These queued projects have not started this year due to resource constraints resulting from higher priority work.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This change request is for a release of funds.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

This change request is for a release of funds.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

This change request is for a release of funds.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

This change request is for a release of funds.

### Enterprise Network Infrastructure

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This change request is for a release of funds.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes are needed to the justification narrative at this time.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Shawna Kiesbuy	BC Owner	Shawha kithely	Jul-19-2022
Jim Corder	BC Sponsor	Security Research Security Sec	Ju1-20-2022
	FP&A	7002E4872*C4446	

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#### 1.0 CHANGE REQUEST 1 – 08.17.2022

Previous Requests	Requested	Approved
5-Year Plan	\$10,525,000	\$10,525,000
07-2022	-\$586,248	\$9,938,752

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
08-2022	\$187,222	\$2,413,752	-\$532,553	\$1,881,199

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Internally Driven
Response needed by	8/17/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The monitoring of ongoing risks related to supply change lead times, prioritization of work, along with the resulting resource constraints has caused projects forecasted to start in 2022 to be pushed out to 2023. This shift in project work causes an excess of funding not needed in the current year, and thus the release of funds. Funding for 2023 is currently being evaluated based on the new project line-up and next year a change request may be generated if additional funds are deemed necessary.

With this release of funds, there is no change to the 2022 TTP forecast.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This change request is for a release of funds.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

This change request is for a release of funds.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

This change request is for a release of funds.

#### Enterprise Network Infrastructure

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

This change request is for a release of funds.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This change request is for a release of funds.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes are needed to the justification narrative at this time.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Shawna Kiesbuy	BC Owner		
Jim Corder	BC Sponsor		
	FP&A		

#### Enterprise Network Infrastructure

#### 1.0 CHANGE REQUEST 3 - 09.15.2022

Previous Requests	Requested	Approved
5-Year Plan	\$10,525,000	\$10,525,000
CR 07-2022	-\$586,248	-\$586,248
CR 08-2022	-\$532,553	-\$532,553

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
09-2022	\$208,435	\$1,881,199	-\$430,000	\$1,451,199

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	9/21/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Avista has an opportunity to purchase already installed dark fiber from Fat Beam. The purchase had been forecasted across two projects / business cases. Recently, the team learned that the purchase needs to be made in one project in one business case and the Control and Safety Network Infrastructure business case was chosen. This release of funds offsets the request of funds for CSNI.

With this release of funds, there is a \$430,000 reduction to the 2022 TTP forecast.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This change request is for a release of funds.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

This change request is for a release of funds.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

This change request is for a release of funds.

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
  - This change request is for a release of funds.
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
  - This change request is for a release of funds.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes are needed to the justification narrative at this time.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

	Name	Role	Signature	Date
	Shawna Kiesbuy	BC Owner		
ſ	Jim Corder	BC Sponsor		
ſ		FP&A		

### 1.0 CHANGE REQUEST 4 – 10.14.2022

Previous Requests	Requested	Approved
5-Year Plan	\$10,525,000	\$10,525,000
CR 1 07-2022	-\$586,248	-\$586,248
CR 2 08-2022	-\$532,553	-\$532,553
CR 3 09-2022	-\$430,000	-\$430,000
CR 4 10-2022	-\$570,000	

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
10-2022	\$267,318	\$1,451,199	-\$570,000	\$881,199

Type of Change	In-year Update	
Primary Reason for Change	Revised Cost	
Response needed by	10/19/2022	

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The monitoring of ongoing risks related to supply chain lead times, prioritization of work, along with the resulting resource constraints has caused projects forecasted to start in 2022 to be pushed out to 2023. This shift in project work causes an excess of funding not needed in the current year, and thus the release of funds. Funding for 2023 is currently being evaluated based on the new project line-up and at the start of next year, a change request will be submitted for additional funds

With this release of funds, there is no change to the 2022 TTP (Transfer to Plant) forecast due to the 2022 projects spanning multiple years, the TTP might be impacted in 2023 and beyond.

Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This change request is for a release of funds and therefore will allow other areas of the business to utilize these funds.

1.1.2 Please reference analysis or information that support the problem and attach to this document.

This release of funds is primarily driven by supply chain lead time issues and resource constraints. A few examples of lead time challenges in this business case include Cisco switches as noted below in the price estimate for several ENI projects.



Resource constraints are also a driver of this release of funds. As noted in the Resource Optimization Committee (ROC) for Enterprise Technology, Network resources are severely understaffed by approximately 14 Full Time Equivalents (FTE) overall. For this business case, the resource constraints are particularly in the IP Network Access area where many projects land in the ENI business case and impact enterprise network access projects, vulnerable device refresh projects and control site network refresh projects where new switches and routers need to replace old, out of support hardware.

In addition, the same network engineering resources are working on this business case are also working in the ECNI business case. Projects in this case have taken longer than anticipated for very similar reasons noted above, (supply chain and resource) and thus are impacting the effectiveness of this business case.

1.1.3 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

Employee staffing will continue to impact this business case going forward until some significant staffing challenges are addressed. The labor market is extremely challenging for Network Engineers right now. Of the 36 individuals we have in the Network Delivery Engineering team (employee and contract), 70% have been in their current role for less than 3 years. This does not include at least 6 network engineering contractors who started and left within 12 months of their start date to pursue other opportunities. This wastes valuable training and onboarding time with our already over-extended network engineers. We are increasing the number of professional service engineering firms we use, but those contracts are taking longer than expected to negotiate.

1.1.4 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

This change request is for a release of funds.

1.1.5 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This change request is for a release of funds and therefore, allows other areas of the business to use these funds on behalf of our customers.

1.1.6 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes are needed to the justification narrative at this time.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Shawna Kiesbuy	BC Owner	Consumation	Oct-18-2022
Jim Corder	BC Sponsor	Sum (arder	Oct-18-2022
	FP&A	C1001 4009*174498	

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### 1.0 CHANGE REQUEST 5 – 11.10.2022

Previous Requests	Requested	Approved
5-Year Plan	\$10,525,000	\$10,525,000
CR 1 07-2022	-\$586,248	-\$586,248
CR 2 08-2022	-\$532,553	-\$532,553
CR 3 09-2022	-\$430,000	-\$430,000
CR 4 10-2022	-\$570,000	-\$570,000
CR 5 11-2022	\$65,000	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
11-2022	\$683,379	\$881,199	\$65,000	\$946,199

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	11/16/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

In mid-October, a hardware order from CompuNet arrive approximately 170 days (about 5 and a half months) ahead of the quoted lead time for the order on the VDR (Vulnerable Device Refresh) Device Refresh\_07 (DC Access Switches) – 09907062 project in this business case. The hardware purchase was forecasted on the project, but it was forecasted to arrive in 2023, so funding to pay for the order was not planned in the 2022 business case budget. The total order equates to \$289,151. Through careful evaluation of other project work in the business case, the team was able to absorb most of the unplanned cost except for \$65,000. This change request is for \$65,000 to cover the remaining balance of the hardware invoice needing to be paid this year. The acceptance of the hardware order from CompuNet has already transpired so Avista is under contractual obligation to pay the invoice for the hardware received. If this request is not approved, the business case risks completing the 2022 year over budget. With this request for funds, there will be no change to the TTP (Transfer to Plant) forecast for 2022.

Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The acceptance of the hardware order from CompuNet has already transpired so Avista is under contractual obligation to pay the invoice for the hardware received. If this request is not approved, the business case risks completing the 2022 year over budget.

1.1.2 Please reference analysis or information that support the problem and attach to this document.

Lead times for hardware purchases have been sporadic over the last couple of years. Our teams are working daily with our vendor partners to plan for orders with as much accuracy as they can while trying to balance the forecast of work across business case funding years. Unfortunately, the volatility of supply right now resulted in this hardware purchase arriving approximately 170 days (about 5 and a half months) ahead of schedule resulting in unplanned costs in the current business case year.

1.1.3 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

This business case request for funds is due to an unplanned arrival and acceptance of a hardware order forecasted in 2023. This request has no impact on O&M costs, employee or staffing, or offsets.

1.1.4 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

This change request is for funds to cover an overage in the business case caused by a hardware purchase from CompuNet arriving approximately 170 days (about 5 and a half months) ahead of schedule. There are no alternatives to this action since the acceptance of the hardware order has contractually obligated Avista to pay the invoice.

1.1.5 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This change request is for funds to cover an overage in the business case caused by a hardware purchase from CompuNet arriving approximately 170 days (about 5 and a half months) ahead of schedule. The hardware selected and purchased for the project is still the best solution given the project requirements. The affected project is part of the Vulnerable Device Refresh initiative which was created to replace assets which will allow Avista to maintain security patching and technical support for the affected platforms while increasing capacity for network traffic. This will benefit stakeholders and customers by providing resiliency and reliability for communication networks at Customer Contact Centers, Generating Facilities, Service Centers.

1.1.6 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes are needed to the justification narrative now.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Shawna Kiesbuy	BC Owner	-Donasymothy. Shawna kieshy	Nov-11-2022
Jim Corder	BC Sponsor	Deadignatus James B Corder	Nov-11-2022
	FP&A	VOLUMENTO POPULA	

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### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Enterprise Security System					
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED					
SINCE FILE	SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?				
☐ Yes	⊠ No	If yes, please attach revised business case.			

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Enterprise Security Business Case is where all cybersecurity investment is centralized, incorporating security system refreshes and multiyear license renewals from previous investments. As new security system investments occur in response to emerging threats and cybersecurity compliance requirements, the refresh of those systems occur under this business case.

The Enterprise Security System planned transfers-to-plant in the filed Washington GRC was approximately \$972k and the actual amounts ended 2022 to be approximately \$2.48M. This represents a difference of \$1.5M more than anticipated when filing the Washington GRC. There are (4) four specific requests with different timelines and associated risks driving this increase in 2022 of: a) Multiyear Splunk License Renewal, b) Noxon HED Switchyard Security, c) Cloud Security Enhancements, and and ) Increase in Contract and Professional Service Costs.

- Multiyear Splunk License Renewal This core security system captures logs from all other systems to index and correlate real-time data to monitor for anomalies needing further investigation. This annual license renewal was budgeted as expense at \$148k. The <a href="mailto:annual">annual</a> vendor renewal quote received came in at \$174k, or a 17.6% increase. A 3-year, prepay renewal quote received came in at \$445,800, with a \$76,200 discount or approximately \$149k per year versus the \$174k per year. This 3 Year pre-pay amount will trigger 80% of this cost to be capital expense. However, the impact would be a 3-year, pre-pay of \$391k to this capital business case, and is an unbudgeted item. Overall, the Company was utilizing a reduction in costs for these licenses. This results in approximately \$391k of additional unexpected transfers-to-plant in 2022 for these overall savings.
- Noxon HED Switchyard Security This project was a requirement of the Western EIM project under relevant CIP standards including but not limited to physical security perimeter, updated processes to ensure compliance requirements are met as well as new and modified documentation and procedures. This project was an unexpected increase of approximately \$420k in transfers-to-plant due to the carryover in work from 2021 to 2022.
- Cloud Security Enhancements Avista's cloud infrastructure is growing, and this project matures Avista's security posture with an upgrade and enhancements in the cloud environment. This was an unplanned project in 2022 due unanticipated growth in cloud infrastructure and resulted in an additional transfers-toplant of approximately \$149k.
- Increase in Contract and Professional Services Costs The recent economic trends in labor market instability have affected our original labor estimates. Over the past 12 months, we lost (2) highly skilled Avista core resources to a very competitive job market. To temporarily offset the labor shortage, challenge in backfilling the roles and continue upgrading aging security systems, we've increased staff augmentation resources and professional services. This has caused project schedule delay and higher costs month over month. The impact is approximately \$420k annually or \$35k/month greater than the original estimates with Avista core resources.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the following attachment that provides more detail on the above discussion:

Enterprise\_Security – CPG-CR\_9.2022

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

If a data breach event were to occur, whereby customer data is stolen, it can cost an average of \$6.39M per event of indirect lifetime costs. Based on the above information, no additional risk was taken and therefore, no change to the original estimated indirect benefits.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

### 1.0 CHANGE REQUEST #1 09/14/2022

Previous Requests	Requested	Approved
5-Year Plan	\$2,500,000	\$2,160,000
CR #1	\$1,070,000	

Month - Year	YTD Spend	Current Approval	Requested Change	Proposed Annual Total
08-2022	\$1,936,866	\$2,160,000	\$1,070,000	\$3,230,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	9/21/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDINEG BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

- The Enterprise Security Business Case is where all cybersecurity investment is centralized, incorporating security system refreshes and multiyear license renewals from previous investments. This year's approved funding amount has been flat and consistent with allocations from 2019, 2020, and 2021. As new security system investments occur in response to emerging threats and cybersecurity compliance requirements, the refresh of those systems occur under this business case. There are (3) three specific requests with different timelines and associated risks for your consideration: a) Multiyear Splunk License Renewal, b) Multiyear Network System Manager Replacement in SCADA, and an c) Increase in Contract and Professional Service Costs.
- **Multiyear Splunk License Renewal** This core security system captures logs from all other systems to index and correlate real-time data to monitor for anomalies needing further investigation. This annual renewal was budgeted in A09 at \$147,900. The annual vendor renewal quote received came in at \$174,000. This is a 17.6% increase. A 3-year, prepay renewal quote received came in at \$445,800, with a \$76,200 discount or approximately \$148,600 per year. This amount will result in an annual reduction of \$118,180 in the A09 budget, as 80% of this cost would qualify as a capital expense. However, the impact would be a 3-year, pre-pay of \$388,738 to this capital business case for an unbudgeted item. The renewal comes due 09/29/2022.
- Multiyear Network System Manager Replacement in our SCADA environment is a requirement to meet our NERC CIP-007 Standard. Our existing system ran its useful life and is out of support. Although this purchase assists Avista meet a compliance requirement, due to the refresh nature of this investment, the purchase was executed under this business case. The replacement system was purchased at the end of July 2022 for \$260,000, with a 3-year license to capture a 20% vendor discount or a savings of \$97,284 to Avista and its customers. While this annual maintenance and support was anticipated, the 3-year, pre-pay investment was not a budgeted item.

Increase in Contract and Professional Services Costs – The recent economic trends in labor market instability have affected our original labor estimates. Over the past 12 months, we lost (2) highly skilled Avista core resources to a very competitive job market. To temporarily offset the labor shortage, challenge in backfilling the roles and continue upgrading aging security systems, we've increased staff augmentation resources and professional services. This has caused project schedule delay and higher costs month over month. The impact is approximately \$420,000 annually or \$35,000/month greater than the original estimates with Avista core resources.

Request	Amount	Need by date
Multiyear Splunk Renewal	\$390,000	9/21/2022
Multiyear IDS Replacement in SCADA	\$260,000	9/21/2022
Increase in Contract/Professional Services Costs	\$420,000	10/31/2022
Total	\$1,070,000	

# 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Cybersecurity risk is at an all-time high with continued increase in the cost of data breaches, averaging \$4.35M per event. These requests fall under non-labor categories, as we are looking for overall savings to Avista and its customers using multiyear renewals versus annual renewals. Additionally, the skilled resources from contractors and professional services are necessary to update and maintain Avista's security systems.

Risks	Impact
Multiyear Splunk Renewal Annual increase in A09 budget, if not purchased under capital by 9/29. Three-year impact is \$78,300	\$78,300
Multiyear IDS Replacement in SCADA Since project was purchased in late July, will need to halt all projects under ES business case to accommodate the purchase. All Avista employees will need to shift from Capital projects to Expense activities, putting pressure on existing Expense budgets, as well as putting security system technologies on hold until 2023.	\$260,000
Increase in Contract/Professional Services Cost Contract/Professional Services Work Authorizations are underway. Avista is contractually bound to complete the work within the timeframe outlined in each SOW. Should this not be approved, we will need to exercise Change Orders in each Work Authorization to put work on hold until 2023. This can put security system upgrades at risk that are utilized to maintain Avista's security posture. In some cases, these system upgrades (e.g., edge firewalls) can put internet facing systems at risk.	\$420,000

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.

Multiyear Splunk Renewal Analysis:

Complete by:	Ryan Bradle	у								
Completed date:	9/9/2022									
Est. Contract Start Date	9/30/2022									
Est. Go-Live Date	9/30/2022									
Contract Term (mo)	36									
Impact	by Contract \	⁄ear			<u>Yea</u>	<u>r 1</u>	Year 2		Year 3	
Product Description	<u>Qty</u>	<u>Unit Price</u>	Ext. Price	Cost Type	<u>CAP</u>	<u>A09</u>	CAP	<u>A09</u>	CAP	A09
Splunk Enterprise - Term License with										
Standard Success Plan - 300 GB/day -	300	\$580.00	\$174,000.00	80/20	\$139,200.00	\$34,800.00				
Splunk Enterprise - Term License with										
Standard Success Plan - 300 GB/day -	300	\$580.00	\$174,000.00	80/20	\$139,200.00			\$34,800.00		
Splunk Enterprise - Term License with										
Standard Success Plan - 300 GB/day -	300	\$580.00	\$174,000.00	80/20	\$139,200.00					\$34,800.00
Discount	1	-\$76,200.00	-\$76,200.00	80/20	-\$60,960.00	-\$5,080.00		-\$5,080.00		-\$5,080.00
					\$356,640.00	\$29,720.00	\$0.00	\$29,720.00	\$0.00	\$29,720.00
				+ tax @ 9%	\$388,737.60	\$32,394.80	\$0.00	\$32,394.80	\$0.00	\$32,394.80

#### Multiyear IDS Replacement for SCADA Analysis:

*Im	plementation Months:	5		Yea	r 1		Year 2	,	Year 3
<u>Product Description</u>	Cost Type	Qty	Unit Price	CAP	A09	CAP	<u>A09</u>	CAP	<u>A09</u>
Dragos: SiteStore virtual, model STS-500-VM	OS	1	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00
Dragos: SiteStore subscription license, STS-500-VM	On-Prem Software	1	\$28,236.00	\$23,373.13	\$1,098.07		\$1,882.40		\$1,882.40
Dragos: Sensor model NS-1000-E	Hardware	4	\$9,941.43	\$39,765.72	\$0.00		\$0.00		\$0.00
Dragos: Sensor subscription license, NS-1000-E	On-Prem Software	4	\$50,824.80	\$168,286.56	\$7,906.08		\$13,553.28		\$13,553.28
Dragos: OT Watch subscription, NS-1000-E	Cloud Service	4	\$16,765.13	\$9,313.96	\$13,039.55		\$22,353.51		\$22,353.51
Dragos: SiteStore Lab model STS-500-VM	OS	1	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00
Dragos: Service - Deployment & Installation Costs Up to 6 Sensors	Professional Service	1	\$9,412.00	\$9,412.00	\$0.00		\$0.00		\$0.00
Dragos: Neighborhood Keeper Program		1	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00
				\$250,151.37	\$22,043.69	\$0.00	\$37,789.19	\$0.00	\$37,789.19

# 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

- Should the request for \$390,000 not be approved to execute a multiyear renewal of Avista's Splunk license, the renewal will go into the A09 budget with an annual increase of \$26,100/year.
- Should the request for \$260,000 not be approved to replenish program funds used to execute a multiyear replacement of SCADA's Intrusion Detection System, all existing project work will need to be halted for the rest of the year and move all employee and contract labor to expense activities.
- Should the request for \$420,000 not be approved to replenish and continue to support contract and professional service costs required to execute on security system upgrades and replacements, work authorizations will require change orders to halt work until 2023. This may put Avista's relationships at risk with vendor partners who have scheduled resources to our job sites and tasks.

# 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

- Alternatives considered for security system licensing include annual and multiyear renewals. Depending on the security system, in some cases annual renewals make sense if the system or product is commoditized or easily swapped. However, when the security system is a core system specific to Avista, multiyear renewals are considered. Moreover, multiyear renewals often come with greater discounts, as the system vendors offer favorable terms for longer commitments.
- The only alternatives considered to not hiring contractors or professional services was to not do the work. This would put various security systems at risk that required upgrade. Additionally,

several of these security systems are a safety net to Avista networks and other technology systems. In-house expertise from existing resources were limited and training them to perform these activities posed an additional risk in working on complex security systems with cursory knowledge.

- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
  - Investments in security systems and expertise to upgrade, maintain and support such systems is a prudent decision for Avista and its customers. Not only are we required to maintain a baseline of cybersecurity systems to meet compliance requirements, but as threats continue to grow in complexity, the systems are required to upkeep Avista's security posture.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.
  - The justification narrative for this business case is still valid.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Andy Leija	BC Owner		Sep-16-2022
Clay Storey	BC Sponsor	Oversigned by. (Lay Storey	Sep-16-2022
	FP&A	modes remain	

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### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

**BUSINESS CASE NAME:** 

Fiber Net	twork Leas	sed Service Replacement	
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHA	NGED
SINCE FILE	D (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	_
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Avista utilizes leased fiber optic cable to transport primarily safety and control data between offices, substations, and generation facilities. The leased fiber incurs an operating expense with lease rates that were established during the sale of an Avista Communication's subsidiary. An Indefeasible Right to Use (IRU) was established to benefit Avista Utilities with rates well below market value. The IRU expires in 2027 with an option to renew for an additional five years, through 2032. For this business case, the project work identified 47 segments and a total of approximately 98 miles of leased fiber left to be replaced with Avista-owned private fiber.

For the tracking year of 2022, the Fiber Network Leased Service Replacement business case planned to transfer-to-plant approximately \$1.4M in project work, while transferred approximately \$687k. This resulted in an under-transfer of \$705k.

The main driver of this variance was resource constraints tied to both our internal Avista engineering teams along with constraints from our professional services construction partner. These constraints compounded through the year, resulting in project work pushed into 2023. The result of the project schedule updates, caused the transfer for to plant amount for 2022 to be less than originally planned and may ultimately increase the expected transfers in 2023.

The projects included in this transfer-to-plant variance are:

- Huetter to Prairie project of approximately \$506k
- Ross Park/Beacon Fiber project of approximately \$150k

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Attached is the FNLSR Steering Committee December slide deck that show the constraints and updated transfer-to-plant dates moved to 2023.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The direct offsets associated with this business case relate to avoided annual lease costs. These lease costs will go away when this work is set to complete in 2027. Any significant delays will delay the offset that is anticipated in 2027 and potentially beyond.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 



# **FNLSR-IRU**

Steering Committee Meeting January 18, 2023

# **FNLSR Dashboard**

Project	ROC Score	Scope	Schedule	Budget	Phase	% Complete	TTP Date	Comments
Rathdrum CT to Avondale	50				Execution	85%	3/23	Due to scheduling and weather conflict from Cascade, work has been postponed. Since the weather has been so cold, Cascade's equipment runs slowly. Since they have been at other Avista sites and work is taking longer on those sites the schedule for this job has been pushed into Jan 2023.
Huetter to Prairie	50				Planning	75%	2/23	Cascade has started construction. Work has been put on hold for a week at the least. Due to City slow plows (which after plowing covered up the locate flags) and the bitter freezing weather crews may not be back on site until late Dec. I have asked Cascade to bill us for the work they have completed at this point. We will see about 50% of the construction cost come through in 2022.
Idaho Rd to Prairie	50				Execution	50%	4/23	Project has been moved out to Q1 2023 due to other project priorities. We have the WA ready to go we just need to wait on a start date from Cascade for Q1 2023.
Ross Park to Beacon- Fiber Approach	50				Execution	95%	2/23	Construction has begun. There were a few delays due to weather and equipment. Cascade should be completed with work mid-week of Dec 19th. Line crew will help with splicing end of week Dec 19th. However, a delay in GPSS schedule has postponed the splicing and therefore will postpone TeleCom shop. GPSS does not have the resourced available until the third week of Jan 2023. They have some turnover and new hires during the last month that delayed their scheduling.







On Target

At Risk

Impacted



# **FNLSR Dashboard**

Project	ROC Score	Scope	Schedule	Budget	Phase	% Complete	TTP Date	Comments
Irvin to Boulder Park - OPGW	50				Execution	95%	12/22	Transmissions contractor estimated that they will be completed hanging the OPGW by Dec 23rd. We will be able to TTP this project once that is completed
3rd and Hatch to Morris Center Vault	50				Execution	15%	12/23	AJ Sims is our new OSP Engineer. He has availability to begin working on this project. Per budget restraint's we will be planning this year and construction next year.  Upcoming: Complete the drawings and send them in for peer review.  Variance/Cost & Effort Explanation: We got a substation engineer assigned but since this has been delayed this could impact our schedule and budget due to the project being opened longer than expected.  Key Accomplishments: An onsite meeting with the OSP Engineer and the Substation Engineer was on 6/29/2021. Design work has started back up.
Sunset to Downtown West	50				Planning	10%	2/24	Planning has started. Transmission will be transferring some material costs to this project. Power Engineers have completed LIDAR and submitted results to transmission. Coded invoice to cover the survey and permitting costs. Transmission has ordered some materials that ET will be covering which is about \$120k. This is expected to arrive in Jan next year.

























# **FNLSR Financial Summary**

Project	TTP Date	Total Approved Budget	Actual Costs to Date	Estimate to Complete (ETC)	Estimate at Completion (EAC)	Variance Trend
Rathdrum CT to Avondale	3/23	\$526,626	\$537,356	\$16,866	\$554,222	(\$27,596)
Huetter to Prairie	1/23	\$474,501	\$331,890	\$193,841	\$525,732	(\$51,230)
Idaho Rd to Prairie	4/24	\$576,634	\$197,980	\$394,983	\$592,963	(\$16,328)
Ross Park to Beacon – Fiber Approach	2/23	\$133,041	\$131,147	\$20,535	\$151,682	(\$18,641)
Irvin to Boulder Park – OPGW	12/22	\$242,995	\$279,630	\$2,069	\$281,699	(\$38,705)
3 <sup>rd</sup> Hatch to Morris Center Vault	12/23	\$329,134	\$75,543	\$280,831	\$356,374	(\$27,240)
Sunset to Downtown West	2/24	\$423,476	\$45,263	\$387,602	\$432,864	(\$9,388)



### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

RI	ISIN	IFSS	$C\Delta SF$	NAME	: .

Fleet Capital Replacement Plan								
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED of with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?						
☐ Yes	⊠ No	If yes, please attach revised business case.						
DIENSEEY	DI AINI THE	TRANSEER TO DIANT WARIANCE OF GREATER THAN \$500 000 AND ±/-10% FOR THE						

CURRENT REPORTING PERIOD:

The Fleet Capital Replacement Plan funds the programmatic work to replace aging units with new units so

as to operate our fleet in a lowest total cost of ownership model.

For 2022 our TTP forecast was \$7.9 million. The December 31<sup>st</sup> results were \$6.9 million. Our TTP actuals to forecast have always been challenging due to the custom nature of our vehicle orders and the upfit process. The supply chain issues experienced since 2020 have further exacerbated the issue. Our 2022 forecast was

impacted by a large amount of Capital Work in Progress (CWIP) that was carried over from the 2021 budget.

The Fleet Plan has a similar issue again this year as we carry over \$3 million in CWIP for 2023. These challenges are due to multiple vendor and supply chain issues that included late deliveries and cancellations. December alone saw \$3.4 million in deliveries. This creates a bubble of work to process the vehicles into our fleet as well as other final processes that must occur, like radio installs. This bubble of deliveries will take at least two months to get into final service and TTP. Leaving us under our original forecasted TTP for 2022.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The Capital Planning Group (CPG) determines the annual budget for this business case. Fleet staff and stakeholders then meet and execute a plan where we select vehicles based on availability and user input to determine how to allocate the funds based on prudency and other factors. Next, we order equipment that can be as many as 600 days out. For 2022, we have met our spend target (capital allocation) what's causing the variation in TTP is a CWIP issue as the delivery of equipment does not immediately mean it is in-service. We always have prior year CWIP impacting the current year TTP. We originally forecasted significantly higher spends for 2022 in quarter 3 and early quarter 4. Had that forecast been actuals our CWIP in January of 23 would be significantly lower.

### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Any changes made in the plan will have no change to the offsets that are a part of the vehicle replacement program. The changes made are related to transaction timing and not the completion of program.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

X Kelly Magalsky

X Gregorymloew

## CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

BUSINESS CASE NAME:	
ER 3009 Gas Above Grade Pipe Remediation Program	
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), SINCE FILED (on record with FP&A as of Sept 2021 for the	
☐ Yes ☐ No If yes, please attach revised busine	ess case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF G CURRENT REPORTING PERIOD:	GREATER THAN \$500,000 AND +/-10% FOR THE
This program remediates above ground piping locations of repair due to deterioration over time or inferior past co assess all the sites, risk rank them, and then design and	nstruction practices The purpose of this program is to
Labor constraints impacted design and risk analytics, wh 2022. The work is planned to resume in 2023.	ich impacted the ability to execute on the work in
The planned transfer to plant is \$750,000. The actual tra	insfer to plant is \$0.
PROJECT WAS PRUDENT for example, stakeholder meeting supporting documentation):  Capital spending levels are reviewed monthly. After review consideration of completed and upcoming work, gas lead releases, if necessary. Those funds forms are submitted funding consideration. Approved Business Case Funds References.	ewing the budget and actual spend results, with dership agrees on submitting funds requests or to the company's Capital Planning Groups (CPG) for
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHA	NGE IN PLANT ADDITIONS? Please explain.
There are no additional offsets beyond that which has al	ready been reported.
I have reviewed the information contained in this respons my knowledge the information is true, correct, and comp	사용하다 그 경기 전 사람들이 아픈데 이 사람들이 아니는 아니라 그렇게 그렇다는 그렇다는 그 그 그 사람들이 살아가 되었다면 하는 바람이다.
BUSINESS CASE OWNER SIGNATURE:	DIRECTOR SIGNATURE:
× Allauk	x afragagible

### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

BL	JSI	NES	SSC	AS	FN	MA	F٠

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes ☐ No If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The gas planning department routinely conducts an analysis on Avista's gas distribution system to identify areas of the system with insufficient capacity to serve existing firm customer loads. The Airway Heights reinforcement was a high priority project because studies showed that there was insufficient pressure at the west end of the Fairchild/Spokane high pressure system.

The planned transfer to plant was \$9,634,502. The actual transfer to plant was \$7,867,781.

The variance associated with this business case was the result of:

- The original estimate allocated \$1.2 million for rocky ground conditions, and the actual rock excavation expenses were only \$370,000.
- 2. Pipeline materials were estimated at \$2.1 million and actual material costs were only \$1.75 million.
- Additional Funds Used During Construction (AFUDC) charges were estimated at \$1.4 million and actual AFUDC charges were only \$240,000.

These cost differentials contributed to the transfer to plant variance being under budget.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Releases are included with this form.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There were no changes to plant offsets associated with this variance and the project was under budget.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

× Aff, auc

**DIRECTOR SIGNATURE:** 

x afrom Grats

### 1.0 CHANGE REQUEST #1 - 9/16/2022

Previous Requests	Requested	Approved
In Year	\$0	\$0

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
09-2022	\$785k	\$1,150k	-\$180k	\$970k

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	9/22/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

In March 2022 the CPG approved a budget of \$2,360,000 which was based on completing all 30,000 ERT replacements in Idaho. Due to supply chain delays we will not have enough ERTs to support the entire replacement program in Idaho and estimate to replace another 1750 ERTs in 2022. Because of this reduction the program costs can be reduced by \$180,000. The 5 year budget submitted for 2023-2027 earlier this year does not account for this change. The total expected spend for 2022 is calculated as shown below:

The Washington ERT Replacement Program will replace approximately 5,000 500G modules that are not working as intended with the AMI network and need to be replaced with 550G modules to continue reliable customer billing. The project has been completed for 2022 and the total spend was \$302,453.

The Idaho ERT Replacement Program replaced approximately 2,300 40G ERT modules that had a battery failure in early 2022. This work has been completed and the total spend was \$240,271. Additionally, due to the postponement of the AMI project in Idaho, it is expected to have another 1750 ERT failures in 2022 that will need to be replaced at a cost of \$182,000.

The Oregon ERT Replacement Program has been completed for 2022 and the total spend is \$242,000.

The 2022 expected spend is calculated as: \$303,000 (Washington) + [\$241,000 + \$182,000] (Idaho) + \$242,000 (Oregon) = **\$968,000** 

## ER 3054 - Gas ERT Replacement Program

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

n/a

1.1.3 Please reference analysis or information that support the problem and attach to this document.

n/a

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

n/a

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

n/a

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

n/a

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No changes necessary.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
David Smith / Jeff Webb	BC Owner	4th a Will	9/16/22
Jody Morehouse	BC Sponsor		9/16/22
	FP&A		

### CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

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ER 3054	– Gas ERT	Replacement Program
		PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

This business case addresses gas meter Encoder Receiver Transmitter (ERT) module replacements to correct equipment failures and batteries reaching end-of-life. Replacements are necessary to maintain reliable operation of the Advanced Metering Infrastructure (AMI) systems in Oregon, Washington and Idaho. The AMI infrastructure provides metering data necessary to ensure proper metering performance as required by public utility commission rules and tariffs.

The planned transfer to plant was \$215,000 for Oregon. The Actual transfer to plant for the variances in Washington and Idaho is \$778, 042.

The original 2022 Gas ERT Replacement Program planned for replacement of approximately 7,000 ERT modules in Oregon with an approved budget (spend) of \$215,000. A change was initiated in March to replace ERT equipment in areas of Washington and Idaho experiencing high ERT failure rates. Therefore, a request for additional funding was submitted to and approved by Avista's Capital Planning Group to cover the additional ERT replacements needed in 2022 for Washington and Idaho.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no additional offsets beyond that which has already been reported.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

DIRECTOR SIGNATURE:

### **EXECUTIVE SUMMARY**

An Encoder Receiver Transmitter (ERT) is an electro-mechanical device that allows gas meters to be read remotely. These ERTs are powered by lithium batteries, which discharge over time and must eventually be replaced.

Most of the gas meters in Washington, Idaho, and Oregon have ERT modules. The large quantity of ERT installations will result in an unmanageable quantity of battery failures in the future if the ERT is not replaced at an optimized frequency. When batteries fail, the customer's usage is estimated and entered into the billing system manually. This manual process causes a high chance of customer dissatisfaction because of potential billing errors associated with bill estimation. Customers often express their dissatisfaction through commission complaints when this happens.

In most areas of Washington, the ERT modules were replaced in 2019 as part of the Advanced Metering Infrastructure (AMI) project. These ERTs will not need to be replaced for approximately 15 years unless they experience a premature battery failure. This business case also covers instances where the ERT module is not communicating with the AMI network as intended, causing a replacement that is compatible with the mobile meter read routes. This will ensure reliable metering reading and billing.

In Idaho the ERTs will likely be changed out in mass when the AMI project starts in 2024, however it is estimated that up to 30,000 40G ERT modules may have a battery failure in 2022 and 2023 due to their age. These 40G ERT modules may be replaced to avoid battery failure and billing issues before the AMI project is implemented.

In Oregon the ERTs will not be changed out in mass because the AMI project will not be implemented there, therefore the recommended solution is to replace the oldest 7,000 ERTs each year on a 15 year cycle. This replacement strategy was optimized by an Avista Asset Management study. The annual cost of this replacement strategy is \$220,000 and it expected to increase approximately 5% per year to adjust for increased wages and materials.

If this program is not funded the amount of ERT battery failures will increase to an unsustainable level. If not replaced at the proposed rate, a peak of more than 20,000 ERTs are predicted to fail annually, each requiring an unplanned maintenance visit to replace, causing an undue burden on Operations personnel and equipment. This large number of failed ERTs will also cause an unreasonable number of meters that would need to be read manually and the customer's usage estimated resulting in estimated billing and a negative customer experience.

### VERSION HISTORY

Version	Author	Description	Date	Notes
1.0	Dave Smith	Initial version	3/9/2017	
1.1	Dave Smith	Revised per initial review	3/24/17	
2.0	Dave Smith	Revised for 2020 Oregon GRC	2/7/20	
		filing		
2.1	Dave Smith	Updated to the refreshed 2020 Business Case template	6/23/20	
2.2	Dave Smith	Updated to the refreshed 2022 Business Case template. Edited to include WA and ID in the program.	5-5-22	

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### **GENERAL INFORMATION**

Requested Spend Amount	\$220,000
Requested Spend Time Period	Annually
Requesting Organization/Department	Gas Engineering
Business Case Owner   Sponsor	Jeff Webb / Dave Smith   Jody Morehouse
Sponsor Organization/Department	B51 – Gas Engineering
Phase	Execution
Category	Program
Driver	Asset Condition

### 1. BUSINESS PROBLEM

### 1.1 What is the current or potential problem that is being addressed?

An Encoder Receiver Transmitter (ERT) is an electro-mechanical device that allows gas meters to be read remotely. These ERTs are powered by lithium batteries, which discharge over time and must eventually be replaced. The average battery life for ERT modules is approximately 15 years. Most of the gas meters in Washington, Idaho, and Oregon have ERT modules. The large quantity of ERT installations will result in an unmanageable quantity of battery failures in the future if not replaced at an optimized frequency. When batteries fail, the customer's usage is estimated and entered into the billing system manually. This manual process causes a high chance of customer dissatisfaction because of potential billing errors associated with bill estimation. Customers often express their dissatisfaction through commission complaints.

Battery replacement was determined to not be the best approach because in order to replace just the battery, a technician needs to remove the module from the meter and bring it back to the shop where the battery can be replaced in a controlled environment. After the battery is replaced the technician needs to return to the meter to re-install the module. This results in twice the travel time and twice the labor time compared to replacing the entire module, negating any cost savings.

Another issue with replacing just the battery is that all of the potting gel surrounding the battery and circuity inside the module needs to be removed in order to access the battery, and once the gel is removed all of the electronic components inside the ERT are now subject to moisture damage in the field, resulting in additional failures. The manufacturer (Itron) does not recommend replacing the battery in ERT modules for these reasons.

### Gas ERT Raplacement Program, ER 3054

**1.2 Discuss the major drivers of the business case** (Customer Requested, Customer Service Quality & Reliability, Mandatory & Compliance, Performance & Capacity, Asset Condition, or Failed Plant & Operations) and the benefits to the customer

This program usess a proactive and strategic method for addressing asset condition by replacing ERT modules before their battery fails. Replacing these assets before they fail will avoid a manual process of estimating a customer's gas usage and bill resulting in higher customer satisfaction. It is also more efficient and cost effective to proactively replace old ERTs rather than waiting until their battery fails and having to send out a servicemen to replace a failed ERT.

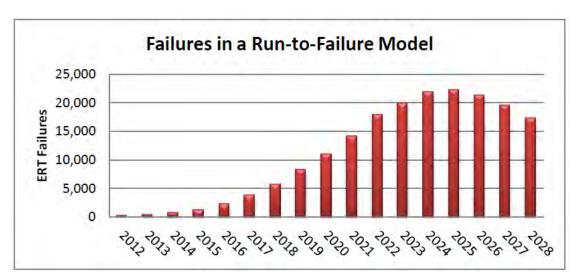
# 1.3 Identify why this work is needed now and what risks there are if not approved or is deferred

The work is needed now because many of the ERTs have reached their endof-life and will begin failing or are not communicating with the AMI network as intended resulting in billing issues.

In most areas of Washington, the ERT modules were replaced in 2019 as part of the Advanced Metering Infrastructure (AMI) project. These ERTs will not need to be replaced for approximately 15 years unless they experience a premature battery failure. This business case also covers instances where the ERT module is not communicating with the AMI network as intended, causing a replacement that is compatible with the mobile meter read routes. This will ensure reliable metering reading and billing.

In Idaho the ERTs will likely be changed out in mass when the AMI project starts in 2024, however it is estimated that up to 30,000 40G ERT modules may have a battery failure in 2022 and 2023 due to their age. These 40G ERT modules may be replaced to avoid battery failure and billing issues before the AMI project is implemented.

The graph below shows how many ERT modules are expected to fail annually in Oregon if they are not proactively replaced.



If this program is not funded the amount of ERT battery failures will increase to an unsustainable level. If not replaced at the proposed rate of 7,000 annually, a peak of more than 20,000 ERTs are predicted to fail annually, each requiring a maintenance visit to replace, causing an undue burden on Operations personnel and equipment. This large number of failed ERTs will also cause an unreasonable number of meters that would need to be read manually and the customer's usage estimated resulting in estimated billing and a negative customer experience.

# 1.4 Identify any measures that can be used to determine whether the investment would successfully deliver on the objectives and address the need listed above.

The Asset Management department was consulted by Gas Engineering for assistance in developing a strategic program to replace ERT modules in Oregon since the AMI program would not replace the modules there. The result of the study suggested the most efficient method for replacing these assets resulted in the highest customer satisfaction and the lowest cost. The graph below summarizes the cost savings associated with a proactive and strategic ERT replacement program over a 15 year cycle:



### 1.5 Supplemental Information

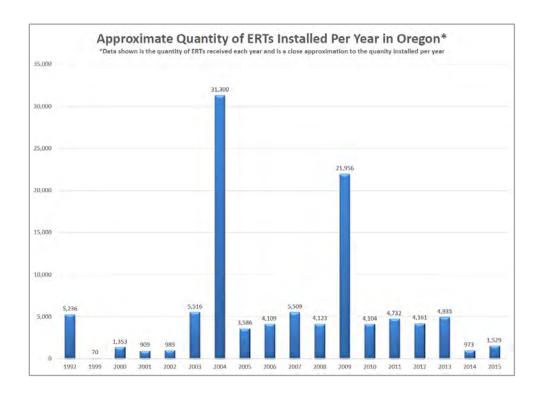
- 1.5.1 Please reference and summarize any studies that support the problem

  The Asset Management study for the Oregon ERT Replacement
  Program is saved on the Avista network drive c01d44 and can be made available upon request.
- 1.5.2 For asset replacement, include graphical or narrative representation of metrics associated with the current condition of the asset that is proposed for replacement.

In Idaho the concern is the 2005-2007 vintage 40G ERTs failing before the AMI project commences in 2024. There are approximately 30,000 of these modules in the system. If we do not proactively replace these modules in 2022 and 2023 there is a high likelihood that their batteries will fail before AMI is implemented starting in 2024.

The graph below shows the quantity of ERTs installed per year in Oregon:

## Gas ERT Raplacement Program, ER 3054



If these ERTs are run to battery failure there will be an unmanageable quantity of ERT failures each year.

### 2. PROPOSAL AND RECOMMENDED SOLUTION

The recommended solution for Idaho is to replace the 30,000 +/- 40G ERTs that are at end of life. This work will be completed in 2022 and 2023.

The recommended solution for Oregon is to continue replacing the oldest 7,000 ERTs each year on a 15 year cycle. This approach targets the oldest ERTs resulting in less battery failures and as a result fewer estimated customer bills.

Option	Capital Cost	Start	Complete
Recommended Solution:			
ID – Replace 30,000 +/- 40G modules in 2022 and 2023.	\$570,000 (ID)	01/2022 (ID)	12/2023 (ID)
OR – Replace the oldest 7,000 ERTs each year on a 15 year cycle	\$200,000 (OR)	01/2016 (OR)	04/2031 (OR)
Alternative Solution:			
ID – Run 40G ERTs to failure.	\$5.41MM (ID)	N/A (ID)	N/A (ID)
OR – Replace 7,000 ERTs based on geographic location each year on a 15 year cycle	\$126,040 (OR)	01/2016 (OR)	04/2031 (OR)

2.1 Describe what metrics, data, analysis or information was considered when preparing this capital request.

Some factors that were considered when preparing this request are the number of ERTs in service, the average battery life of the ERT module, the effects on the customer's bill if the ERT fails, the cost to reactively replace the failed module, and the cost to proactively replace the asset before failure. Refer to the asset management study discussed in Section 1.4.

2.2 Discuss how the requested capital cost amount will be spent in the current year (or future years if a multi-year or ongoing initiative). (i.e. what are the expected functions, processes or deliverables that will result from the capital spend?). Include any known or estimated reductions to O&M as a result of this investment.

In Idaho the replacement of approximately 30,000 2005-2007 40G ERT modules will be replaced in 2022 and 2023. The exact timing is still being evaluated, taking into account supply chain limitations and expected failure rates.

At the beginning of each year the project team determines the location of the oldest 7,000 ERTs in the Oregon. Replacement ERT modules are then ordered. Due to the "pre-capitalization process" the cost of the ERT module will go against ER1053 (Gas ERT Minor Blanket). This program covers the labor and minor material cost for replacing the ERT. Work orders are created for the replacement of each ERT. A third party contractor is utilized to efficiently replace all 7,000 ERTs. The program is completed between January and December each year.

If an ERT battery fails the Mobile Collector will not download the monthly meter read. As a result a servicemen is dispatched to investigate the issue which results in a much higher cost than if the ERT was proactively replaced before the battery dies. This additional cost is primarily composed of personnel labor and travel wages, vehicle costs, and the cost to produce an estimated customer bill.

Reactive ERT Replacement Costs <sup>1</sup> , Per Unit				
Avista personnel labor & travel time wages	\$100.36			
Avista vehicle corrective call out cost	\$67.04			
Cost to produce estimated bill when ERTs fail	\$12.93			
Total	\$ 180.34			

<sup>1</sup>These costs were calculated using the ERT Replacement Strategy Development study from 2012 and adjusted by adding a 2% annual inflation rate.

Washington & Idaho Proactive ERT Replacement Costs <sup>2</sup> , Per Unit				
Contractor labor	\$54.25			
Project management	\$0.75			
Total	\$55.00			

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Oregon Proactive ERT Replacement Costs <sup>2</sup> , Per Unit				
Contractor labor	\$25.00			
Project management \$0.75				
Total	\$25.75			

<sup>&</sup>lt;sup>2</sup>These cost reflect 2022 contractor unit pricing per Avista Contract R-40780.

# 2.3 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented.

Replacing ERT modules is not a new process for Avista. Existing processes and technologies will be utilized for this program.

# 2.4 Discuss the alternatives that were considered and any tangible risks and mitigation strategies for each alternative.

In 2022, an alternative solution that was considered for Washington was to install Star Connected Grid Routers (CGR) devices in the gas only areas where the 500G modules were not able to communicate through the AMI mesh network. The Star CGR option would have taken much longer to implement and would have also been much more costly than replacing the ERT module, therefore the most timely and cost effective solution was to replace the 500G module with a 550G module that would allow mobile reading in the gas only areas.

An alternative solution for Oregon that was considered was to replace 7,000 ERTs based on it's geographic location each year on a 15 year cycle (represented by the yellow line in the graph in Section 1.4). This option involves replacing a geographic cluster of ERTs. The benefit to this approach is that the ERTs are located close to one another, which equates to less travel time in-between ERT locations. The disadvantage to this approach is that the oldest ERTs may not be replaced if they are outside of the geographic zone, so there would be a higher quantity of ERT battery failures and customer billing estimates. A third party contractor provided a cost estimate for both replacement strategies and the cost to replace the oldest ERTs was not significantly more than replacing the geographically located ERT clusters. However the overall cost increase to replace by location was significant, approximately \$5,000,000 more over the life of the 15 year program, due to the high number of expected unplanned replacements using this method vs replace by age.

The run-to-failure cost to reactively replace the failed ERT modules was also considered for Idaho and Oregon. When an ERT is run to failure the customer's bill is estimated and then corrected the next month after the ERT is replaced. If this proactive replacement program is not funded there will be an unmanageable quantity of ERTs failing each year and it is likely that the failed ERT will not be replaced in one month's billing cycle resulting in billing estimates for multiple months. This will create customer dissatisfaction and loss of trust. See below for breakdown of these risks.

### Assumptions:

- 1. Except for regulatory fines, cost estimates based on SME input.
- 2. Costs associated with each risk can vary significantly depending on site conditions.

### **Risk Probability Definitions:**

Very High (VH)	Risk event expected to occur
High (H)	Risk event more likely to occur than not
Probable (P)	Risk event may or may not occur
Low (L)	Risk event less likely to occur than not
Very Low (VL)	Risk event not expected to occur

### Risk Avoidance Over Time and the Cost of Doing Nothing:

		Risk Over Time			Time		
		1	2	5	10	15+	
#	Risk	Year	Years	Years	Years	Years	Cost Estimate
4	Degulaten, Finas						\$225,134 per day per violation (Max)*
1	Regulatory Fines		L .	_	_	_	\$2,251,334 Total (Max)*
2	Pipeline Leak	L	L	L	L	L	\$5,000 to \$150,000 per site (site dependent)
3	Pipeline Failure & Outage	L	L	L	L	L	\$150,000 to \$3,000,000 per site (site dependent)
4	Negative Reputation	Н	VH	VH	VH	VH	Erosion of PUC and Public trust
5	Employee & Public Safety	L	L	L	L	L	Lost time, lawsuits, healthcare , etc. (varies)

\*Regulatory fines present a daily and overall maximum value per violation in accordance with 49 CFR Part 190.223. However, these values are not necessarily an accurate representation of how much Avista would be fined for any specific violation. The actual amount is likely to be much lower since Avista has an ongoing reputation and history of investing in programs related to safety and non-compliance issues. However, it is a bookend reminder from which to characterize the regulatory risk associated with chronic and/or egregious non-compliance, especially in the event of a pipeline safety incident (i.e. failure). Therefore, Avista must continue to demonstrate an ongoing commitment to compliance and pipeline safety to ensure favorable future outcomes with respect to regulatory penalties (actual penalty amount is at the discretion of the state or federal agency).

Over the life of the 15 year program in Oregon the asset management study estimates that the cost of this run-to-failure approach would be approximately \$12,500,000 more than if a proactive and strategic replacement program was executed. Refer to the cost analysis graph in Section 1.4 showing a comparison between the preferred and alternative solutions.

# 2.5 Include a timeline of when this work will be started and completed. Describe when the investments become used and useful to the customer.

The Idaho program is planned to be competed by the end of 2023. The Oregon program will be completed between January and December each year on a 15 year cycle. The ERT modules are purchased as a pre-capital material item under ER 1053 (Gas ERT Minor Blanket). The ERTs will become used and useful upon installation on the meter.

2.6 Discuss how the proposed investment aligns with strategic vision, goals, objectives and mission statement of the organization.

This program aligns with Avista's organizational focus to maintain a safe and reliable infrastructure to achieve optimum life-cycle performance, safely, reliably, and at a fair price for our customers.

2.7 Include why the requested amount above is considered a prudent investment, providing or attaching any supporting documentation. In addition, please explain how the investment prudency will be reviewed and re-evaluated throughout the project

The replacement strategy described herein was optimized by Avista's Asset Management department to levelized the asset replacement cost, to optimize the asset life-cycle, and to minimize the number of failed ERTs requiring customer billing estimates. The program costs will be monitored monthly by the program manager.

# 2.8 Supplemental Information

# 2.8.1 Identify customers and stakeholders that interface with the business case

Avista gas customers benefit from the replacement of these ERT modules because they will receive reliable and accurate billing.

Business case stakeholders including the ERT Replacement Program manager, GIS Analyst, Sourcing Professional, Maximo Business Analyst, IT, Service Credit Dispatch, and Oregon Gas Operations all work together to ensure a successful program execution.

### 2.8.2 Identify any related Business Cases

ER 1053 Gas ERT Minor Blanket

# 3. MONITOR AND CONTROL

# 3.1 Steering Committee or Advisory Group Information

The Asset Management department was consulted by Gas Engineering for assistance developing a strategic program to replace ERT modules before their battery expires. The result of the study suggested the optimized method for replacing these assets that resulted in the highest customer satisfaction and lowest cost.

# 3.2 Provide and discuss the governance processes and people that will provide oversight

Using the replacement strategy recommended by Asset Management the ERT Replacement Program manager works with GIS Technical Services to determine the location of the oldest 7,000 ERT modules in Oregon. Each year prior to starting work the oldest ERT locations are re-analyzed to ensure the most accurate and up to date information. The third party contractor performing the replacement work also provide field verification to ensure only old ERTs are replaced.

# 3.3 How will decision-making, prioritization, and change requests be documented and monitored

The ERT Replacement Program is documented in a business plan and prioritized in a spreadsheet. Each ERT replacement is documented in Maximo with a work order.

Year to date spend and budget updates are reviewed monthly. Annually, the Gas Engineering Prioritization Investment Committee (EPIC) reviews the 5 year plan and ensures the budget level is appropriate given other categories of work and risk on the gas system.

# 4. APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the Gas ERT Replacement Program, ER 3054 and agree with the approach it presents. Significant changes to this will be coordinated with and approved by the undersigned or their designated representatives.

Signature:	All a U.S.	Date:	8/31/22
Print Name:	Jeff Webb / David Smith		
Title:	Mgr Gas Engineering		
Role:	Business Case Owner		
Signature:		Date:	
Print Name:	Jody Morehouse		
Title:	Director Natural Gas		
Role:	Business Case Sponsor		

Signature:		Date:	
Print Name:		_	
Title:		-	
Role:	Steering/Advisory Committee Review	-	

BUSINESS	CASE NAM	E:	
ER 3057	Gas HP Rei	mediation Program	
		46. ^^ [사이 아니아 아니아 아니아 아니아 아니아 아니아 아니아 아니아 아니아 아니	EC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED 21 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revis	sed business case.
	XPLAIN THE REPORTING		ANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE
incompl project	lete constru is unique in	ction records, exposed water	eplacement for integrity and compliance reasons such as: er crossings, or mitigating High Consequence Areas. Each vary significantly from year to year depending on the number
Labor c	onstraints in	npacted the ability to execut	te on the work in 2022. The work is planned to resume in 2023.
The pla	nned transf	er to plant is \$600,000. The	actual transfer to plant is \$0.
Capital : conside releases	ration of co s, if necessa	vels are reviewed monthly. mpleted and upcoming wor ry. Those funds forms are so	After reviewing the budget and actual spend results, with rk, gas leadership agrees on submitting funds requests or ubmitted to the company's Capital Planning Groups (CPG) for e Funds Request(s) are included in this form.
ARE THER	E REVISED (	OFFSETS ASSOCIATED WITH	THIS CHANGE IN PLANT ADDITIONS? Please explain.
There a	re no additi	onal offsets beyond that wh	hich has already been reported.
		information contained in th oformation is true, correct, c	his response for this specific business case, and to the best of and comprehensive.
BUSINESS	CASE OWN	IER SIGNATURE:	DIRECTOR SIGNATURE:
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FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?

Yes No If yes, please attach revised business case. (Updated in August 2022)

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Isolated steel consists of a gas service, riser, or mainline pipe (steel) that does not have adequate cathodic protection per the Code of Federal Regulations (CFR) Section 192.455 and 192.457. This pipe is at a high risk of developing corrosion related leaks, which could be a potential hazard to Avista customers and property. Full replacement of these facilities is recommended to mitigate the risk and be in full compliance with State and Federal regulations.

The program objective is to identify and document isolated steel pipe sections, including isolated risers, that may not be cathodically protected and to replace each riser or pipeline section within a specified timeframe after its identification.

The planned transfer to plant is \$862,754. The actual transfer to plant is \$1,424,685.

During the year it was recognized that there were increased costs above the planned estimate associated with the program including pavement restoration of roadways and traffic control during construction. There were also several projects in which a service replacement resulted in a section of pipeline main being replaced as well.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form.

The work associated with this program involves the mitigation of high-risk facilities with potentially hazardous and compliance related implications. Two separate in-year funds request forms were submitted in September and November.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no additional offsets beyond that which has already been reported.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

× 9/1 aUM

**DIRECTOR SIGNATURE:** 

× aficia Gibbe

BUSINESS (	=1, system (f, st. syst)		
ER - 3005	5 Gas Non	-Revenue Program	
			DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED 021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach re	vised business case.
PLEASE EXF			RIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE
services, responding against finds Since this	lowering ng to cust uture failu s work is n	mains and services, repa omer requested work. As re and often discovered v nostly reactionary, the bud	cts on the natural gas distribution infrastructure (e.g., replacing airing leaks, etc.) as well as replacing damaged equipment and such, this work is often reactionary due to failure or protection when abnormal operating conditions are discovered in the field, get levels are based on historical spend levels. The cost to do this stor labor, materials, restoration requirements, and traffic control.
The plani	ned transf	er to plant was \$9,295,000	0. The actual transfer to plant was \$10,657,765.
reliability	and safet	ce was due to an unfores y for our customers, highe increase in material costs.	seen increase in workload that had to be completed to maintain than budgeted labor costs (including union labor retro-pay), and
This busi Group ap	ness case proved ac	e was monitored through t Iditional funding for the ab	the year. In October and November the Avista Capital Planning ove-mentioned cost impacts.
	AS PRUDI	ENT for example, stakehol	RUNS AND THE DECISION TO CONTINUE TO INVEST IN THE Ider meeting approval, CPG funds change requests (please attach
considera releases,	ition of co if necessa	mpleted and upcoming w ry. Those funds forms are	y. After reviewing the budget and actual spend results, with ork, gas leadership agrees on submitting funds requests or submitted to the company's Capital Planning Group (CPG) for use Funds Request(s) are included with this form.
ARE THERE	REVISED (	OFFSETS ASSOCIATED WIT	TH THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are	no additi	onal offsets beyond that v	which has already been reported.
		information contained in formation is true, correct	this response for this specific business case, and to the best of t, and comprehensive.
BUSINESS C	CASE OWN	ER SIGNATURE:	DIRECTOR SIGNATURE:
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BUSINESS CASE NAME:	
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FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

□ Yes □ No If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The PMC Program is necessary to comply with public utility commission rules and tariffs in Oregon, Washington and Idaho, which requires Avista to test meters for accuracy and ensure proper metering performance. This business case addresses change-out of both test sample meters and Failed Family meters. Failed Family meters are removed from the field because testing and analysis indicates the meter family (manufacturer year and model/size) is not metering accurately.

The planned transfer to plant is \$3,500,000. The actual transfer to plant is \$1,657,533.

In 2022, national supply chain issues had a significant negative impact on Avista's ability to procure necessary meter supply. These unforeseen supply chain issues came at a time when Avista's meter inventory was low, which compounded the challenges. On this basis, the Failed Family Program was temporarily paused for 2022 and 2023 with the goal of preserving existing meter inventory for new customers and for damaged meter/high bill meter replacements. Dependent on resolution of national supply chain issues, the program is planned to resume in 2024, or potentially sooner, if adequate meter and ERT inventory is obtained before 2024.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form.

An in-year funds request form was submitted in September 2022 to give back \$1,650,000 from the previously approved budget of \$3,500,000.

# ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Temporarily pausing the PMC Program will not change the direct offsets associated with the program, but it will postpone the direct savings of \$38,000 from 2022 to 2024 because we do not anticipate having sufficient meter and ERT inventory to resume the program until 2024. This will not change the indirect offsets associated with the program.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

All all

DIRECTOR SIGNATURE:

x afrena gibla

# Gas Non-Revenue Program, ER3005

# 1.0 CHANGE REQUEST #2 - 9/16/22

Previous Requests	Requested	Approved
5-Year Plan	\$0	\$0

Month - Year	YTD Spend	Current Approval	Requested Change	Proposed Annual Total
9-2022	\$1,416k	\$3,500k	-\$1,650k	\$1,850k

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	9/22/2022

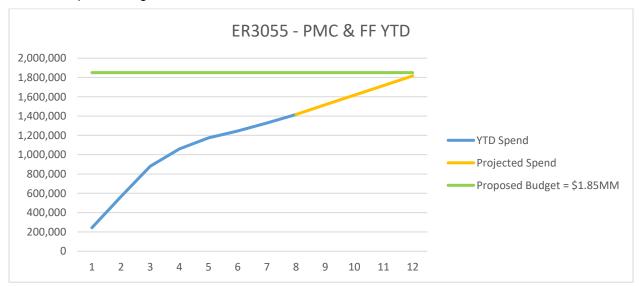
# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Due to limited meter inventory and supply chain shortages, the 2022 PMC and Failed Family program was put on hold in order to reserve meter inventory for new customers and for damaged meter/high bill meter replacements. As of 9-7-22 the year-to-date spend was \$1,416,415. The monthly spend in September was \$87,713 which was up 6% from August. As we move into the heating season the monthly spend is expected to increase a little more, therefore it is estimated that \$100,000 will be spent each month through the end of the year.

Total expected spend =  $$1,416,715 + (4 \times $100,000) = $1,816,415$ 

Proposed budget = \$1,850,000



# Gas Non-Revenue Program, ER3005

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

n/a

1.1.3 Please reference analysis or information that support the problem and attach to this document.

n/a

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

n/a

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.
  - Narrative is still valid.

# 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
David Smith / Jeff Webb	BC Owner	Alba a Will	9/16/22
Jody Morehouse	BC Sponsor		9/16/22
	FP&A		

# **EXECUTIVE SUMMARY**

Avista is required by state commission rules and tariffs in WA, ID, and OR to annually test gas meters for accuracy and ensure proper metering performance. Execution of this program on an annual basis ensures the continuation of reliable and accurate gas measurement for our customers and compliance with the applicable state tariffs.

The Planned Meter Change-out (PMC) Program uses a statistical sampling methodology based on ANSI Z1.9 "Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming". Sample sizes and acceptance criteria are defined in the ANSI standard. The annual test results of gas meters that have been removed from the field are analyzed and a determination of the accuracy of each meter family is made. If the analytics determine a meter family (defined as a manufacturer year and model/size) is no longer metering accurately enough to meet the tariff, then that entire meter family will be replaced. Conversely, if the analytics determine a meter family is testing well (close to 100% accurate), the sample size (number of meters in that family required to be tested) can be reduced. These analytics help control costs and remove meters quickly that are not performing well.

This program includes only the labor and minor materials associated with the PMC Program. Major materials (meters, pressure regulators, and Encoder Receiver Transmitter (ERT)) will be charged to the appropriate Gas Growth Programs. The annual cost for the program varies depending on the results of the previous year's statistical analysis. On average approximately 6,000 meters are removed for this program resulting in an average cost of \$1,500,000 (\$250/meter).

Avista would not be in compliance with state commission rules and tariffs in WA, ID, and OR if this program is not completed annually.

# **VERSION HISTORY**

Version	Author	Description	Date	Notes
1.0	Jeff Webb	Initial Version	03/16/2017	
1.1	Jeff Webb		04/07/2017	
2.0	Dave Smith	Revised for 2020 Oregon GRC filing	2/17/2020	
2.1	Dave Smith	Updated to the refreshed 2020 Business Case template	6/24/2020	
2.2	Dave Smith	Updated to the refreshed 2022 Business Case template	5-5-22	

# **GENERAL INFORMATION**

Requested Spend Amount	\$4,100,000 (2023)
Requested Spend Time Period	Annually
Requesting Organization/Department	Gas Engineering
Business Case Owner   Sponsor	Jeff Webb / Dave Smith   Jody Morehouse
Sponsor Organization/Department	B51 – Gas Engineering
Phase	Execution
Category	Mandatory
Driver	Mandatory & Compliance

### 1. BUSINESS PROBLEM

# 1.1 What is the current or potential problem that is being addressed?

Avista is required by state commission rules and tariffs in WA, ID, and OR to test meters for accuracy and ensure proper metering performance. Execution of this program on an annual basis ensures the continuation of reliable gas measurement and compliance with the applicable tariffs.

**1.2 Discuss the major drivers of the business case** (Customer Requested, Customer Service Quality & Reliability, Mandatory & Compliance, Performance & Capacity, Asset Condition, or Failed Plant & Operations) and the benefits to the customer

This program is a mandatory requirement to be in compliance with state commission rules and tariffs in WA, ID, and OR.

The following state rules regulate Avista's PMC Program:

# Oregon:

- OAC 860-023-0015 "Testing Gas and Electric Meters"
- Tariff Rule #18

### Idaho:

IDAPA 31.31.01.151 through .157 "Standards for Service"

### Washington:

- WAC Chapter 480-90-333 through -348 "Gas companies Operations"
- Tariff Rule #170

Our customers benefit from this program because it assures that natural gas use is measured accurately in all jurisdictions.

# 1.3 Identify why this work is needed now and what risks there are if not approved or is deferred

Avista would not be in compliance with state commission rules and tariffs in WA, ID, and OR if this program is not completed annually.

# 1.4 Identify any measures that can be used to determine whether the investment would successfully deliver on the objectives and address the need listed above.

The PMC Program uses a statistical sampling methodology based on ANSI Z1.9 "Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming". Sample sizes and acceptance criteria are defined in the ANSI standard. The annual test results of gas meters that have been removed from the field are analyzed and a determination of the accuracy of each meter family is made. If the analytics determine a meter family (defined as a manufacturer year and model/size) is no longer metering accurately enough to meet the tariff, then that entire meter family will be replaced. Conversely, if the analytics determine a meter family is testing well (close to 100% accurate), the sample size (number of meters in that family required to be tested) can be reduced. These analytics help control costs and also remove meters quickly that are not performing well.

# 1.5 Supplemental Information

- 1.5.1 Please reference and summarize any studies that support the problem
- Gas PMC Program Standard Operating Procedure
- ANZI Z1.9 "Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming"
- The following state rules regulate the PMC program:

# Oregon:

- OAC 860-023-0015 "Testing Gas and Electric Meters"
- Tariff Rule #18

### Idaho:

IDAPA 31.31.01.151 through .157 "Standards for Service"

### Washington:

- WAC Chapter 480-90-333 through -348 "Gas companies Operations"
- Tariff Rule #170

These documents are saved on the Avista network drive c01d44 and can be made available upon request.

1.5.2 For asset replacement, include graphical or narrative representation of metrics associated with the current condition of the asset that is proposed for replacement.

The meter accuracy testing results collected annually from the program are documented in an Excel spreadsheet. This spreadsheet performs calculations based on ANSI Z1.9 to determine the following year's sampling requirements and identify which meter families do not meet the accuracy standards and must be removed.

# 2. PROPOSAL AND RECOMMENDED SOLUTION

The recommended solution is to complete this mandatory programmatic work. Completion of this program will keep Avista in compliance with state rules and tariffs and assure that our customers' natural gas use is measured accurately. Partial completion of this program will result in Avista being out of compliance with state rules and tariffs.

Option					Capital Cost	Start	Complete
Recommended	Solution,	Fully	complete	the	\$4,100,000	January	December
programmatic wo	ork describe	ed					

# 2.1 Describe what metrics, data, analysis or information was considered when preparing this capital request.

Historical program costs are used to determine the average labor costs to remove and test each meter. The number of meters required to be removed varies each year depending on the previous year's testing results. The average cost per meter is then multiplied by the anticipated number of meters to be removed to determine the estimated program cost for the following year.

The PMC program was paused in 2022 due to inventory limitations in the meter manufacturing stream. There are not enough meters to support both growth and the PMC program, so a decision was made to use the meter we do have for new growth opportunities. The plan is to reinstate the program as soon as meter inventories return to an acceptable level. The assumption is we will be able to resume the program in 2023. The funds request for 2023 is higher than normal because it includes pulling meter families that would normally have been pulled in 2022 in addion to the anticipated number for 2023.

# 2.2 Discuss how the requested capital cost amount will be spent in the current year (or future years if a multi-year or ongoing initiative). (i.e. what are the expected functions, processes or deliverables that will result from the capital spend?). Include any known or estimated reductions to O&M as a result of this investment.

The program is completed between January and December of each year. Gas Engineering, Gas Operations, Gas Meter Shop, and Technical Services work together to administer the PMC program. Gas Operations and the Gas Meter Shop personnel remove the meters from the customer's premise and install new ones. If a large meter family fails, Avista may hire a contractor to assist in the removal of the meters. The Gas Meter Shop completes physical calibration tests on the meters and the Technical Services group then analyzes the test results at the end of the year to determine the status of each family of gas meters. The results of this analysis will define the meter removal and testing requirements for the following year. Gas Engineering develops an annual report which is made available to the state commissions upon request.

Completing the annual PMC Program provides direct savings. Customers benefit from this program because it ensures their gas meter remains accurate throughout its service life. Meter families that have an accuracy outside of the acceptable range will be replaced. Most customers that have a failed family meter replaced will see a cost savings on their energy bill. See the file titled ER 3055 Cost Offset Calcs 2022-2023.xlsx showing the calculations for the direct savings shown below.

The estimated direct savings were calculated with the following assumptions:

- 1. The 2022 direct savings was calculated assuming that 50% of the R275\_1994 failed family meters will be replaced in 2021 and the remaining 50% in 2022.
- 2. The Lifetime direct savings was calculated by assuming that the failed family meters being replaced would have remained in service for an additional 10 years.

<sup>1</sup>The direct savings for future years cannot be calculated until the program finishes and the meter accuracy data is complied.

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	2022	2023	Lifetime
Capital:	1	-	1
Expense:	\$38,000	<sup>1</sup> See Above	\$153,000
Total:	\$38,000	<sup>1</sup> See Above	\$153,000

Completing the annual PMC Program also provides indirect savings. The program provides Avista with the data necessary to identify statistical trends in meter accuracy. If a particular meter family shows a consistent drift in mean accuracy, the meter family can remain in service and the customer's bill can be adjusted accordingly in the Meter Data Management system. This approach has allowed Avista to adjust leave approximately 67,000 meters in service that would have otherwise needed to be replaced. See the file titled ER 3055 Cost Offset Calcs 2022-2023.xlsx showing the calculations for the indirect savings shown below.

The estimated indirect savings were calculated with the following assumptions:

1. The average cost to replace a meter in 2022 and 2023 is estimated at \$236 and \$243, respectively. This estimated cost was calculated by taking the actual average cost to replace a meter in 2020 at \$222 and then adding a 3% increase each year to account for a cost of living adjustment.

Per the failed family replacement timeframe defined in the PMC Program
 Standard Operating Procedure, 25% of the total 67,000 meters would need to be replaced each year starting in 2022 and ending in 2025.

Quantified indirect savings:

	2022	2023	Lifetime
Capital:	-	-	
Expense:	\$3,995,000	\$4,114,000	\$15,984,000

# 2.3 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented.

Replacing gas meters is not a new process for Avista. Existing processes and technologies will be utilized for this program.

# 2.4 Discuss the alternatives that were considered and any tangible risks and mitigation strategies for each alternative.

The only alternatives are to either partially fund this program or to not fund it at all. If this program were not completed fully, Avista would be out of compliance with state rules and tariffs and could be exposed to fines from the various state utility commissions. Also, the accuracy of measurement of our customers' natural gas usage could not be assured. See below for breakdown of these risks:

### **Risk Probability Definitions:**

Very High (VH)	Risk event expected to occur
High (H)	Risk event more likely to occur than not
Probable (P)	Risk event may or may not occur
Low (L)	Risk event less likely to occur than not
Very Low (VL)	Risk event not expected to occur

### Risk Avoidance Over Time and the Cost of Doing Nothing:

		Risk Over Time (years)				s)	
#	Risk	1	2	5	10	15+	Cost Estimate
1	Pogulatory Finas*		-	V/11 V/11 V/11		\/II	\$225,134 per day per violation (Max)
1	Regulatory Fines*	Н	Н	VH	VH	VH	\$2,251,334 Total (Max)
2	Pipeline Leak	Not Applicable			Not Applicable		
3	Pipeline Failure & Outage	Not Applicable			Not Applicable		
4	Negative Reputation	Н	Н	VH	VH	VH	Erosion of PUC and Public trust
5	Employee & Public Safety	Not Applicable			Not Applicable		

\*Regulatory fines present a daily and overall maximum value per violation in accordance with 49 CFR Part 190.223. However, these values are not necessarily an accurate representation of how much Avista would be fined for any specific violation. The actual amount is likely to be much lower since Avista has an ongoing reputation and history of investing in programs related to safety and non-compliance issues. However, it is a bookend reminder from which to characterize the regulatory risk associated with chronic and/or egregious non-compliance, especially in the event of

a pipeline safety incident (i.e. failure). Therefore, Avista must continue to demonstrate an ongoing commitment to compliance and pipeline safety to ensure favorable future outcomes with respect to regulatory penalties (actual penalty amount is at the discretion of the state or federal agency).

# 2.5 Include a timeline of when this work will be started and completed. Describe when the investments become used and useful to the customer.

The program will be completed between January and December of each year. The gas meters are purchased as a pre-capital material item under ER 1050 (Gas Meters). The meter will become used and useful upon installation.

# 2.6 Discuss how the proposed investment aligns with strategic vision, goals, objectives and mission statement of the organization.

This program aligns with Avista's organizational focus to maintain a safe and reliable infrastructure to achieve optimum life-cycle performance, safely, reliably, and at a fair price for our customers.

# 2.7 Include why the requested amount above is considered a prudent investment, providing or attaching any supporting documentation. In addition, please explain how the investment prudency will be reviewed and re-evaluated throughout the project

This program must be completed to ensure our customer's meters remain accurate throughout their service life. Accuracy data is obtained and analyzed each year to ensure the program is testing the appropriate number of meters and removing ones that no longer meet Avista's accuracy requirements.

### 2.8 Supplemental Information

### 2.8.1 Identify customers and stakeholders that interface with the business case

All Avista natural gas customers benefit from this program because it ensures their gas meters remain accurate throughout their service life.

Business case stakeholders include Gas Engineering, Gas Operations, Gas Meter Shop, Technical Services, and state commissions.

### 2.8.2 Identify any related Business Cases

ER 1050 Gas Meters

# 3. MONITOR AND CONTROL

# 3.1 Steering Committee or Advisory Group Information

Gas Engineering is ultimately responsible for the PMC plan and annual reports that are developed and made available to each of the state commissions.

# 3.2 Provide and discuss the governance processes and people that will provide oversight

Gas Engineering, Gas Operations, Gas Meter Shop, and Technical Services work together to administer the PMC program and ensure compliance with the various state rules and tariffs related to gas meter testing.

# 3.3 How will decision-making, prioritization, and change requests be documented and monitored

Meter accuracy testing results are compiled and analyzed in a spreadsheet. An annual report is developed by Gas Engineering and made available to the state commissions upon request. This report defines the program requirements for the following year.

### 4. APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the Gas PMC Program, ER 3055 and agree with the approach it presents. Significant changes to this will be coordinated with and approved by the undersigned or their designated representatives.

Signature:	All a UM	Date:	8/30/22
Print Name:	Jeff Webb / David Smith	_	
Title:	Mgr Gas Engineering	_	
Role:	Business Case Owner	_	
_		_	
Signature:		Date:	
Print Name:	Jody Morehouse	_	
Title:	Director Natural Gas	_	
Role:	Business Case Sponsor	_	
_		_	
Signature:		Date:	
Print Name:		_	
Title:		_	
Role:	Steering/Advisory Committee Review	_	

BUSINESS CASE NAME:		
ER 3000 – Gas Reinforcement Program		

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes

No.

If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The gas planning department routinely conducts an analysis on Avista's gas distribution system to identify areas of the system with insufficient capacity to serve existing firm customer loads. Deficient areas are assigned a priority level based on the severity of the risk associated with insufficient system capacity. The areas with the highest priority are selected for remediation and an options analysis is conducted to select the preferred alternative.

The planned transfer to plant is \$1,299,997. The actual transfer to plant is \$1,892,133.

During the year it was recognized that there were increased costs above the planned estimate associated with the protects including increased labor, materials, pavement restoration of roadways and other construction services. Additionally, we were notified of a customer in Idaho who was increasing load that required a main reinforcement, which was started in 2022.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no additional offsets beyond that which has already been reported.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

DIRECTOR SIGNATURE:

x afrein Globy

BUSINESS CASE NAME:		

ER 3003 - Gas Replacement Street and Hwy Program FOR THE CURRENT REPORTING PERIOD (JAN - DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)? ☐ Yes ⊠ No If yes, please attach revised business case. PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD: This Business Case is mandated by franchise agreement contracts with the city and state entities, and permits entered with railroad owners. Avista is mandated under these agreements to relocate its facilities when local jurisdictional projects necessitate. Often these projects are identified without significant lead times, which makes it difficult to forecast and estimate projects. The planned transfer to plant is \$3,495,650. The actual transfer to plant is \$4,847,700. This variance is driven by the increase in the number, size and cost of projects. The increases in spend were needed to complete mandated work. Not completing this work would put Avista out of compliance with respective franchise agreements. EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation): Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form. ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain. There are no additional offsets beyond that which has already been reported. I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive. BUSINESS CASE OWNER SIGNATURE: DIRECTOR SIGNATURE:

BO2INE22	CASE NAIVI	t;
ER 3010	– Gas Tran	sient Voltage Mitigation Program
		PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Avista has experienced safety issues including fires at Regulator Stations due to transient voltage spikes from faults on the adjacent electric transmission system. The purpose of this program is to identify high pressure gas piping systems that are at risk of these conditions and identify gas systems that have high steady state voltage, and then install mitigative measures to reduce the risk. These efforts will protect the pipeline and equipment from being damaged and reduce the touch voltage exposure to below compliance limits, keeping our employees safe. Common approaches to this include the installation of gradient mats, solid state decouplers (SSD), and copper counterpoise conductor.

The planned transfer to plant was \$875,000. The actual transfer to plant was \$0.

This program experienced design and material supply chain delays resulting a portion of the work being reschedule to 2023. A significant amount of construction work was completed as part of this program in 2022, however most of the work is not complete and will be transferred to plant in 2023.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Capital spending levels are reviewed monthly. After reviewing the budget and actual spend results, with consideration of completed and upcoming work, gas leadership agrees on submitting funds requests or releases, if necessary. Those funds forms are submitted to the company's Capital Planning Group (CPG) for funding consideration. Approved Business Case Funds Request(s) are included with this form.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no additional offsets beyond that which has already been reported.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

# **EXECUTIVE SUMMARY**

Gas supply to Warden, WA currently has two contraints. 1) the town is supplied gas from the fully-subscribed and capacity-constrained Moses Lake lateral (owned by Williams NWP). Warden has a design-day need projected to be 1,472 dekatherm per day (Dth/day). Avista has Firm transportation capacity for 1,180 Dth/day. The capacity gap of 292 Dth/day can be served on a non-Firm basis, but there is a risk of not being able to serve Firm customers in Warden during severe cold weather events. In order to meet our obligation to serve current Firm loads in Warden on a peak day, Avista requires incremental capacity from Williams NWP. Williams NWP provided an estimate of \$9.85MM to increase the capacity of the Moses Lake lateral. 2) The high pressure (HP) supply line into town has reached its capacity. Sufficient capacity is defined as pressures at or above 90 pounds per square inch (psig) in a HP distribution system on a design day analysis. Gas Engineering will be responsible for distribution system changes. This ER is specific to the work and costs associated with Avista's distribution system upgrades.

As a result of current capacity/supply constraints, industrial gas growth opportunities are hampered within the Port of Warden Industrial Park as well as other sites in the area. Grant County Economic Development Council and the Port of Warden have contacted Avista several times related to different commercial ventures interested in the Port site. Avista's largest gas customer in Warden, Washington Potato, has also shared that they wish to increase their plant's capacity and gas usage.

The recommended solution for increasing the capacity of Avista's distribution system is to perform an uprate of the existing 4" HP line. The uprate will increase the Maximum Allowable Operating Pressure (MAOP) of the pipeline from 150 psig to 250 psig. The capacity of the uprated pipeline will nearly double from 98 Mcfh to 195 Mcfh. This solution can be accomplished for an approximate \$85,000 capital investment needed to replace three valves that are not rated for the higher operating pressure. The Washington Utility and Transportation Commission (WUTC) has approved Avista's proposal to uprate the existing 4" high pressure gas line.

An alternative solution would be to install a larger pipeline into Warden which is estimated to cost \$3MM and would take several years to complete. The most economical and timely solution to increase gas capacity is to perform the uprate of the existing pipeline.

If this project is not approved the capacity constrained gas supply in Warden will continue to limit economic growth in the area.

# **VERSION HISTORY**

Version	Author	Description	Date	Notes
1.0	Jeff Webb	Initial Version	3/9/2017	
1.1	Jeff Webb		4/6/2017	
2.0	David Smith	Updated to the refreshed 2022 Business Case template. Edited to include high pressure uprate solution.	5-9-22	

Template Version: 04.21.2022

# **GENERAL INFORMATION**

Requested Spend Amount	\$85,000
Requested Spend Time Period	1 year, 2022
Requesting Organization/Department	B51 – Gas Engineering
Business Case Owner   Sponsor	Jeff Webb/Dave Smith   Jody Morehouse
Sponsor Organization/Department	B51 – Gas Engineering
Phase	Execution
Category	Project
Driver	Performance & Capacity

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Generat	tion DC Sup	plied Systems	
FOR THE (	CURRENT RE	PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANG	EC
SINCE FILE	ED (on reco	d with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Generation DC Supplied System business case is a program that ensures critical power systems at all of Avista's generation and control facilities are safe and reliable. These systems are the backbone for supplying power to the protective relays, breakers, controls and communication systems within the generation and control facilities. To maintain reliability, Avista follows NERC requirements and design enhancements for the monitoring and testing of our DC system.

Avista planned to perform a DC upgrade project at Noxon Rapids HED and at Rathdrum CT. However, due to engineering manpower constraints this year, other projects were prioritized higher, and no new Generation DC Supplied System projects were completed in 2022. The \$18,486 placed in service were related to closing costs on a project completed in 2021.

The annual funds for this program are expected to accomplish approximately two projects a year. The projects must always be prioritized with all other department projects as manpower availability is taken into consideration.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

This business case is monitored through the year at the Generation & Production Department's SCRUM meeting. It was determined that new work, funded from this business case, would be a lower priority this year when all capital work was taken into consideration. In the same way, should significant cost overrun occur, they would be discussed, and a direction forward would be determined. Additionally, a funding change request would have to be submitted and approved by the Company's Capital Planning Group before additional funding could be obtained and work continued.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

This work is performed as required under NERC PRC-005-06 which states the equipment this business case replaces is required to be in working order at all times, and therefore, does not reach the end of life. Required inspections are performed regardless of the age of equipment. Capacity testing is performed when equipment is put in service. As such, replaced equipment is subject to the same maintenance and operating schedules and therefore, no offsetting savings are identified with this work.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

X Fasture Marhouse

x Alexis Alexander

Signed by: Newhouse, Kristina

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Identity and Access Governance					
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	GED		
☐ Yes	⊠ No	If yes, please attach revised business case.			

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

Avista's current Identity and Access Governance (IAG) program is highly manual, time consuming, cumbersome and prone to human error. This has led to consistent failures of related controls around access to systems or facilities for individuals who have either changed roles in the Company or left the Company and should no longer have previous role access. The IAG program will create role-based profiles, define system privileges, automate access management, and facilitate regular user access review and validation. This program was just started in 2022.

The Identity Access Governance business case planned transfers-to-plant in the filed Washington GRC was approximately \$672k and did not end up transferring anything in 2022. This is now expected to transfer-to-plant in June of 2023.

There is only one project within this business case called *Identity and Access Governance Implementation* phase 1, which is a new complex technology for Avista. This project was unable to go live in 2022 due to a variety of resource constraints, which caused delays in the timeline. Hardware delays in the model office environment also contributed to a delay in the project timeline.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the executive update attached for further details regarding this delay.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

These projects have no identifiable direct or indirect cost savings for customers, as they are required by law, or simply after thorough review have no offsets.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

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DIRECTOR SIGNATURE:

DocuSigned by:

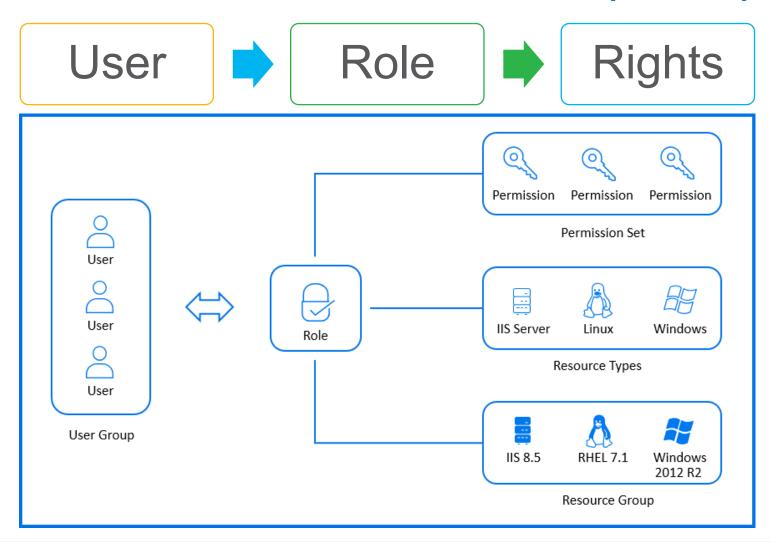
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# Role Based Access Control: Executive Update

(Ryan Krasselt and Jim Kensok)

# Role Based Access Control (RBAC) – Update



- Access may be based on job function or role
- One to many combination
- Elimination of rights requires role and process refinement
- Straddling multiple roles can continue to present challenges
- User Access Reviews will be critical to manage user rights and refine roles
- Future state to include other than SOX systems

# **RBAC** – Update

# **Original Go-Live Schedule: 9/2022**

# Challenges:

- Vendor resource availability
- Technical skillset varied internally and externally
- Deployment and data standards not established; new solution to Avista

# **Current Go-Live Schedule: 5/2023**

# Potential Risk:

- Non-Active Directory managed SOX applications may be a challenge
  - FSS (JET, Red, Cashbook), PayCourier (Remittance), Nucleus, AMR TWACs



# **RBAC** – Update

Relevant Milestones	Date
1. Implement Identity Access Management Software	In Progress
2. Integrate Target Applications, Servers, and Databases (e.g., AD, Cognos, CC&B, WinOS, Oracle, UltiPro, Linux, MV90)	Mar 2023
3. Design and Configure System to Run User Access Reviews	Apr 2023
4. Train and Support Staff to Manage and Operate Software	Apr-May 2023
5. Perform User Access Reviews in Software Solution	May 2023
6. Define Roles Associated with SOX Systems (e.g., Accounting, Finance, Treasury, IT, etc.)	Aug 2023
7. Create Role Based Access in Software	2023-2024
8. Expand to Applications Beyond SOX Systems	Ongoing

# 

<b>BUSINESS</b>	CASE	NAME:
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ER 2074	– Joint Use		
FOR THE	CURRENT R	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHA	- ANGED
SINCE FIL	ED (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	_
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

ER 2074 – Joint Use 2022 original budget was \$2,750,000.

- It was planned that the original budget would be spent and transferred to plant in 2022.
- Due to significant increases in joint use activities by licenses it was necessary to increase the budget to accommodate the increase in joint use make ready activities, as required by law.
- The budget was increased in June to \$4,500,000. It was planned that the entire budget would transfer to plant in 2022.
- The budget was further increase in July to \$6,000,000 to meet an anticipated spend. It was again planned that the entire budget would transfer to plant in 2022.
- The original 2022 Transfer to Plant total was forecasted at \$2,749,992.
- The final actual 2022 Transfer to Plant total was \$4,340,369. Note: Net Spending was less that forecast in July.
- Variance Explanation: The increase in transfer plant was due to the increase in budget to accommodate the increased joint use make ready requirements. The increase in transfer to plant is in alignment with the increased budget and spending requirements.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The joint use business case reflects the net cost of joint use make ready work. The budget was increased throughout the year in alignment with anticipated make ready requirements. The increases in budget were necessary to ensure compliance with legal requirements to complete the make ready activities.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

No

Due to the way this program functions any changes made in 2022 should have little impact to the cost savings associated with this program.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

X Jesse Bitler

**DIRECTOR SIGNATURE:** 

X David Howell

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**BUSINESS CASE NAME:** 

**CURRENT REPORTING PERIOD:** 

KF_Fuel Yard Equipment Replacement						
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?						
$oxed{oxed}$ Yes $oxed{\Box}$ No $oxed{If}$ yes, please attach revised business case.						
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE						

This business case is for the replacement of equipment for receiving and processing fuel for use at the Kettle Falls Thermal Generating Station. This equipment no longer meets the needs of the facility as it has aged and standards around it have changed, such as larger deliveries the equipment is not sized for and more stringent environmental standards.

The plan, as filed in the Washington GRC, was for construction through 2022 into early 2023 with commissioning and transfer to plant (TTP) in April, 2023. However, in early 2022 the steering committee agreed to a new approach which allowed for the new equipment to be commissioned simultaneously while the original system was still operating. This shortened the commissioning schedule and allowed the major equipment to be transferred to plant earlier than expected.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

This project was governed by a Steering Committee representing Power Supply, Environmental and Operations. The Steering Committee evaluated the options and supported the April 2022 request (attached) to the Capital Planning Group for additional funding of \$2.5M to cover the expected remaining construction costs and earlier TTP. This additional funding was determined to be necessary to complete the construction and deliver a functional system to the plant. The Steering Committee voted to adjust the schedule and budget to move funds out of 2023 and into 2022.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Early TTP of this project will reduce or delay major maintenance expenses on the aging equipment, which includes elimination of the 2023 rebuild of the primary disc screen, replacing belts on the two removed conveyors, repairing and/or replacing truck dumper drag chains, maintenance on the old hog, and potentially other maintenance items, for an estimated short-term savings of greater than \$30,000. In addition, by bringing the system online earlier than scheduled, an estimated \$225,000 in forecasted capital expense on AFUDC was saved and will be re-deployed to other projects in 2023.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

x Ny Wigger 3/15/23

**DIRECTOR SIGNATURE:** 

x Alexis Alexander 03/15/23

# **EXECUTIVE SUMMARY**

The existing system does not allow the plant to operate consistently with safe best practices, environmental stewartship and production. The fuel handling equipment operates at or beyond its absolute limit. In the early 1980's Washington State increased the legal hauling weight and the trucking industry transitioned from 48' trailers to 53' to This change created a number of production and safety increase their payload. challenges for the plant operations and contractor support. The system does not meet current environmental regulations for visibility and particulate matter (PM) emissions for Although the primary drivers for the project are safety, intermittent periods. environmental, and reliability, we do expect a decrease in O&M. With all benefits included, Financial Planning and Analysis has concluded that this is a prudent project. The project will proceed over a two year period with \$12 million in 2019 and \$10 million in 2020. (7/8/2021 Update: Project timeline has been extended and adjusted and the current plan will continue into 2021 with the underground utilities installed, major equipment purchased and truck dumpers commissioned. 2022 will be construction of conveyance, processing and control buildings and installation of the hog and disc screen.) (8/29/2022 Update: Construction is on track for Transfer to Plant by the end of the year. Additional funds were requested mid-year in 2022 for an annual total of \$11.1M, in addition to \$20M spent prior to 2022 and \$1M projected for 2023. Project total at completion is projected to be \$32M.)

Replacing the major fuel handling equipment will create a safer system for employees and contractors as the new dumpers will be designed to lift current truck lengths and weights. The major equipment will be designed with covers and passive dust control utilizing new dumper technology and conveyance covers. (7/8/2021 Update: Scope has been reduced to reduce project costs by changing the truck route, eliminating a pass through travel route, reduction of an enclosed processing building, eliminating a conveyor through a more compact layout, eliminating a new power supply from the distribution line near the plant site and delay of replacing the existing #3 fuel conveyor)

This project will impact customers in service code Electric Direct jurisdiction Allocated North serving our electric customers in Washington and Idaho.

### VERSION HISTORY

Version	Author	Description	Date	Notes
Draft	Greg Wiggins	Initial draft of original business case	05/01/2018	
1.0	Thomas Dempsey	Edit Draft / Executive Summary	07/03/2018	Added content
1.1	Greg Wiggins	Edit Approved Business Case to new Template	07/08/2021	New Template / Update major project changes Scope, Schedule and Budget

# KF\_Fuel Yard Equipment\_Replacement

1.2	Greg Crossman	2022 update	08/29/2022	Updated with current status

### **GENERAL INFORMATION**

Requested Spend Amount	\$32,000,000 through 2023 (\$26.3M spent to date)		
Requested Spend Time Period	2 year (7/8/2021 Update project will be 5 year)		
Requesting Organization/Department	GPSS		
Business Case Owner   Sponsor	Greg Wiggins   Alexis Alexander		
Sponsor Organization/Department	GPSS		
Phase	Execution (7/8/2021 Update project is in execution phase)		
Category	Project		
Driver	Asset Condition		

# 1. BUSINESS PROBLEM

The major fuel yard equipment being considered for replacement includes the truck dumpers, fuel hog, truck scale, and conveyance systems.

Truck Scale - The truck scale is used to account for the quantity of fuel received from each truck delivery. The truck drivers scale in upon arrival to the site and the scale out after completing the unloading process.

**Truck Dumpers** - The truck dumper receives the delivered fuel by elevating the trailers. Fuel exits the rear of the trailer into a receiving housing.



**Fuel Conveyors** - Fuel conveyers move the fuel from the truck dumpers to a metal detection system, then to the fuel hog system and finally out to the fuel yard.

**Hog and Disc Screen -** The fuel hog is a device that clarifies and conditions the fuel so that it is the proper size required for optimum combustion.

# 1.1 What is the current or potential problem that is being addressed?

There are three key components that comprise the business problem presented by the current fuel yard.

- 1. Safety
- Environmental
- 3. Reliability

These three components are summarized as follows:

The Kettle Falls Generating Station is a biomass fueled power plant that processes on average 500,000 green tons of waste wood from area sawmills. The wood delivered to the facility is trucked in by contractors utilizing semi-trucks and chip trailer. On average the plant received 65-80 loads of fuel each day with surges to 100 deliveries in a 24 hour period.

The plant's original design was just prior to Washington State increasing the legal haul lengths and weights. All the equipment was designed for 48' trailers and the new law change in 1985 allowed drivers to haul with 53' trailers. When the drivers enter the facility the load is weighed on a State certified scale to determine amount of fuel being delivered. The longer trailers do not completely fit on the scale without the drivers lifting the tag axle on the trailer. The plant's delivery tracking system captures the gross weight of the truck and trailer into the 3Log financial interface application. Through this system vendors and suppliers are paid for their services. Due to the longer trailers and short scale drives can "cheat" the system by not positioning the load correctly on the scale. Each load is reviewed through the 3Log (TWA) Truck Weight Analyzer. When an infraction is found the surveillance video is reviewed and sent to the hauling company for reconciliation. Manual adjustments are made in the system to ensure proper payment to the supplier.





Truck was intentionally positioned short on the scale.

TWA show drivers manipulating the scale due to being overloaded.

The fuel is offloaded truck trailers into the receiving hoppers via a truck dumpers. The wood is then conveyed, screened and sized prior to being transferred out to the fuel inventory pile. The Fuel Equipment Operators then manage the fuel inventory utilizing D10 Cat dozers to stack out incoming fuel and stage inventory to be processed in the plant.

Due to the higher legal hauling limits in Washington the longer truck/trailer configurations require the truck drivers to unhitch the trailer from their trucks. This unhitching process not only increases truck turnaround time and increases hauling costs to plant, it adds a difficult step. Although not the primary factor, a contractor fatality in 2013 occurred while going through this step in the process. One driver was attempting to unhitch his trailer

from the truck and was working with another driver to get the hitch pin released when the accident occurred.





After the load is raised into the air and the fuel is discharged out of the back of the haul trailer into the truck receiving hopper a large plume of dust often launched into the air and

then carried in the wind off the plant site. After the wood discharges out of the truck receiving hopper it is transferred via conveyor belt to a disc screen and hammer hog to be properly sized and then discharged onto the hog storage area.

Both Safety and Environmental regulations require that PM be reasonably controlled for worker safety, air quality and visibility. All emissions should be managed onsite.



The fuel yard is subject to a very corrosive environment due to the wet wood being in contact with the equipment. The years of rusting has caused failure to metal conduit and structural steel. The metal support structure of the truck receiving hoppers has rusted through to the point of being completely cracked through. Welded plates have been installed to affected areas on the truck receiving dumpers. Many of the electrical conduits are rusted through and need replacement.

The system is currently running at maximum capacity with fuel spilling over the edges of the conveyance system, the disc screen is not operating at the proper throughput as a significant amount of proper sized fuel is carried over the disc screen into the hammer hog. The over feeding of material into the hog creates excessive wear on the hammer hog grates and hammers.

With an average of 80 semi loads delivered each day and over 25 sawmills depending on the fuel yard at Kettle Falls to be in full operation there is tremendous pressure in keeping

the system running. Area mills store the fuel purchased by Avista in storage bins and can only hold the waste wood for a few days and sometimes only hours before the backup of wood begins to cause production issues at the mill. When product flow out of the mill is not managed well suppliers may begin to look for other options to move their waste to more reliable markets. Another important detriment to not keeping fuel moving efficiently is that as more fuel inventory builds at the supplying mill, the resulting Moisture Content increases as well as the opportunity for contamination from rock and other "non-spec" materials. It is important to keep the KFGS fuel yard operating with minimal downtime to provide good service and quality control to the supplier's milling operations. It is critical to the reliability of both the KFGS plant and its supply chain.

In 2017 a team was assembled including the Thermal Operations and Maintenance Manager, Fuel Manager, Plant Manager, Thermal Engineering and plant staff. The team worked with outside engineering firm WSP to evaluate the fuel yard equipment and explore options. The team also traveled to two new biomass plants to gain knowledge of new equipment and process. This information along with the support of WSP allowed the team to evaluate a number of options.

1.2 Discuss the major drivers of the business case (Customer Requested, Customer Service Quality & Reliability, Mandatory & Compliance, Performance & Capacity, Asset Condition, or Failed Plant & Operations) and the benefits to the customer

Major drivers for this project were Asset Condition and Mandatory & Compliance. Installing the new fuel yard equipment with a higher capacity design and environmental dust control measures will be a benefit to the plant and neighbors. Moving truck through the yard quickly reduces trucking costs. This project will decrease truck turn time.

## 1.3 Identify why this work is needed now and what risks there are if not approved or is deferred

The plant experienced a fatality of a contract driver that would have been completely avoided if the truck dumpers were able to lift the current truck weights and lengths. A few years later another driver was injured on plant site attempting to manually offload his overloaded trailer when a bunch of fuel slid out of the trailer and buried the driver crushing his hip and knee. This project will make for a safer facility for our contractors.

1.4 Identify any measures that can be used to determine whether the investment would successfully deliver on the objectives and address the need listed above.

Truck weight analyzer and the weighwiz system will be able to accurately capture the delivery with the new longer scales. Truck turntime will decrease as drivers will no longer need to lift tag axels, disconnect the truck and trailer or use one scale for inbound and outbound scaling.

Template Version: 08/04/2020

### 1.5 Supplemental Information

### 1.5.1 Please reference and summarize any studies that support the problem

In 2017 a team was assembled including the Thermal Operations and Maintenance Manager, Fuel Manager, Plant Manager, Thermal Engineering and plant staff. The team worked with outside engineering firm WSP to evaluate the fuel yard equipment and explore options. WSP presented the Team a feasibility study with options to consider. That document is located in the project file.

# 1.5.2 For asset replacement, include graphical or narrative representation of metrics associated with the current condition of the asset that is proposed for replacement.

The team selected option #3 and in replacing the major equipment in a new layout. Below shows the four options, matrix score, CAPX and OPEX.

This feasibility study includes estimated CAPEX, OPEX and MTC, and discusses the pros and cons of the scenarios analyzed. The possibility of an increase in generation of 15 MW was considered when sizing the equipment. Some equipment drives may require upgrading, as such the equipment was sized for the increase.

Based on extensive in-person meetings with the Avista project team, four scenarios were examined to meet the requirements of the plant; results of the analysis for the scenarios are shown in the table below.

	System #1: Existing and Rebuilds	System #2: Existing Layout c/w new equip	System #3: New Layout c/w new equip	System #4: New System c/w Covered Building
Avista's Ranking Calculator by System	370.00	296.00	123.00	143.00
CAPEX (2017 \$)	\$4.2 M	\$9.5 M	\$21.6 M	\$30.1 M
OPEX (average over 20 years, 2017 \$)	\$1,095,000	\$1,121,000	\$665,000	\$998,000
MTC (average over 20 years, 2017 \$)	\$829,000	\$782,000	\$405,000	\$432,000

### 2. PROPOSAL AND RECOMMENDED SOLUTION

The four options were discussed and doing nothing has been the approach for a number of years. Maintenance costs have increased with equipment failure to the live bottom gear boxes, dumper cylinders and lifting deck. Modifications are being made to equipment due to obsolete equipment is no longer available. This approach will see continued breakdown maintenance, reduction in fuel yard reliability and continued risks around safety and environmental litigation.

Option 1 includes major rebuild of the existing equipment. The truck dumpers would have mechanical and support rebuilt, some conveyors would be sped up to the maximum allowed throughput, hog and disc screen would be rebuilt, the power distribution, motor control centers and PLC's replaced, all the electrical hardware in the yard would be replaced. This option would not change the operations of the fuel handling system. Safety and environmental concerns would remain unchanged. The truck scaling issue would still remain. The work would create major disruptions to our suppliers as the work and repairs could not be done without interrupting

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delivery schedules for days and weeks at a time. Fuel would have to be diverted to other consumers with the risk of losing the contracts in the future.

Option 2 included replacing key equipment with one new scale, two dumpers, two conveyors, hog and screen in the existing location. This option would not address the congested truck route that currently exists with one scale. The fuel conveyor angle would remain the same and would not solve the sliding winter fuel issues experienced by the plant operations staff all winter long. This option would disrupt dilveries and cause major fuel disruptions to the sawmills and carriers under contract. Temporary truck dumpers would have to be installed and significant fuel curtailment and deverting would be required.

Recommendation is to pursue Option 3 that includes relocating new equipment to a different location in the fuel yard. This approach would allow the current system to operate while the new system is constructed and commissioned. The layout would reduce crossing traffic issues with the semi trucks. A new longer inbound and separate outbound scales would eliminate the scaling issue as sensors would not allow a driver to scale in unless the truck was positioned correctly on the scale. The two new truck dumpers would be larger in size which would allow the lifting of both the truck and the trailer. This would reduce truck turnaround time and eliminate the hazard identified in the driver fatality. The new dumpers would incorporate a dust containments systems to reduce fugitive dust during the offload. New conveyors would be larger to accommodate higher throughput. The higher capacity belt system would reduce laborious shoveling of spilled fuel. The incline of the new belts would reduce winter frozen fuel from sliding on the conveyor belts. The disc screen would be larger in size for better screening efficiency and reduce hog operation to only oversized material. The upgraded stack out fuel conveyor system would strategically move the fuel to three locations reducing Caterpillar dozer fuel consumption and yearly time base maintenance. A new control tower and power supply would eliminate the electrical deficiencies with the current system.

Option 4 is the same as option 3 with the addition of a covered fuel storage area. Covering the fuel could reduce moisture content during the winter months. Power Supply and Asset Management explored the additional cost benefit and this option did not make financial sense.

Option	Capital Cost	Start	Complete
Existing Rebuild and Minor Upgrades	\$4,200,000	10/2020	6/2023
Existing Layout with New Equipment	\$9,500,000	10/2020	6/2023
New Layout with New Equipment	\$22,000,000	10/2020	6/2023
New Layout with New Equipment and Covered Yard	\$30,100,000	10/2020	6/2023

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2.1 Describe what metrics, data, analysis or information was considered when preparing this capital request.

The Team worked with WSP and evaluated ever component of the fuel handling system. All of the current equipment was ranked using the GPSS project ranking matrix and the scores were used to determine what system would meet the criteria set for the project. Below is an example of the analysis that was done for every part of the fuel handing system.

		-		Scope of Work I	Description & Avista Rating	
ltem#	Equipment Name	Wt	System #1: Existing	System #2: Existing Layout c/w new equip	System #3: New Layout c/w new equip	System #4: New System c/w Covered Building
1	Truck Scale(s)		- maintenance	<ul> <li>new single scale and data recorder</li> </ul>	<ul> <li>new dual scales and data recorder</li> </ul>	- new dual scales and data recorder
	Personal or public safety	4	3	2	0	0
١	Potential environmental issue	4	0	0	0	Ó
	Regulatory mandate	3	0	0	0	0
	On-going maintenance issue wt:3	3	2	0	0	0
	Decrease future operating costs	2	2	0	0	0
	Increase efficiency (revenues - power usage)	1	i	1	ō.	0
	Obsolete parts and equipment	1	0	0	0.	0
	Risk of equipment failure	4	2	2	0	0
1	Customer Value	3	2	1	0	0
	Sub-total		37	20	0	0

Reference key points from external documentation, list any addendums, attachments etc.

2.2 Discuss how the requested capital cost amount will be spent in the current year (or future years if a multi-year or ongoing initiative). (i.e. what are the expected functions, processes or deliverables that will result from the capital spend?). Include any known or estimated reductions to O&M as a result of this investment.

The project will be a two year project with engineering, design and major equipment procurement in the first year followed by construction and commissioning the following year. The beakdown is a two year period with \$12 million in 2019 and \$10 million in 2020. (7/8/2021 The project will run into 2022 with a possibility of 2023. The project originally requested 22 million over two years, CPG has only funded 20 million. When presenting the request I failed to load the project during the estimating process so AFUDC and Loadings were not added at the time of the request. These two issues have a 4 million shortfall in project funding. During construction the underground excavation process discovered unforeseen challenges with foundations and underground piping that resulted in re-engineering and changes. Cost and overruns form the phase one resulted in the Team drastically cutting scope to manage budget. Changes included re-routing the truck area, removing the enclosed processing building,

repurposing some existing equipment, redesigning the layout to eliminate an entire conveyor and postponing replacing the final stackout conveyor.) (8/29/2022 Update: The project spent \$20M through the end of 2021. CPG originally approved \$8.6M for 2022, however after forecasting remaining costs to complete the project, an additional \$2.5M was requested and approved via Funds Change Request for a 2022 total of \$11.1M. CPG also allocated \$1.5M for 2023, however that has also been revised via FCR to \$1M to include demolition, punchlist, and cleanup after Transfer to Plant occurs toward the end of 2022.)

[Offsets to projects will be more strongly scrutinized in general rate cases going forward *(ref. WUTC Docket No. U-190531 Policy Statement)*, therefore it is critical that these impacts are thought through in order to support rate recovery.

## 2.3 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented.

This project will require some short outages that will be managed within the normal Spring outage for accommodate some conveyor transitions to the current process and power supply connections. There may be some curtailment needs with our contract mill to stop wood deliveries. This project will not cause any plant reliability issues with Power Supply.

## 2.4 Discuss the alternatives that were considered and any tangible risks and mitigation strategies for each alternative.

Alternatives considered are discussed at the beginning of Section 2. Each alternative came with risks and benefits, however replacing the equipment in a new location (Option 3) was determined to be the solution providing the best business value to Avista. At present (8/29/2022), contracts have been awarded and the project is approaching startup and commissioning, on track for Transfer to Plant by the end of the calendar year.

## 2.5 Include a timeline of when this work will be started and completed. Describe when the investments become used and useful to the customer.

(7/8/2021 Update All of the underground work is complete minus two conveyor foundations that will be installed after the current truck dumpers are demolished. All major equipment is purchased and onsite minus the hammer hog and transition chute and the #3 stack out conveyor. The fueling building is procured and will be installed in September. The truck dumpers will be commissioned mid July. All the critical electrical equipment has been purchased. The project has two options for 2022 one being a complete project to the #3 conveyor and the other a hot feed option which could see some of the equipment in Q3 of 2022 either way. If the hot feed option is selected then the remaining equipment would become operational in 2023.) (8/29/2022 Update: Construction is significantly underway with startup and commissioning beginning in September 2022. Transfer to Plant is expected by the end of the year.)

2.6 Discuss how the proposed investment aligns with strategic vision, goals, objectives and mission statement of the organization.

Ketlle Falls is a renewable generating site and this project aligns with providing reliable renewable energy to our customers. This project will increase Safety and be good for the environment and neighbors.

2.7 Include why the requested amount above is considered a prudent investment, providing or attaching any supporting documentation. In addition, please explain how the investment prudency will be reviewed and re-evaluated throughout the project

This project was subjected to a rigorous evaluation of each major piece of equipment and is documented in the WSP Feasibility Study. The project has worked closely with the Steering Committee that is represented by GPSS, Environmental and Power Supply. The project is being lead by GPSS Project Manager and the Team meets regularly to discuss scope, schedule and budget.

## 2.8 Supplemental Information

2.8.1 Identify customers and stakeholders that interface with the business case

**GPSS Thermal Operations and Maintenance Manager** 

Environmental

Power Supply

Contracts and Supply Chain

Plant Staff

2.8.2 Identify any related Business Cases

KF 4160 V Station Service replacement (new request in 2022)

### 3. MONITOR AND CONTROL

3.1 Steering Committee or Advisory Group Information

Thomas Dempsey - GPSS Thermal Operations and Maint Mgr Darrell Soyars – Environmental Scott Reid – Power Supply

## 3.2 Provide and discuss the governance processes and people that will provide oversight

GPSS Core team will follow the Department Project Management protocol. There will be monthly Steering Committee meetings to discuess issues or concerns. Updates will be shared on an as needed basis between monthly status meetings.

## 3.3 How will decision-making, prioritization, and change requests be documented and monitored

Chage orders will follow Supply Chain contracting protocol based on financial signing authority.

### 4. APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the Kettle Falls Fuel Yard Equipment Replacement project and agree with the approach it presents. Significant changes to this will be coordinated with and approved by the undersigned or their designated representatives.

Signature: Print Name:	lsy Vyrigh	Date:	8/29/2022
_	Greg Wiggins	<del>-</del>	
Title:	Plant Manager	_	
Role:	Business Case Owner		
_		-	
Signature:		Date:	
Print Name:	Alexis Alexander	-	
Title:	Director GPSS		
Role:	Business Case Sponsor	_	
Signature:		Date:	
Print Name:	Thomas Dempsey	-	
Title:	GPSS Thermal Ops and Maint Mgr	•	
Role:	Steering/Advisory Committee Review	-	

## 1.0 CHANGE REQUEST #4 - 4/13/2022

Previous Requests	Requested	Approved
5-Year Plan	NA	\$8,600,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
03-2022	\$1,687,173	\$8,600,000	+\$2,500,000	\$11,100,000

Type of Change	In-year Update
Primary Reason for Change	Revised Cost
Response needed by	4/29/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

In 2021 the project underspent its CPG allocation and returned \$475,000 in December. At that time contracting of Phase 2 work was just beginning so it was not possible to utilize the funds before year end, however the scope that may have been funded still remains to be completed for a functional project and therefore requires those funds. In addition, the progression over the course of the project through design iterations into early procurements and then into phased construction resulted in 2022 becoming a catch-all for any remaining scope, which has increased total cost for the year. Further, not unique to this project, but no less impactful are the marked increases in pricing for commodities and construction contractors. Both inflation and supply chain issues have contributed to significantly higher prices in materials, fuel, transportation, and labor, resulting in higher overall costs to prosecute and complete the project.

The requested amount includes a contingency of approximately 3% on the 2022 remaining cost. While there is fairly high cost confidence at this point, the remaining scope is split into several discrete contracts so if any gaps or essential changes are discovered it is likely Avista will be financially responsible and not the contractors.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The existing Fuel Yard has been beyond its useful life for several years. In fact one of the critical components, the truck dumpers, have been undersized essentially since the plant came online in the 1980s due to a change at that time to hauling limits. The undersized dumpers present an ongoing safety hazard to plant personnel and truck drivers delivering fuel to the project site so transitioning to the new system is critical to the plant's continued operation. In addition, the new fuel yard equipment has been on site since last year. Continuing to allow it to sit stored and unused will both allow the warranties to expire prematurely, potentially even before the equipment is in service, and cause undue degradation due to being stored outdoors versus installed and in use as intended.

## Kettle Falls Fuel Yard Equipment Replacement Project

1.1.3 Please reference analysis or information that support the problem and attach to this document.

The current budget forecast is available upon request and shows projected expenditures for the rest of the year in order to deliver a functional project.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

O&M costs may be increased by delaying installation further into the future since warranties will expire prematurely and necessary maintenance may be more extensive, and therefore more costly, due to prolonged storage.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The team is actively exploring cost-saving options to value engineer the remaining work. For example, there is work currently specified at an existing structure that would be beneficial but not necessarily required to deliver a functional project to the plant. The team is evaluating if eliminating (or delaying beyond 2022) items like this would be feasible and if it can be done without unanticipated follow-on consequences. Construction is currently underway so there will be limited opportunities to change the design, but the team is looking for them where possible.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The additional funds requested will allow the Kettle Falls Generating Station to operate more safely and more reliably. Continuing to operate on the existing equipment presents both a safety hazard to people at the plant and increases the risk that an unforeseen outage to fuel delivery will occur.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification narrative is still valid given the nature of this change. This change simply reflects an increase in the cost to perform the specified work remaining to deliver the project this year, primarily due to work from previous years pushing into 2022, as well as historic levels of inflation and price increases for materials, commodities, and labor. While cost-saving options are being explored where possible as noted above, the current approved amount will nonetheless be insufficient to deliver the project this year.

## 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Thomas Dempsey	BC Owner	Thomas C Dempsey Date: 2022.04.14 07:48:23 -07:00'	
Alexis Alexander	BC Sponsor	Alexis Alexander Digitally signed by Alexis Alexander Date: 2022.04.14 21:22:45 -07'00'	
	FP&A		

**BUSINESS CASE NAME:** 

Land Mobile Radio and Real Time Communication Systems					
FOR THE C	URRENT RE	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAN	IGED		
SINCE FILE	SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?				
☐ Yes	⊠ No	If yes, please attach revised business case.			

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Land Mobile Radio & Real Time Communication Systems business case provides communication technology solutions that enable our gas and electric staff to communicate with each other in the field and office in real time in very remote locations where cellular service is not available. Mobile radio coverage is an essential safety requirement for field staff working throughout our territory to maintain safe and reliable electric and natural gas infrastructure.

This business case was expected to transfer-to-plant approximately \$3.6M and ended up transferring around \$300k, resulting in an understated transfer-to-plant amount of approximately \$3.3M. Several projects in this business case have been affected by internal labor constraints, longer than anticipated planning phases and a decrease in costs for professional services combined with a short build window for mountain top sites. This has resulted in work that was planned to be completed this year shifting into 2023, with a reduction in transfers-to-plant for 2022. Approximately \$600k of this decrease to transfers-to-plant is represented in the attached change request that discusses spend. The remaining difference of approximately \$2.7M, represent work discussed above that has already started and is in Construction Work in Progress. It is anticipated that these projects will transfer to plant in 2023, consequently increasing the originally forecasted transfers in 2023. In summary, through prudent governance of this business case, capital funding that was not able to be spent this year (and ultimately transferred-to-plant), was released for other areas of the business to utilize.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

All projects contained within ET business cases are governed by a steering committee and thus any changes to scope, schedule, or budget are approved by that steering committee and business case governance for prudency. Therefore, any additional costs to the project were prudently documented and approved. Please see the following CPG change request document for further details discussed above:

Land Mobile Radio In Year – Business Case Funds Change Request 11.22

### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

When endpoint devices break down it can result in the inability of an employee to access essential technology systems such as our meter data, customer billing and our mapping data. This can result in indirect productivity savings across all areas of the business. Savings related to avoiding these down time issues were not affected in 2022 and the indirect savings originally estimated are appropriate for 2022.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 





## 1.0 CHANGE REQUEST CR01 6.22

Previous Requests	Requested	Approved
5-Year Plan	\$2,700,000	\$2,500,000
CR01	\$90,000	

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
06-2022	\$412,071	\$2,500,000	\$90,000	\$2,590,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	6/29/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Under a previous project, Avista has built and deployed three drop repeater devices. These are designed for use in temporary situations when field work is required in areas of poor radio coverage. These three devices are in regular use. However, one device has been semi-permanently placed in Dixie Summit Idaho in order to improve coverage in this area for a longer duration. As a result, our field teams are short one drop repeater device. This business case is requesting \$90,000 in additional funds in order to build a fourth drop repeater device.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

With the third drop repeater deployed, our field teams are currently short one drop repeater. This could increase the risk of not being able to use radio communications while in the field.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see section 1.1.1.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

Safety of employees doing field work in areas with poor radio coverage could be impacted if they do not have a drop repeater.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The alternative would be to not build an additional drop repeater or do fund additional LMR build sites, which are typically more expensive.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This investment is still prudent as drop repeaters can be used in a variety of scenarios to improve radio coverage.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification is still valid.

## 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Coccisional by:	Jun-10-2022
Jim Corder	BC Sponsor	Sames B Corder	Jun-10-2022
	FP&A	T10284972 (04-40	

10:22 AM PDT 2:13 PM PDT

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## 1.0 CHANGE REQUEST CR02 11.22

Previous Requests	Requested	Approved
5-Year Plan	\$2,700,000	\$2,500,000
CR01	\$90,000	\$90,000
CR02	-\$600,000	

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
11-2022	\$1,424,618	\$2,590,000	-\$600,000	\$1,990,000

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Internally Driven
Response needed by	11/30/2022

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Several projects in this business case have been affected by internal labor constraints, specifically in the Network Engineering team. This has resulted in work that was planned to be completed this year shifting into 2023, with a reduction in costs for 2022. Projects affected by these resource constraints include LMR Coverage Enhancements Stranger Mountain, Tait Product Updates and Real Time Radio Phase 2. Approximate impact of these costs is \$300,000 in costs shifted to 2023.

Projects in this business case have also been affected by longer than anticipated planning phases, which is likewise resulting in the bulk of planned execution costs moving into 2023. These projects include the Hydro Coverage Enhancements – Cabinet Gorge project and the Tait Push to Talk Mobile app project. Approximate impact of these costs is \$250,000 in costs shifted to 2023.

Finally, the TruFleet WCP Tallysman Upgrade project was forecast at a much higher amount than was necessary due to this being the first time this project has been upgraded. Professional services costs to upgrade this application are significantly less than planned, resulting in a reduction in budget of approximately \$50,000.

The total reduction in funding for this business case is \$600,000. This will also impact transfer to plant significantly, reducing the \$4.4 million in planned transfers from the July update to \$400,000.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

These over forecast of labor is being released now, and was not released earlier because, while resource constraints were known, the teams had still believed it was possible to complete work before the end of the year.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see section 1.1.1.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

Potential impact to 2023 capital spend requests.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

No alternatives.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This investment is still prudent.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The justification is still valid.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
Walter Roys	BC Owner	Walter Roys	Nov-14-2022
Jim Corder	BC Sponsor	Downstreed to Downstreed by Jim Corder	Nov-15-2022
	FP&A	7500 4809 57449	

7:58 AM PST 9:31 AM PST

N Lewis	ton Autotr	ansformer - Failed Plant
FOR THE C	CURRENT R ED (on reco	EPORTING PERIOD (JAN — DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.
	(PLAIN THE REPORTING	TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE PERIOD:
Substati rather to for man autotrar	on. Upon i nan a rebui y different	is in support of an emergency autotransformer replacement at North Lewiston inspection of the failed transformer, test results indicated a full replacement was required id. Because this project was an emergency with significant unknowns, the team budgeted circumstances that may have been encountered during the project lifecycle. Because the placement project went smooth with minimal obstacles, the overall project was udget.
ROJECT V		SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE NT for example, stakeholder meeting approval, CPG funds change requests (please attackation):
No cost o	overruns we ed through	ere associated with this Business Case (project) for 2022. This Business Case was the year and reviewed at the Electrical Engineering Budget Committee each month.
RE THERE	REVISED C	FFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are not chan	e no change ge. Inspect	es to the offsets. Since this was a replacement of a major transformer, the O&M costs do ions, testing and maintenance will occur as scheduled.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**DIRECTOR SIGNATURE:** 

**BUSINESS CASE OWNER SIGNATURE:** 

2/20/2023

Signed by: glenn.madden@avistacorp.cgm

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CAPITAL ADDITIONS VARIANCE EXPLANATION FORM
BUSINESS CASE NAME:
New Revenue - Growth
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes ☐ No If yes, please attach revised business case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:
Avista defines these investments as "customer requests for new service connections, line extensions, transmission interconnections, or system reinforcements to serve a single large customer." Electric and Gas devices are also included in this business case -Meters, Transformers, Gas Regulators, and ERTs (Encoder Receiver Transmitter) to be used for a range of purposes such as replacing failed plant, connecting new customers, and replacing equipment that no longer meets standards. Supply chain challenges caused most of the transfer to plant variance. As lead times escalated, we aimed to increase safety stock to be sure we had critical equipment on hand to meet our obligation to serve. Transformer and gas meter purchases led to nearly \$10M of the variance for instance. Supply chain impacts fed into the direct cost of each connection as well.
EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):
It is required to connect new customers when feasible, and prudent to source a stock of critical equipment.
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are no direct O&M offsets associated with the New Revenue - Growth business case. The New Revenue - Growth Business Case is driven by tariff requirement that mandates obligation to serve new customer load when requested within our franchised areas. Expected revenue associated with growth plant are included as "other revenue" in the Company's Offset Adjustment (4.03 and 5.09). Any change in billed revenue would flow through the decoupling mechanism.
I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

X David Howell

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**DIRECTOR SIGNATURE:** 

X David Howell

R	1151	INIFSS	CASE	NAN/	١F٠

Nine Mi	le HED Batt	ery Building	
FOR THE (	CURRENT RI	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHAI	NGED
SINCE FILE	ED (on reco	d with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Nine Mile Falls Battery Building project was implemented to secure a dedicated location to store and monitor the critical power system (battery backup) for the Nine Mile Falls Hydro Electric Development. During emergency situations, the critical power system is required to continually monitor and control the turbine generators and spillway for safe operations of the river and its flow. The current location of the batteries poses safety, reliability, and structural integrity concerns.

During the course of the project, the scope was increased to also include an emergency generator because, in the event of an extended outage, the generation standard only calls for eight hours of runtime from batteries. The emergency generator will provide 24 hours of runtime with the ability to easily refuel with minimal impact. The addition of an emergency generator not only increased the cost of the project, but it also extended the time it will take to complete the project. No dollars were transferred to plant in 2022 due to the increased scope. This project is expected to transfer to plant in May of 2023.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

This business case is monitored by a steering committee made up of a cross-department group who meet each month throughout execution. Regular meetings are held with the steering committee. The decision to add the emergency generator to the scope of this project was agreed to on July 26, 2022.

### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There is no changes to the offsets reported for this work. This work will improve compliance with regulation as the current location of the batteries does not meet the National Electric Safety Code (NESC) Section 14.141. The new battery building will meet the NESC standard and eliminate personal safety risks associated with current battery storage location. Maintenance costs will not be reduced; however, decreased impact from extended outages is expected as described above.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

Digitally signed by Kristina (go cougs)

Date: 2023.03.14
16:03:43-07'00'

**DIRECTOR SIGNATURE:** 

Alexis

X Alexander

Digitally signed by Alexis
Alexander
Date: 2023.03.15
14:33:07 -07'00'

<b>BUSIN</b>	IESS	CASE	NAN	ΛF:

Nine Mile Powerhouse Crane Rehab			
	T REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGE ecord with FP&A as of Sept 2021 for the 2022-2027 5-year planning cycle)?	ED	
☐ Yes ⊠ N	o If yes, please attach revised business case.		

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Powerhouse Cranes – identical 35T bridge cranes – at Nine Mile Falls Hydroelectric Development experienced significant stress during the 2014 rehabilitation of Units 1 and 2. During that project, both cranes were subjected to extraordinary use, damage and overloading in unusually detrimental conditions. This wear ultimately led to the Generator Bay Crane being tagged out of service – deemed unusable.

As this Business Case was originally written, Avista believed that the rehabilitation of the cranes would have to be addressed individually. However, the identical and somewhat "off-the-shelf" design of the two cranes led to a contract with Konecranes at a significantly reduced price. Both cranes were ultimately rehabilitated for a contract price of \$789,327 resulting in a significantly reduced capital expenditure.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

This business case was monitored by a steering committee made up of a cross-department group who met each month through its execution. Although this business case variance was an issue of estimating and engineering, if there had been significant cost overruns, it would have been discussed at the steering committee and a decision on the best path forward would have been made.

### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The offsets associate with this work are as originally reported. These cranes are at end of their useful life and need replaced to ensure that Nine Mile Dam continues to provide safe, reliable, and affordable energy to Avista's customers. Calculated indirect savings (risk cost reduction) considers the condition of the asset, the probability of failure, the probable consequence of failure and other risk factors such as personnel and public safety, environmental impacts, and unplanned outages and repairs.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

X Ryan Bean Date: 2023.03.15 09:45:40 -07'00'

**DIRECTOR SIGNATURE:** 

Alexis

Alexander

Alexander

Digitally signed by Alexis

Alexander

Date: 2023.03.15

13:59:54 -07'00'

BUSINESS CASE NAME:	
Protection System Upgrade for PRC-002	

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes ☑ No If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The purpose of this Business Case is to become compliant with the new FERC PRC-002 standard at several substation locations. This standard is titled 'Disturbance Monitoring and Reporting Requirements' and requires sequence of events recording (SER) and fault recording (FR) data. During the Scoping Process for these projects, several additional equipment replacements were identified as imminent failures at a number of substations. All substation locations are now compliant with FERC Standard PRC-002 and some of the imminent failures have been addressed under this business case while crews were on site to avoid extra site visits and mobilization costs. The imminent failures not able to be addressed because of the PRC-002 deadline time constraint, are planned to be completed through the 'Substation – Substation Rebuilds' business case. The project schedule was extended to almost the full time of the deadline due to the additional scope that addressed some of the imminent failures.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The ERT stakeholder meeting approved the added scope. Funds change requests related to the imminent failures were approved by the CPG.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There is no change to the offsets defined for this project. The O&M costs will remain the same however the clock will restart for maintenance work when equipment is installed.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

DIRECTOR SIGNATURE:

**BUSINESS CASE OWNER SIGNATURE:** 

2/22/2023

Signed by alenn madden@avistacorp.com

BUSINESS	CASE N	AME:		

	Mountain 2	30/115kV Station (New) Integration Project Phase 2
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.
	(PLAIN THE REPORTING	TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE G PERIOD:
distribu system, distribu the orig that dis The stu- original	tion, and tr Specifically tion and co inal schedu tribution cu dy also iden ly estimated	is the second phase of the Saddle Mountain Project which includes substation, ansmission work associated with connecting Saddle Mountain Phase 1 to the Avista y, Phase 2 includes the Othello substation rebuild project and the related transmission, mmunication work. The Substation construction portion of the project extended beyond alle due the outcome of a detailed cutover analysis that was completed, which identified atover work could not be started until the water pumping load diminished in October. Intified that the cutover would take 15 weeks, which was significantly longer than was do. The remaining testing and commissioning work is projected to be complete in early sed time to complete the project resulted in increased costs.
PROJECT		SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE ENT for example, stakeholder meeting approval, CPG funds change requests (please attach tation):
and revi	ewed at the	s associated with this Business Case (project) for 2022 were monitored through the year e Electrical Engineering Budget Committee each month. As cost overruns were identified, ade to request additional funds based on the information above.
the deci		
	E REVISED (	OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

Signed by glenn medden@wistacorp.com

**BUSINESS CASE OWNER SIGNATURE:** 

DIRECTOR SIGNATURE:

BUSINESS CASE NAME:

Spokane River License Implementation

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes ☐ No If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Spokane River License defines how Avista shall operate the Spokane River Project. Funding the implementation activities that are essential to remain in compliance with the FERC license, provides Avista the permission to operate the Spokane River Project. Specific elements of this program change from year to year, depending on license requirements as well as resource conditions. Ongoing stakeholder engagement, and therefore, negotiation, is also required by the license. As a result, some elements of the license are relatively predictable and static while others are dynamic and evolving. Implementation of Spokane River License shoreline projects during 2022 were dependent upon permits being issued and a successful drawdown (lake lowered below its normal full pool elevation). A successful drawdown is affected by weather, flow and company needs. In 2022, long agency review times and agency resource shortages delayed receiving the necessary permits at a time when the lake was lowered resulting in schedule modifications. The shoreline project schedule was shifted and transfer to plant is expected to occur by end Dec. 2023.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The Spokane River License governance is multi-faceted and includes engagement with regulatory agencies, external and internal stakeholders, internal steering committees for specific major projects, as well as the organizational hierarchy within which the Spokane River team operates. Work coordination occurs through multi-departmental meetings and work planning. All cost overruns would be vetted through these committees and agencies to determine the appropriate path forward.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no direct or indirect offsets associated with this project. Avista is required to comply with all terms of the License. Non-compliance would risk challenges to its operational flexibility and could allow FERC to open a License for a third party to take over. Avista would suffer reputational risks in not complying with the License and its attendant agreements.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

X Mol L

**DIRECTOR SIGNATURE:** 

BI	151	NE:	22	CA	SE	NA	M	F.

Spokan	e Valley Tra	nsmission Reinforcement (SVTR)
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGE rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Spokane Valley Transmission Reinforcement Business Case was developed to comply with North American Electric Reliability Corporation required standards. Work associated with this Business Case was identified via Avista's System Planning Group.

For the January-December fiscal year 2022 the Spokane Valley Transmission Reinforcement Business Case was funded at \$2M and later amended by a \$600k Request for Funds via the Capital Planning Group. The Transfer to Plant Variance stems from the Beacon-Irvin #2 115kV Transmission Line Rebuild Project. The cause of the Variance can be attributed to underestimating/underbudgeting. Originally a Feasibility Estimate of \$500,000/ mile was made for the 2-mile plus project and wasn't updated to reflect the impact of building for Distribution underbuild span lengths (16 poles per miles as opposed to 10 poles per mile for Transmission only). Additionally, the Feasibility estimate didn't take into consideration the inflation driven large impacts to Supply Chain and Construction costs that occurred in 2021-2022.

This project, along with another similar project (captured in a different Business Case) show that this type of construction will now cost \$1,000,000/mile or more depending upon complexities encountered.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Cost overruns were associated with this Business Case (project) for 2022. This Business Case was monitored through the year and reviewed at the Electrical Engineering Budget Committee each month. As cost overruns were identified, a decision was made to request additional funds.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are offsets associated with this project. The nature of the project includes replacing conductor, as such and with placing into service in 2022, we can assume an indirect O&M savings due to lower line losses as originally reported. Attached is the associated Capital Investments Offset form.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

DIRECTOR SIGNATURE:

BUSINESS CASE OWNER SIGNATURE:

2/22/2023

Stuned by: glenn madden@avistacord.com

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# 2022-2023 CAPITAL PROJECT SAVINGS AND PRODUCTIVITY REPORTING FORM

1. Business Case Name: Spokane Valley Transmission Reinforcement

2. Business Case Owner: Glenn Madden

3. Director Responsible: Vern Malensky

4. Direct Savings - Description of Estimated Direct Savings Resulting from this Business Case (please describe and quantify any hard cost savings Avista's customers will gain due to the work under this project. Such savings could include reductions in labor, reduced maintenance due to new equipment, or other):

Quantified direct savings:

2023	Lifetime
	2023

5. Indirect Savings - Description of Estimated Indirect Savings and/or Productivity Gains Resulting from this Project (please describe and quantify any indirect cost savings or productivity gains Avista's customers will gain from this project). For example, deploying this capital investment reduces the future need to hire X number of employees. For a new substation or transmission line, are there efficiencies to be gained from less line losses. Or, if we don't do this project now, if may cost more in the future (cost avoidance).

The business case includes indirect savings realized when replacing an existing conductor with another that has fewer losses due to a reduced impedance. Power loss savings were made using the average line loading that was provided by Avista's Transmission System Planning Department. A Mid-C Heavy Load price of energy was used to calculate the savings.

Quantified indirect savings:

2022	2023	Lifetime
\$19,645.75	\$17,427.69	

6. No Direct or Indirect Savings – These are projects where there are NO identifiable direct or indirect cost savings for customers, as they are required by law, or simply after thorough review have no offsets. (For these projects, please think through any potential offsets, as having no offsets is a high hurdle). If the work is required by law or rule, please identify the law and describe and quantify any risk or penalty Avista's customers will endure due to non-compliance.

<Answer and Please Show \$\$>

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

Director Name Vern

Director Signature

Date 2/22/2023

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Clean En	ergy Fund	2	
FOR THE C	CURRENT R	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANC	GEC
SINCE FILE	D (on reco	rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?	
☐ Yes	⊠ No	If yes, please attach revised business case.	

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Clean Energy Fund 2 project is a Distributed Energy Resources (solar, energy storage, and building controls) project interconnected to the grid and operated by the utility to optimize and meet the needs of the customer and the grid. This project is partially funded from the State of Washington's Clean Energy Fund 2 grant.

Project assets were installed in 2021, and the expectation was that the capital project would be completed and closed by the end of 2021. Thus, there were no planned transfers to plant in 2022. Due to unforeseen delays by multiple contractors, there were additions to the capital project in 2022 which were originally expected in 2021. Those additions were related to system commissioning and final deliverables related to the asset deployment and were required to meet Department of Commerce milestones.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

The project change request process consists of the following steps: 1) Submit a change request to the initial business case explaining need for additional funds, 2) Develop a presentation outlining the request for funds from the Invent Council. 3) Obtain approval from the Invent Council to proceed with the work. The utility funds clean energy projects through its strategic fund which are allocated and approved by the Invent council.

### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no revised offsets associated with this change in plant additions. The Clean Energy Fund 2 project was partially funded by the Department of Commerce and is part of a series of Washington State supported efforts to advance the clean energy economy in the state. The project has demonstrated a series of customer and utility benefits, including demand charge reduction, resilient backup power, energy efficiency, and power quality improvements, all while giving Avista direct experience with beneficial grid technologies. The effort included \$3.5M in grant funding from the Department of Commerce.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

Recoverable Signature

X

**DIRECTOR SIGNATURE:** 

Recoverable Signature

X

Signed by: John

Signed by: John

## 1.0 CHANGE REQUEST #2 - 4/25/2022

Previous Requests	Requested	Approved
Original	\$4,500,000	\$4,500,000
Change Request 1	\$652,201	\$652,201
Change Request 2	\$980,000	\$980,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month - Year	LTD Spend	Current Approval	Requested Change	Proposed Lifetime Total
02-2021	\$4,970,488	\$4,500,000	\$652,201	\$5,152,201
04-2022		\$5,152,201	\$980,000	\$6,132,201

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Externally Driven
Response needed by	5/31/2021

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The Clean Energy Fund 2 project has experienced unexpected delays due to COVID (availability of resources), first-generation grid assets, and equipment failures. The Clean Energy Fund 2 project consists of solar panels, electric storage, building controls and a panel house to orchestrate black start, islanding, and Point of Common Coupling (PCC) regulation. Avista contracted Power Engineers and SEL Inc. to design and commission the microgrid. The microgrid storage assets were installed in the summer of 2021 during the peak of COVID. During this period, the project schedule was impacted due to constraints of site access and availability of technical resources.

To date, the utility professional and craft resources are not trained in the design and deployment of inverter resources and microgrid embedded control systems. The utility maintains high reliability and safe working conditions by training craft resources to adhere to installation specifications and standard work practices. First generation installations like microgrids, inherently, impact the working protocol followed by utility personnel. In addition, to installing the asset, the project team is required to develop installation standards and operational work processes. Operationalizing first-generational assets into existing organizational business processes have an impact on schedule.

The inverter technology deployed on this project experienced equipment disruptions and failures. For example, the microgrid consists of four solar inverters for the installed roof top solar. To date, all four solar inverters have required repair or reconfiguration to keep them

## Clean Energy Fund II

online. Avista operational staff is not currently trained to maintain inverter technology which requires the project to contract with a third party. Unreliable assets and the maintenance of the systems have a direct impact on schedule

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The request is not for additional work, but rather to cover the outstanding budget that remains. If the request is not approved, the following risks may result:

- We may not meet the agreed upon milestones with the Department of Commerce for the project.
- We would miss the opportunity to learn from WSU and PNNL's analysis of the performance of the microgrid assets from an economic and operations perspective. We would also miss out on the opportunity to learn how to operate the microgrid within Avista's operational context.
- We would be unable to use the microgrid for the upcoming planned field demonstration portion of the UI-ASSIST project, a separate research initiative with WSU.

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.

The attached spreadsheet "CEF2 Cost Overun" identifies how the cost overruns were not incorporated in the project plan. Approximately, \$250,000 dollars represent the cost overrun at project closure. The cost overruns were under reported due to communication charges under a separate project number and the transferred invoices not accounted under the correct project number.

# 1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

There would be no impact to business functions or O&M costs.

## 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

**Alternative 1**: The capital project is completed but still have outstanding costs as summarized above. The project is implementing a performance and economic assessment. This analysis is being funded from O&M and does not effect the capital budget.

## 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Clean Energy Fund 2 project represents a milestone in Avista's journey toward a more modern and distributed grid as the first islanded microgrid in the company's history. It has

## Clean Energy Fund II

been a remarkable accomplishment on a technical and organizational level to bring in a completely new capability to our system, and the lessons learned have been invaluable. This project benefits the customers by enabling a path forward to provide clean and renewable products to meet our legislative obligation under the clean energy transformation.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The business justification narrative is still valid.

## 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
John Gibson	BC Owner		
Heather Rosentrater	BC Sponsor		
	FP&A		

## 1.0 CHANGE REQUEST #1 - 2/18/2021

Previous Requests	Requested	Approved
Original	\$4,500,000	\$4,500,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	LTD Spend	Current	Requested	Proposed
Year		Approval	Change	Lifetime Total
02-2021	\$4,970,488	\$4,500,000	\$652,201	\$5,152,201

Type of Change	In-year Update
Primary Reason for Change	Timing Change, Externally Driven
Response needed by	2/28/2021

## 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The Clean Energy Fund 2 project has experienced delays due to unexpected issues with the sites for the battery energy storage systems. We have partnered with WSU to site the batteries on their Spokane campus. The sites have changed twice, each time creating extra costs due to re-design, design delays for other partners with designs dependent on siting, and in the case of the final site, extra costs for site preparation. The delays have also caused significant AFUDC, with the estimate being \$812K of AFUDC by the end of the project.

The requested change includes \$270K in estimated AFUDC remaining for 2021 and \$122,626 in estimated loading remaining for 2021.

## 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The work is needed to complete the construction and installation of the remaining project assets, which are the energy storage installations, panel house with microgrid controller and communications, and the testing/commissioning of the system. The request is not for additional work, but rather to cover the outstanding scope that remains. If the request is not approved, the following risks may result:

- We may not meet the agreed upon milestones with the Department of Commerce for the project. The milestones are connected to \$1.75M of remaining payments.
- We would miss the opportunity to learn from WSU and PNNL's analysis of the performance of the microgrid assets from an economic and operations perspective. We would also miss out on the opportunity to learn how to operate the microgrid within Avista's operational context.

- We would be unable to use the microgrid for the upcoming planned field demonstration portion of the UI-ASSIST project, a separate research initiative with WSU.

## 1.1.3 Please reference analysis or information that support the problem and attach to this document.

The attached spreadsheet "CEF2 Budget Summary.xlsx" shows how the budget change request was calculated, based on the expected remaining spend, expected payments from Commerce, and the original project budget.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

There would be no impact to business functions or O&M costs.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

**Alternative 1**: stop project work. This alternative is not the preferred because we would not be able to get the \$1.75M commerce milestone payments. We would have some reputational risk, and would miss out on all of the project benefits

**Alternative 2:** Reduced scope option. This option, which could be explored in more detail, would involve installing only 1 of the 2 batteries. Foregoing the installation of the 2<sup>nd</sup> battery would reduce the construction cost by approximately \$200K, mainly by eliminating site preparation and new UG feeder extension to the battery. The second battery, which we already purchased, could be stored and used at a later date. The following risks would need to be weighed if we were to consider this option:

- Risk of Department of Commerce reducing our milestone payments (it is unknown how they would handle a reduction in project scope)
- Project experimentation value would be reduced, but not eliminated. Mainly we would lose the ability to perform optimization across multiple batteries.
- The 2<sup>nd</sup> battery would not be able to be transferred to plant until a new site was developed for a different project, and the battery would need to be stored/monitored on an Avista site (such as Boulder).

## 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

This investment is still prudent for the company. Energy storage and distributed energy resources are an important part of the future distribution system, and this project is helping Avista develop the acumen to deploy, operate and optimize these new resources.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The business justification narrative is still valid.

## 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the funds change request and agree with the approach it presents, and that it has been approved by the relevant governance group. Signatures are required before funding can be considered.

Name	Role	Signature	Date
John Gibson	BC Owner		
	BC Sponsor		
	FP&A		

## Clean Energy Fund 2 - Shared Energy Economy

## 1 GENERAL INFORMATION

Requested Spend Amount	\$ 4,500,000 (Avista Contribution)	
Requesting Organization/Department	Research and Development/ Distribution Operations	
Business Case Owner	Kenneth Dillon (Project Manager)	
Business Case Sponsor	Heather Rosentrater	
Sponsor Organization/Department	Distribution Operations	
Category	Strategic	
Driver	Customer Service Quality & Reliability	

## 1.1 Steering Committee or Advisory Group Information

- Heather Rosentrater (Executive Sponsor)
- John Gibson (Project Sponsor)
- Curt Kirkeby (Concept Engineer/Project Sponsor)
- Kenneth Dillon (Project Manager, CEF1 and CEF2)
- Mike Diedesch (Project Engineer)
- Washington State, Department of Commerce advisory group

### 2 BUSINESS PROBLEM

Distributed Energy Resources (DERs) interconnected to the grid and operated by the utility can be optimized to meet the needs of the customer as well as the grid – economies of scope or "vertical values". Sharing the investment in DERs across multiple building owners and coordinated across the grid reduces the investment cost to each building owner as well as provides opportunity to optimize utilization – economies of scale or "horizontal values". Leveraging both economies of scope and scale to derive value out of DERs requires the development of a platform to supervise, control, synchronize and optimize these assets – Avista Distribution System Platform (ADSP).

Micro-Transactive Grid (MTG) is an extension of the ADSP platform to support the optimal utilization of DERs. Rather than optimizing a single building's utilization of DERs, the MTG will leverage building fleets, load diversity, and building management systems to optimize the DERs across the distribution loop network. In addition, the MTG will be designed to sectionalize the load into distinct districts which share common DER assets to improve system resiliency and reduce DER investment requirements.

The opportunity to address these issues is a Strategic opportunity which has a great deal of support from the Washington State Department of Commerce, the Governor of the State of Washington, and Avista's Clean Energy Fund 2 Partners (McKinstry, Itron, SEL, SPIRAE). By enabling the seamless integration of renewable and distributed energy resources, and by leveraging and extending the electric distribution grid infrastructure to support intrastate micro-transactive energy markets, Avista can enhance the role and relevancy of utilities in ways that directly align with the state's objectives for reducing emissions and increasing the strength and competiveness of its economy. New types of energy and energy service models can create opportunities for utilities to act as trusted brokers between providers and

## Clean Energy Fund 2 – Shared Energy Economy

consumers – to manage and optimized use, performance, safety, and reliability towards a more responsible, resilient, and sustainable energy future.

A delay in implementing this project could result in a lost opportunity to address these issues and the loss of matching funding from the Department of Commerce.

Avista's analytical partner, the Pacific Northwest National Lab (PNNL), will extend the analysis leading to a valuation of the Shared Energy Economy by simulating a transactive market. In these simulations, a "trading hub" enabling energy transactions between participants will be designed across multiple MTG platforms. Due to the limitation of regulatory requirements, the energy transactions will be simulated rather than executed across the MTG platforms. However, once established, the MTG platforms will operationally be utilized to facilitate the exchange in energy and balance the grid logistics from system capacity, available resources, trading routes, and system stability. The valuation and operation of the MTG Platforms will determine technical, operational, and economic opportunities to deploy DERs across an investment community participating in a Shared Energy Economy.

## 3 PROPOSAL AND RECOMMENDED SOLUTION

Option	Capital Cost	Start	Complete
Do nothing	\$0		
Implementation of CEF2 Proposal	\$8,000,0001	05/2018	6/2020

### Project Proposal/Solution Overview

Avista and its Partners will control and optimize the utilization of shared DERs across a MTG. The MTG will consist of building management systems, solar panels, and energy storage assets integrated on a loop feed to support a shared model of renewable energy resources for commercial, university campus, and industrial parks.

The MTG project will be deployed in Spokane's University District in order to maximize the impact and visibility of the project. The University District, designated by the Department of Commerce as an Innovation Partnership Zone, is adjacent to Spokane's downtown core. It consists of 770 acres, including the campuses of Gonzaga University, Washington State University Health Sciences Spokane, and programs from Eastern Washington University, Whitworth, University of Washington and Spokane Community Colleges. In addition to higher education, the University District is home to Urbanova, a collaborative effort to create a living laboratory for smart cities of the future.

Avista and its Partners will extend the valuation of DERs into a Shared Energy Economy model. In this model, Avista will be evaluating how a conventional micro-grid and the inherent combination of distributed assets could provide value while connected to the grid or during an islanded condition away from the distribution system. In a Shared Energy Economy, building owners and tenants can share in the investment and benefits obtained by a MTG. The valuation analysis for a Shared Energy Economy is fundamentally trying to show that a non-utility portion of the community can participate in the deployment of local DERs and derive both financial and operational benefits which cannot be realized within the conventional regulatory and utility model. In addition, the Shared Energy Economy can help support the valuation of DERs when compared to traditional centralized generational assets.

Of the \$8 million total capital cost, \$3.5 million has been appropriated and approved by the Washington State Department of Commerce and will be provided to Avista upon meeting defined Milestones

### Clean Energy Fund 2 - Shared Energy Economy

To provide analysis to demonstrate the above statements, Avista and its partners will develop a set of operational modes for the MTG including both grid connected and grid islanded states.

Two MTG "platforms", or "nodes", will be deployed. The MTG platforms consist of DER assets, control devices, and distribution equipment necessary to integrate, control, and operate the MTG Platform. The projected list of major equipment for the project is listed below:

- 100 kW/350 kWh Energy Storage Asset
- 500 kW/1.5 kWh Energy Storage Asset
- Solar Arrays with total peak capacity between 50 and 125 kW
  - Avista intends to utilize 4-quadrant smart inverters compliant with UL1741A and similar to those compliant to CPUC Rule 21, allowing for extended voltage ride through as well as voltage and frequency grid support
- 2 750 kVA Power Transformers
- Automated Transfer Switches
- MGCS Micro Grid Control System
- Building Management Systems
- Load Shedding Devices (isolation of critical loads during Critical Resiliency Mode)

#### **Proposed Project Schedule**

- Completion of Phase 0 September 2017 Luly Funded by Boc
- Engineering Design/Interconnect December 2017
- Procurement of large items June 2018
- Construction and Installation (solar, battery, distribution system transfer to plant) October 2018
- Systems Commissioning (control system transfer to plant) April 2019
- Analytics and Testing September 2019
- Final Report December 2019

#### Strategic Innovation

The innovation of the project's business case lies in the development of a shared economy to reduce the initial cost of the DER assets and to increase the value from the DER assets and their operation. The MTG distributes the cost of distributed generation assets like solar and storage across multiple building or tenant members to reduce the cost of renewable assets per member. This economic model is similar to the Combined Heat and Power (CHP) model which shares the waste heat across multiple buildings by the use of steam pipes. The MTG will supervise and control the renewable assets to coordinate and optimize their utilization across Avista's distribution loop feed between building and assets.

The functionality above is not being met by other vendors or utilities in the industry, thus allowing a significant opportunity for innovation in an open part of the market.

### Clean Energy Fund 2 – Shared Energy Economy

#### Impacts to Future O&M/Stakeholder Involvement

Protection

Initial project design, implementation and construction; no ongoing O&M in addition to the programs in place (relay testing, replacement, etc)

Spokane Area Engineering/Distribution Engineering

Initial project design, implementation and construction; no ongoing O&M in addition to the programs in place (project and electrical design)

Distribution Dispatch

Project implementation, commissioning and ongoing operation; no ongoing O&M in addition to the staff in place (operation will be assigned to existing staff)

Asset Maintenance

Ongoing battery and solar panel maintenance will be addressed through an O&M Agreement with each supplier, and is expected to be less than \$100,000 per year

#### **Budget Development**

The proposed budget for the project was created and vetted thought the State of Washington Clean Energy Fund oversight committee, with significant input from the CEF1 (Turner Energy Storage Project) budget and actual costs. This allowed the Grant Application to include a budget and request developed with a fair amount of confidence, and provided a stepping stone for the Phase 0 process.

Phase 0, facilitated by Avista and supported by the Partners, was an opportunity to refine the proposed scope and budget of the Project. During a multi month period, Avista and the Partners met numerous times to better understand the scope of each Partner's role and to produce a 30% design document with a more accurate cost estimates. Given the unknown issues that can arise during the deployment of new technology and the experience of Avista and others during the CEF1 implementation, the Department of Commerce was highly supportive of this effort and provided funding during the development process to fund this effort.

### Clean Energy Fund 2 - Shared Energy Economy

#### 4 APPROVAL AND AUTHORIZATION

The undersigned acknowledge they have reviewed the Clean Energy Fund 2 – Shared Energy Economy and agree with the approach it presents. Significant changes to this will be coordinated with and approved by the undersigned or their designated representatives.

Signature:

wit out

Print Name:

Kenneth Dillon

Title:

Project Manager

Role:

**Business Case Owner** 

Signature:

to be

Date:

4130118

Print Name:

Heather Rosentrater

Title:

Vice President, Energy Delivery

Role:

**Business Case Sponsor** 

Date

Signature:

Print Name:

Title:

Role:

Steering/Advisory Committee Review

#### 5 VERSION HISTORY

Version	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	Kenneth Dillon	4/24/2018	John Gibson	4/25/2018	Initial version
100					
T					

Template Version: 03/07/2017

CAPITAL ADDITIONS VARIANCE EXPLANATION FORM  BUSINESS CASE NAME:
Upriver Park Development
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☑ Yes ☐ No If yes, please attach revised business case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:
The Upriver Park Development was originally approved with a \$2 million budget based on a concept sketch and architect's estimate produced in 2018. The original estimate failed to capture the complexity of civil work associated with park development including internal design costs. The project was further delayed due to COVID-19 related uncertainties in early 2020. Design concluded mid-2021, and the project submitted a funds change request for an additional \$1.5 million in funding after receiving a revised estimate pushing total project cost to \$3.5 million. Upon submission of the design to the City of Spokane, the project experienced additional delay when the City required numerous redesigns for permit issuance. These required changes resulted in increased construction scope and a schedule delay resulting in an increase in total budget to \$3.85 million. The accumulation of delays created unfavorable construction conditions, and project leadership delayed construction through winter 2021 to ensure the best outcome. Construction concluded in spring 2022, with a total project cost of \$3,823,802.
EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):
Please see attached supporting documentation. Not only did this park fulfill Avista's commitment to various key stakeholders (i.e. the City of Spokane, local community, neighborhood councils, and state and federal recreation managers), it also brought the Avista campus fire response system into code compliance and satisfied Avista's commitment to the Spokane River License.
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
No revised offsets are associated with this change.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

XML I

**DIRECTOR SIGNATURE:** 

X Bruce F Howard

RI	ISIN	IFSS	CASE	NAN	ИF·

Structure	es and Imp	provements/ Furniture
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED ord with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
□ Yes	⊠ No	If yes, please attach revised business case.
		TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE G PERIOD:
and furn systemat furniture additions increase include: Conditio safety pr	iture budg cically add replacem s or site im in Transfe added furi n projects ojects tha	Improvements program is responsible for the capital maintenance, site improvement, gets at over 40 offices, storage buildings, and service centers. This program is intended to ress: lifecycle asset replacements (examples: roofing, asphalt, electrical), lifecycle nents and new furniture additions (to support growth) and manager requested business approvements. It also funds drop in equipment failure and safety related projects. The er to Plants reflects the addition of projects to the Business Case during the year. These niture purchases, totaling \$550K, to accommodate office changes post COVID-19; Asset that were unfunded coming into 2022, totaling \$360K; and equipment failure/ drop in/t needed immediate funding. A property was also purchased to accommodate growth in kston valley reflecting an additional \$345K in unplanned transfers to plant.
	AS PRUD	'SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE ENT for example, stakeholder meeting approval, CPG funds change requests (please attacitation):
regularly meeting, action. U	scheduled attending Jpon appro	are approved by the Facilities Steering Committee. This Director level approving body has dimonthly meetings, currently held on the second Thursday of every month. At the members of the FSC vote to approve or reject, with the majority determining course of coval funding requests are sent to the CPG for funding approval if needed. Minutes are and to all FSC members. Any meeting non-attendees have two days to raise any concerns.
ARE THERE	REVISED	OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are	no chang	ges to the expected offsets for this business case for 2022.

my knowledge the information is true, correct, and comprehensive.

**BUSINESS CASE OWNER SIGNATURE:** 

**DIRECTOR SIGNATURE:** 

x Kelly Magalsky

X Cric Bowles

#### 1.0 CHANGE REQUEST #1 - 2.17.2022

Previous Requests	Requested	Approved
5-Year Plan	\$3,600,000	\$3,350,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
MM-YYYY	\$176,000	\$3,350,000	\$500,000- \$1,000,000	\$3,850,000- \$4,350,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	3/31/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The existing cooling units in the Data Center are having partial equipment failures. The cooling coils are failing due to the use of raw well water and have been temporarily repaired by our in-house HVAC team on a short-term basis. The units are no longer reliable and need to be replaces as soon as possible to ensure continuity. The cooling system needs to be revised to ensure the damage does not continue in future units. The revised design will include creating a closed loop system that will ensure treated water is used on the replacement units. The design will include the same, if not more, redundancy as the current design as required for critical operations systems.

# 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The Avista Data Center serves all areas of Avista, both Gas and Electric and all states. The Data Center cooling system is critical to ensure all the Data Center equipment maintains functionality. The redundancy and dependability of the cooling system is a critical element to the reliability of the Data Center as a whole. Loss of the Data Center would have a dramatic impact on the operation or the Company as a whole.

The Data Center cooling system is critical to ensure all the Data Center equipment maintains functionality. The redundancy and dependability of the cooling system is a critical element to the reliability of the Data Center as a whole. Not approving this project may result is equipment failures which may require transferring services from the Data Center to an off-site Data Center at the expense of O&M and may also

impact customer service. Some Data Center services may need to be dropped all together to maintain critical systems. The equipment required to be replaced are long lead time items and are not readily available in the event of a failure. A failure to the Data Center cooling system would result in an impact to the Data Center for up to 5 months, thus impacting the operations of most areas of the Company.

The project estimate for this work is \$2,000,000. Absorbing all of this into ER7001 limits Facilities ability to complete work both manager requested and asset condition work. The backlog of projects is growing yearly and pushing this work further will create a future bowl wave of work. Adding a portion of the Data Center Cooling System project cost into ER7001 will allow Facilities to put needed projects back on the list for 2022.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

RED: Projects Added if funded at \$500k GREEN: Projects Added, along with RED, if funded at \$1M.

		timate	H	ccuracy
CDA Shop Exhaust	\$	10,000		30%
Walk through Gate Jimmie Dean	\$	12,000		30%
CDA OH Exhaust Fan	\$	5,000		30%
GOB Sidewalk missing after demo of fleet building	\$	60,000		30%
Gap in IR Canopy Roofmoved from Safety Action	Т			
Item List		TBD		30%
CDA BUCC add three desks	Ş	150,000	Ļ	30%
St. Maries Renovate and update bathrooms	\$	110,000		80%
Elk City Restroom/ Building upgrade	\$	170,000		80%
Wash Bay undercarriage	\$	75,000	Ţ	80%
Paving back lot at Ritzville office	\$	75,000	П	30%
New exterior windows Ritzville office	ç	25,000		30%
Manager Requested Total	\$	692,000		
St Maries- Insulation System	\$	50,000		30%
GOB North Service bldg stair replacement	\$	36,000		30%
CDA Replace stairs at CS Entrance	\$	13,000		30%
Orofino Flooring	\$	12,000		30%
CDA Gutters	\$	35,000	Г	30%
Light in Kamiah	\$	6,500	Г	30%
Grangeville Storage Yard	\$	75,000	Г	30%
Colfax electrical panel	\$	6,000	Г	30%
Kamiah concrete driveway	\$	9,000	Г	30%
Orofino Gutter Replacement	\$	5,000	Г	30%
Othello BUR Replacement	\$	65,000	Г	30%
GOB Transformer/ Switchgear Completion	\$	160,000		100%
Data Center Cooling System	\$ 2	2.000.000		90%
Kellogg BUR Replacement	\$	65,000	Г	30%
Medford Asphalt and parking lot	\$	300,000	Г	30%
Kellogg Permeable Asphalt- Test??	\$	90,000	Ī	30%
Asset Condition Total	<b>\$</b> 2	2,877,500		
Jimmy Dean Expansion- Add Offices	\$	80,000		
Allocation	\$	350,000		
Drop-In/ Safety/ Failure Projects Remaining Total	\$	270,000		
Furniutre Allocation	\$	250,000		
Total Budget	S	4,219,500		

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

The alternative is to absorb the critical Data Center work into the existing ER7001 allocation. Not adding any additional funding and differing work another year. While this is an option as stated previously the bowl wave of work will continue to grow and will need to be funded in the future.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Structures and Improvements Business Case was created to sever small to mid-range projects for facilities located throughout out service territory. These Asset Condition and operation need projects are vital to keeping operations running for Avista offices.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	2.17.2022
Alicia Gibbs	BC Sponsor	Alicia Gibbs	2.17.2022
	FP&A		

#### 1.0 CHANGE REQUEST #2 - 3.22.2022

Previous Requests	Requested	Approved
5-Year Plan	\$3,600,000	\$3,350,000

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
MM-YYYY	\$0	\$3,350,000	\$550,000	\$3,900,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	4/29/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

#### 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

After considering employee experience, legal obligations, and ergonomic information, the facilities department is recommending offering an Avista chair for their home office to employees who work at home as part of a fully offsite or hybrid work schedule.

Based on information collected at Mission, we are missing 400 chairs on campus. Chairs are approximately \$900/each.. Office furniture is a capital expense in ER7001/7003, and chairs are depreciated over 15 years. The capital expense to replace missing chairs and provide secondary chairs as requested, based on role classification and other considerations, is estimated to be around \$550k (assuming 600 chairs- See highlighted approved option for quantity).

This quantity of seating exceeds the current budgeted amount in ER7001/7003. ER7003, the furniture portion of the overall Structures and Improvements Business Case, is only funded at \$250,000 for 2022 for all furniture needs throughout all Avista facilities.

# 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

A quality office chair that is fit properly to the employee can reduce the risk of a costly claim. In addition, employees are less likely to file work comp claims if they feel their employer has taken the extra measures to ensure their safety. If an employee did have an ergonomic issue arise, they are more likely to use conservative treatment measures that are less costly and don't require filing a claim at all.

Our risk for ergo claims does go up with employees working at home. Whether that be hybrid or fully remote. We have much less control over their work environment.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Currently, there is no federal requirement that we provide chairs to work from home employees; additionally there are no state requirements in the states where we have employees. Some states (e.g. California) do require that the employers provide their telework employees with office equipment such as chairs, and that is something we look at each time we have a new remote request.

Despite there being no legal requirement, OSHA does still apply to employees working from home and we could see workers comp claims from ergonomic-related injuries of teleworking employees. Here is an interesting article from Forbes on the issue:

https://www.forbes.com/sites/larryenglish/2021/03/09/the-hidden-costs-when-remote-workers-spend-all-day-on-the-couch/?sh=4626150c6bbe

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

Potential options:

Options included: returning office chairs, providing additional office chairs, and offering an employee stipend. After evaluating benefits and risks, it was determined that offering the option of a second chair reduced potential ergonomic claim risk, improved the employee experience, minimized barriers to employees coming into the office, and minimized potential injuries related to returning the office chair. Although not calculated, there is a potential soft offset from injury claims.

- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
  - Minimized safety concerns
  - Employee may feel like employer has taken extra measures to ensure safety Reduced barriers to working in the office
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

No Change Needed

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	3/22/2022
Alicia Gibbs	BC Sponsor	Alicia Gibbs	3/22/2022
	FP&A	Ü	

#### 1.0 CHANGE REQUEST #3- 6.2022

Previous Requests	Requested	Approved	Comments
5-Year Plan	\$3,600,000	\$3,350,000	Initial Request
Change #1	\$1M-\$500K	\$500,000	Data Center Cooling Units
Change #2	\$550,000	\$550,000	Chairs

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
06-2022	\$745,000	\$4,400,000	\$135,000	\$4,535,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	6/22/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

The new cafeteria provider and their systems require changes to the Avista Café and technology for the Café startup. Much of the equipment is needed for the new cashless payment system, failed equipment replacements, and to provide afterhours food service coolers.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

This work is required to open the Avista Café and provide food service to the Mission campus. Without the cashless system the current model would be changed considerably and increase the labor and subsidy costs.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

The subsidy funding models were created and approved by the Café Steering Committee and leadership.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

The Avista Café works from a subsidy model, the approved model was reviewed by the Café Steering Committee. Avista has provided a subsidized Café benefit to employees for the last 4 years (prior to COVID-19). The approval of this funds request will fund the Capital portion of the startup of the continuation of this benefit.

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

Alternatives discussed would be to reduce the offerings and hire a register attendant, reducing sales and increasing labor expenses resulting in a higher subsidy.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Café is an employee benefit making Avista an attractive place to work in a tight labor market. Keeping employees onsite for lunch while providing opportunities for productive networking and overall employee satisfaction.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Structures and Improvements Business Case is still valid, this change is a drop in project related to business change.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	6/20/2022
AliciaGibbs	BC Sponsor	Alicia Gibbs	6/20/22
	FP&A		

#### 1.0 CHANGE REQUEST #4- 7.2022

Previous Requests	Requested	Approved	Comments
5-Year Plan	\$3,600,000	\$3,350,000	Initial Request
Change #1	\$1M-\$500K	\$500,000	Data Center Cooling Units
Change #2	\$550,000	\$550,000	Chairs
Change #3	\$135,000	\$135,000	Café Startup

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
06-2022	\$745,000	\$4,535,000	\$98,000	\$4,633,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	7/29/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

# 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

There have been failures in the system that are unable to be obsorbed into the existing allocation.

- Café Flooring- Carpet is failing, pealing up and requiring duct tape to ensure safety and prevent trip hazards
  - Estimate: \$25,000
- Spokane Valley Call Center Gate- The vehicle gate is no longer working and the operator and gate need to be replaced to maintain the security perimeter and provide access for employees.
  - Estimate: \$25,000
- Executive Flooring Replacement- Carpet is failing, pealing up and requiring duct tape to ensure safety and prevent trip hazards. The Boardrom and CR512 are already being replaced and replacing the remaining area in total will be more efficient and save on mobilization costs.
  - Open Office Area and Private Offices
  - Estimate \$48,000

# 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

We discussed waiting until 2023 to fund this work but due to the use of these assets doing this work as soon as possible makes the most sence. The flooring is creating a

trip hazard due to pealing corners and the gate is part of general access to the Spokane Valley Call Center requiring its immediate replacement.

# 1.1.3 Please reference analysis or information that support the problem and attach to this document.

Café Flooring:





Spokane Vallet Call Center Gate:





**Executive Flooring Replacement:** 



1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

We discussed waiting until 2023 to fund this work but due to the use of these assets doing this work as soon as possible make sthe most sence.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Structures and Improvements Business Case was created to sever small to midrange projects for facilities located throughout out service territory. These Asset Condition and operation need projects are vital to keeping operations running for Avista offices.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Structures and Improvements Business Case is still valid, this change is a drop in project related to unplanned failures.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	7/18/22
AliciaGibbs	BC Sponsor	Alicia Gibbs	7/18/22
	FP&A		

### 1.0 CHANGE REQUEST #5- 8.2022

Previous Requests	Requested	Approved	Comments
5-Year Plan	\$3,600,000	\$3,350,000	Initial Request
Change #1	\$1M-\$500K	\$500,000	Data Center Cooling Units
Change #2	\$550,000	\$550,000	Chairs
Change #3	\$135,000	\$135,000	Café Startup
Change #4	\$98,000	\$98,000	Added Projects

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
07-2022	\$1,958,531	\$4,633,000	\$112,000	\$4,745,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	8/31/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

There have been failures in the system that are unable to be obsorbed into the existing allocation.

Davenport Basement Structural

Estimate: \$80,000

Grangeville Water Leak and Repair

Estimate: \$85,000

- Electric Shop Roll Up Door- Higher Cost Estimate due to installation requirements
  - Estimate \$185.000

We have been able to absorb some of these changes by differing work into 2023 reducing our ask to the \$112,000.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

The projectslisted are critical failures requiring immediate repair/ replacement. We have differed some work that has not yet started but most projects are already inflight.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Davenport: A structural annaysys was completed by a third party requiring that we move forward with shoring of the basement space.

Grangeville: An active water leak has been identified requiring excavation of the line and a repair. It will require compaction of the area and patching upon completion

Electric Shop: The roll up door is partially failed and is requiring replacement. A temporary SOP is in place to ensure safe operation in the short term.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

We discussed waiting until 2023 to fund this work but due to the use of these assets doing this work as soon as possible makes the most sence.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Structures and Improvements Business Case was created to sever small to midrange projects for facilities located throughout out service territory. These Asset Condition and operation need projects are vital to keeping operations running for Avista offices.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Structures and Improvements Business Case is still valid, this change is a drop in project related to unplanned failures.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	8/16/22
AliciaGibbs	BC Sponsor	Alicia Gibbs	8/16/22
	FP&A		

#### 1.0 CHANGE REQUEST #6- 10.17.2022

Previous Requests	Requested	Approved	Comments
5-Year Plan	\$3,600,000	\$3,350,000	Initial Request
Change #1	\$1M-\$500K	\$500,000	Data Center Cooling Units
Change #2	\$550,000	\$550,000	Chairs
Change #3	\$135,000	\$135,000	Café Startup
Change #4	\$98,000	\$98,000	Added Projects
Change #5	\$92,000	\$92,000	Added Projects
Change #1.1	-	\$55,000	Continuation of pending request #1/ Sandpoint HVAC

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
10-2022	\$2,840,411	\$4,780,000	\$275,000	\$5,055,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	10/21/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

# 1.1.1 Identify what has changed such that the current approved amount is not sufficient.

This project would be for the purchase of a property that is adjacent to the Clarkston Service Center. This space has been an automotive repair facility and would be easily modified to allow service and repairs on all classes of Avista vehicles in Clarkston. This is an unbudgeted property purchase as Avista was unaware the land was available for sale until 10/2022.

# 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Currently, equipment maintenance and repair work done in Clarkston, WA is completed in what normally would be a parking stall for vehicles. This space was never intended to be a maintenance bay. The mechanics tool box sits on a slope that is over 2% and there is not way to install a vehicle lift in the space. The lack of a lift requires employees to do work on their knees using jacks and "creapers" on the slanted floor.

# 1.1.3 Please reference analysis or information that support the problem and attach to this document.

In 2018 a design was completed to add an addition to the Clarkston office for the Fleet team. This design was completed and capital dollars were requested for this project in 2019. This project was not prioritized for funding in 2019 and 2020. While this project has remained valid the current estimated cost for this addition is between \$600-750K. The proposed project will meet the needs of the team without impacting the operations and current traffic flow of the current Clarkston Service Center.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

In 2018 a design was completed to add an addition to the Clarkston office for the Fleet team. This design was completed and capital dollars were requested for this project in 2019. This project was not prioritized for funding in 2019 and 2020. While this project has remained valid the current estimated cost for this addition is between \$600-750K. The proposed project will meet the needs of the team without impacting the operations and current traffic flow of the current Clarkston Service Center.

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Structures and Improvements Business Case was created to sever small to mid-range projects for facilities located throughout out service territory. These Asset Condition and operation need projects are vital to keeping operations running for Avista offices.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Structures and Improvements Business Case is still valid, this change is a drop in project related to property coming available adjacent to an existing Service Ce.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	10/17/22
Alicia Gibbs	BC Sponsor	Alicia Gibbs	10/18/2022
	FP&A	U	

#### 1.0 CHANGE REQUEST #7- 12.13.2022

Previous Requests	Requested	Approved	Comments
5-Year Plan	\$3,600,000	\$3,350,000	Initial Request
Change #1	\$1M-\$500K	\$500,000	Data Center Cooling Units
Change #2	\$550,000	\$550,000	Chairs
Change #3	\$135,000	\$135,000	Café Startup
Change #4	\$98,000	\$98,000	Added Projects
Change #5	\$92,000	\$92,000	Added Projects
Change #1.1	-	\$55,000	Continuation of pending request #1/ Sandpoint HVAC
Change #6	\$275,000	\$275,000	Clarkston Property Purchase

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
12-2022	\$3,399,279	\$5,055,000	-\$395,000	\$4,660,000

Type of Change	In-year Update
Primary Reason for Change	Scope Change
Response needed by	12/23/2022

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Facilities has a couple of projects that we were unable to complete in 2022. We have run into issues with finding appropriate skilled contractors able to complete this work. We are returning

these dollars to the CPG for use elseware and will fund this work out of the existing ER7001 2023 allocation.

- \$180K: COF- Electric Shop Roll Up Door
  - Contractor was unable to get the shop drawings from the manufacturer in time for us to complete this in 2023 as expected.
- \$85K: Grangeville- Water Leak/ Concrete Work
  - Unable to find a contractor willing to do this work in 2022. Looking to schedule this work in early 2023.
- \$50K: CDA BUCC- Add Desks for Training
  - Were able to accommodate this request at Mission campus using existing furniture, cabling and minimal electrical changes that were charged to the SCADA Training project.
- \$25K: Furniture Allocation
  - Underspend due to not purchasing Executive Assistant Furniture, waiting on Sr Leadership Feedback
- \$55K: River Outflow Piping at Service Building- Accounting Correction
  - Project was designed in 2021 during the completion of Upriver Park then placed on hold. Once designed it was determined by Facilities and Environmental that the benefit of the work was not worth the \$1M+ price tag, design costs were credited to Capital.
- 1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Work is still needed and Facilities is returning these dollars to the CPG for use elseware and will fund this work out of the existing ER7001 2023 allocation.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

None

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented, including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

None

1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).

None

1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.

The Structures and Improvements Business Case was created to sever small to mid-range projects for facilities located throughout out service territory. These Asset Condition and operation need projects are vital to keeping operations running for Avista offices.

1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Structures and Improvements Business Case is still valid, this change is a drop in project related to property coming available adjacent to an existing Service Ce.

#### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Eric Bowles	BC Owner	Tric Bowles	12/13/22
Kelly Magalsky	BC Sponsor	Kelly Magalsky	12-13-22
	FP&A		

BUSINESS CASE NAME:
Substation - New Distribution Station Capacity Program
FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes ☐ No If yes, please attach revised business case.
PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:
The Distribution Station Capacity Program focuses on new substation construction and SCADA installations in substations. 2022 Transfer to Plant included SCADA for all Subs (St Maries upgrade project), Flint Rd Substation transformers, Southeast minor station rebuild and Airway Heights capacity upgrades. After further analysis, the Airway Heights project scope was updated from a full transformer upgrade to only relay and breaker upgrades. In addition, the Clearwater SCADA project was originally scheduled to be built and completed in 2022, but the schedule was adjusted to 2023 because of resource and outage constraints. Finally, the property purchase for the Bruce Rd substation in the future wasn't able to be completed in 2022 as originally planned due to negotiations extending beyond original expectations. These changes impacted the transfer to plant for 2022.
EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):
No cost overruns were associated with this Business Case (project) for 2022. This Business Case was monitored through the year and reviewed at the Electrical Engineering Budget Committee each month.
ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.
There are no revisions to the offsets. Most projects within this business case add equipment to the service territory which results in higher maintenance costs for inspections, testing and maintenance work.
have reviewed the information contained in this response for this specific business case, and to the best of

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**DIRECTOR SIGNATURE:** 

**BUSINESS CASE OWNER SIGNATURE:** 

2/20/2023

Signed by: glenn madden@avistacorp.com

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	ion - Statio	n Rebuilds Program
FOR THE	CURRENT RI ED (on reco	EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.
PLEASE E	XPLAIN THE REPORTING	TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE PERIOD:
include equipm busines is due t availab	s the purcha ent replace s case was r o a significa	supports substation rebuild requirements across our entire service territory. This use of major equipment spares (i.e. power transformers and high voltage breakers), small ments (i.e. Voltage Regulators), and major substation rebuild projects. In 2022, this esponsible for more than 60 separate work items. The variance in the Transfer to Plant and decrease in small equipment replacement projects because of resource and material and a delay in the planned replacement of a mobile transformer (\$3.8M) due to s.
EVIDENCE		SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE
PROJECT	was PRODE g document	NT for example, stakeholder meeting approval, CPG funds change requests (please attach
PROJECT Supportin	g document overruns we	NT for example, stakeholder meeting approval, CPG funds change requests (please attach
PROJECT supportin No cost monitor	g document overruns we ed through	NT for example, stakeholder meeting approval, CPG funds change requests (please attach ation):  ere associated with this Business Case (project) for 2022. This Business Case was

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

**DIRECTOR SIGNATURE:** 

**BUSINESS CASE OWNER SIGNATURE:** 

2/20/2023

Signed by: glenn.madden@avistacorp.com

RHIST	NESS	CASE	NAME:
DUSI	IACOD	CHOL	MAIVIE.

Transmi	ssion Comp	liance - Construction
		PORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGER of with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Transmission Compliance - Construction Business Case was developed to comply with standards and codes. Many of the projects within this Business Case are developed to comply with North American Electric Reliability Corporation required standards. Others are developed to comply with National Electric Safety Code (NESC) rules as adopted into the Washington Administrative Code. Work associated with this Business Case is typically identified via Avista's System Planning Group; or, in the case of NESC driven projects, the Transmission Line Design Group.

For the January-December fiscal year 2022 the Transmission Compliance - Construction Business Case was funded (spend) at \$2,650,000 and later amended by a \$1,250,000 Request for additional funds via the Capital Planning Group (CPG). The transfer to plant variance stems from the Boulder-Irvin #1 115kV Transmission Line Rebuild Project. The cause of the variance can be attributed to underestimating/underbudgeting. Originally a feasibility estimate of \$500,000/mile was made for the 4-mile project and wasn't updated to reflect the impact of building Distribution underbuild span lengths (16 poles per mile as opposed to 10 poles per mile for Transmission only). Additionally, the feasibility estimate didn't take into consideration the inflation driven large impacts to Supply Chain and construction costs that occurred in 2021-2022.

This project, along with another similar project (captured in a different Business Case) show that this type of construction will now cost \$1,000,000/mile or more depending upon complexities encountered.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

Cost overruns were associated with this Business Case (project) for 2022. This Business Case was monitored through the year and reviewed at the Electrical Engineering Budget Committee each month. As cost overruns were identified, a decision was made to request additional funds through the CPG process. Attached is the formal request for additional funding

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are offsets associated with this project. The nature of the project includes replacing conductor, as such and with placing into service in 2022, we can assume an indirect O&M savings due to lower line losses as originally reported. Attached is the associated Capital Investments Offset form.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

APPROVED By Ken Sweigert at 2:43 pm, Feb 10, 2023 DIRECTOR SIGNATURE:

# 2022-2023 CAPITAL PROJECT SAVINGS AND PRODUCTIVITY REPORTING FORM

1. Business Case Name: Transmission Construction - Compliance

2. Business Case Owner: Ken Sweigart

3. Director Responsible: Vern Malensky

4. **Direct Savings** - Description of Estimated Direct Savings Resulting from this Business Case (please describe and quantify any hard cost savings Avista's customers will gain due to the work under this project. Such savings could include reductions in labor, reduced maintenance due to new equipment, or other):

Quantified direct savings:

2022	2023	Lifetime

5. Indirect Savings - Description of Estimated Indirect Savings and/or Productivity Gains Resulting from this Project (please describe and quantify any indirect cost savings or productivity gains Avista's customers will gain from this project). For example, deploying this capital investment reduces the future need to hire X number of employees. For a new substation or transmission line, are there efficiencies to be gained from less line losses. Or, if we don't do this project now, if may cost more in the future (cost avoidance).

The business case includes indirect savings realized when replacing an existing conductor with another that has fewer losses due to a reduced impedance. Power loss savings were made using the average line loading that was provided by Avista's Transmission System Planning Department. A Mid-C Heavy Load price of energy was used to calculate the savings.

Quantified indirect savings:

2022	2023	Lifetime
\$5,599.01	\$4,966.87	

6. No Direct or Indirect Savings – These are projects where there are NO identifiable direct or indirect cost savings for customers, as they are required by law, or simply after thorough review have no offsets. (For these projects, please think through any potential offsets, as having no offsets is a high hurdle). If the work is required by law or rule, please identify the law and describe and quantify any risk or penalty Avista's customers will endure due to non-compliance.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

Director Name V	ern Malensky	
Director Signature	Ven Wd	
Date 2/14/2	023	

#### 1.0 CHANGE REQUEST #1 – 11-1-2022

Previous Requests	Requested	Approved	
5-Year Plan	\$2,650,000	\$2,650,000	

For new change requests, update the Change Request # and Date. Add a new line to the table to log previous change requests

Month -	YTD Spend	Current	Requested	Proposed
Year		Approval	Change	Annual Total
#1: 11-2022	Wait for Oct #'s	\$2,650,000	\$1,250,000	\$3,900,000

Type of Change	In-year Update	
Primary Reason for Change	Revised Cost	
Response needed by	11/18/2022	

# 1.1 ALL ITEMS IN THIS SECTION MUST THOROUGHLY DESCRIBE THE REASON FOR THE FUNDS CHANGE REQUEST, INCLUDING BUT NOT LIMITED TO:

1.1.1 Identify what has changed such that the current approved amount is not sufficient.

Request covers the need to rebuild the Boulder-Irvin #1 115kV Transmission Line due to the majority of poles failing NESC strength requirements. Strength analysis was triggered by a Joint Use attachment request. The 2022 project phase is in construction and is expected to complete in November. Inflation and construction complexity have led to the revised expected spend for 2022. The remaining work is to be completed in 2023. The work scope for 2022 was such that reducing scope to match budget proved difficult.

1.1.2 Identify why this work is needed now and what risks may result if this request is not approved or if it is deferred.

Work is in construction and is expected to complete in November. To accommodate this work within TLD's existing budget, adjustments were made to the Transmission Major Rebuild – Asset Condition (TMR-AC) Business Case (BC) that shifted spend to 2023. If not for the Transmission Compliance – Construction (TCC) work this TMR-AC money would have been spent in 2022. Please see associated BCFCR TMR-AC BC release of \$1,250,000 to accommodate this work.

1.1.3 Please reference analysis or information that support the problem and attach to this document.

Please see 1.1.1.

1.1.4 Outline any business functions and processes that may be impacted (and how) by the business case for it to be successfully implemented; including additional O&M costs, employee or staffing, reductions to O&M (offsets), etc.

No impacts expected.

### Transmission Compliance - Construction BC 2022 In-Year #1

- 1.1.5 Discuss what alternatives were considered. Describe why this is the best and/or least cost alternative (e.g., cost benefit analysis, attach as supporting documentation).
  Please see 1.1.1.
- 1.1.6 Discuss, if given this change, how this investment is still prudent for the company to continue for the benefit of our customers.
  - Request of funds elevates prudency (deterance of expensive Construction reduction modifications).
- 1.1.7 Confirm that the justification narrative is still valid given the nature of this change. If not, indicate that the narrative will be updated to incorporate.

The Justification Narrative is still valid.

### 2.0 CHANGE REQUEST APPROVAL AND AUTHORIZATION

Name	Role	Signature	Date
Ken Sweigart	BC Owner		
	BC Sponsor		
	FP&A		

B	JSI	N	ESS	CA	SF	NA	M	E:
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Transmission Major Rebuild – Asset Condition

FOR THE CURRENT REPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGED SINCE FILED (on record with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?

☐ Yes ☐ No If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Transmission Major Rebuild – Asset Condition Business Case was developed in response to the general aging of Transmission Line assets with replacements generally made in accordance with the Asset Management Transmission Line Priority Model spreadsheet. Work associated with this Business Case typically involves the replacement of existing structures (updated in height and strength class to accommodate future wire upgrades).

Starting in 2021 a large project (Lolo-Oxbow 230kV Structure Replacement Phase 2) began. This project was constructed over the 2021-2022 Winter, bridging the 2021-2022 fiscal years, with an in-service plan of May 2022 at approx. \$5.7M. Due to Avista entering the Energy Imbalance Market in 2022 it was decided to reduce the scope of this project, allowing for an earlier completion date at a revised in-service cost of approx. \$3.5M and subsequent availability of the Lolo-Oxbow 230kV Transmission Line for any needed check out and commissioning. This is the reason for the reduced Transfer to Plant in 2022. The remaining 2022 Business Case budget (spend) was redirected to the next prioritized project which is expected to be placed in service in 2023.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

No costs overruns were associated with this Business Case (project) for 2022. However, this Business Case is monitored through the year and reviewed at the Electrical Engineering Budget Committee each month. If a cost overrun were to occur, a discussion and decision would direct the appropriate path forward.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no revised offsets associated with this project. The nature of the project includes replacing conductor, as such and with placing into service in 2022, we can assume the same indirect O&M savings due to lower line losses as originally reported.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

APPROVED

By Ken Sweigart at 2:47 pm, Feb 10, 2023

DIRECTOR SIGNATURE:

# 2022-2023 CAPITAL PROJECT SAVINGS AND PRODUCTIVITY REPORTING FORM

1. Business Case Name: Transmission Major Rebuild - Asset Condition

2. Business Case Owner: Ken Sweigart

3. Director Responsible: Vern Malensky

4. Direct Savings - Description of Estimated Direct Savings Resulting from this Business Case (please describe and quantify any hard cost savings Avista's customers will gain due to the work under this project. Such savings could include reductions in labor, reduced maintenance due to new equipment, or other):

Quantified direct savings:

2022	2023	Lifetime

5. Indirect Savings - Description of Estimated Indirect Savings and/or Productivity Gains Resulting from this Project (please describe and quantify any indirect cost savings or productivity gains Avista's customers will gain from this project). For example, deploying this capital investment reduces the future need to hire X number of employees. For a new substation or transmission line, are there efficiencies to be gained from less line losses. Or, if we don't do this project now, if may cost more in the future (cost avoidance).

The business case includes indirect savings realized when replacing an existing conductor with another that has fewer losses due to a reduced impedance. Power loss savings were made using the average line loading that was provided by Avista's Transmission System Planning Department. A Mid-C Heavy Load price of energy was used to calculate the savings.

Quantified indirect savings:

2022	2023	Lifetime
\$10,256.75	\$9,098.73	

6. No Direct or Indirect Savings – These are projects where there are NO identifiable direct or indirect cost savings for customers, as they are required by law, or simply after thorough review have no offsets. (For these projects, please think through any potential offsets, as having no offsets is a high hurdle). If the work is required by law or rule, please identify the law and describe and quantify any risk or penalty Avista's customers will endure due to non-compliance.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

Director Name	Vern Malencky	
Director Signati	ure Va W	
Date 2/14/	2023	

RΙ	151	NESS	CASE	MAM	F.
D.	, ,,,	MEDO	CMJL	INVIVI	

Transmi	ssion NERC	Low-Risk Priority Line Ratings Mitigation
		EPORTING PERIOD (JAN – DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGE rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
☐ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

The Low Priority Ratings Mitigation Business Case was developed in response to a North American Electric Reliability Corporation "Alert" requiring all utilities to field confirm their Transmission Line Capacity and Operating ratings. To bring the field conditions in line with the stated capacity ratings a multi-year program was initiated. The primary means to accomplish the mitigation involves changing existing structures with taller replacements.

For the January-December fiscal years 2022 and 2023 the Low-Risk Priority Line Ratings Mitigation Business Case was/is funded at \$2,500,000 respectively. Starting in 2022 a large project (Ninth & Central – Third & Hatch: Latah Tap 115kV Transmission Line Structure Replacement) began. Due to Supply Chain considerations the steel poles for the entire project were purchased in 2022, with only a percentage being installed. The 2022 budget did not allow for the entirety of the poles to be installed. The remaining poles will be installed in 2023.

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

No costs overruns were associated with this Business Case (project) for 2022. However, this Business Case is monitored through the year and reviewed at the Electrical Engineering Budget Committee each month. If a cost overrun were to occur, a discussion and decision would direct the appropriate path forward.

#### ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

There are no additional revised offsets associated with this project. The nature of the project (replacing poles only before end of life) does not change maintenance schedules, and therefore no offsets were /are realized.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

APPROVED

By Ken Sweigert at 2:49 pm, Feb 10, 2023

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## CAPITAL ADDITIONS VARIANCE EXPLANATION FORM

BUSINESS CASE NAME	Rι	JSIN	FSS	CASE	NAM	IF.
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Westsid	le 230/115I	V Station Brownfield Rebuild Project
		EPORTING PERIOD (JAN — DEC 2022), HAS YOUR BUSINESS CASE JUSTIFICATION CHANGE rd with FP&A as of Sept 2021 for the 2022-2027 5 year planning cycle)?
□ Yes	⊠ No	If yes, please attach revised business case.

PLEASE EXPLAIN THE TRANSFER TO PLANT VARIANCE OF GREATER THAN \$500,000 AND +/-10% FOR THE CURRENT REPORTING PERIOD:

This business case supports the complete rebuild of the Westside Substation in Spokane, which was prioritized high due to equipment failure, asset condition and capacity needs. This is a transmission substation (230kV to 115kV) that required the teams to keep energized during the construction process to support reliable service to our customers in the area. Because of this constraint, the project was separated into three phases of construction. As work was completed in each phase, the project costs for that work were transferred to plant. Phase 1 was completed prior to 2020. Phase 2 includes Auto Transformer #2, high voltage breakers, and Transmission related components, which was completed in 2022. Phase 3 is anticipated to be complete in 2024. The reason for the transition to Phase 2 completion in 2022 instead of 2021 was due to planned outage constraints, supply chain issues and resource constraints, which limited the ability to complete this work as planned.

2022 Planned TTP: \$0 2022 Actual TTP: \$3,292,230 (100% over budgeted TTP)

EVIDENCE THAT ANY SIGNIFICANT COST OVERRUNS AND THE DECISION TO CONTINUE TO INVEST IN THE PROJECT WAS PRUDENT for example, stakeholder meeting approval, CPG funds change requests (please attach supporting documentation):

No cost overruns were associated with this Business Case (project) for 2022. This Business Case was monitored through the year and reviewed at the Electrical Engineering Budget Committee each month. There are no significant cost overruns associated with Phase 2 of the Westside Rebuild Project. There were construction delays due to COVID in 2020. A mid-year budget request (\$1.2m) was made in 2022 to include the cost of the high voltage breakers that arrived in late 2022 instead of the early 2023.

ARE THERE REVISED OFFSETS ASSOCIATED WITH THIS CHANGE IN PLANT ADDITIONS? Please explain.

The offsets for the Westside Rebuild Project have not changed. O&M costs will remain the same for the new station as they are for the current station, however the calendar for maintenance work will start new with each equipment install.

I have reviewed the information contained in this response for this specific business case, and to the best of my knowledge the information is true, correct, and comprehensive.

BUSINESS CASE OWNER SIGNATURE:

2/22/2023

Signed by, glenn madden@avistacarp.com

**DIRECTOR SIGNATURE:** 

### ATTACHMENT D

Table No. 1 below provides a listing of all Business Cases not previously included in the Company's original filing in Dockets UE-220053, et. al., and where actual 2022 additions were below the \$500,000 and +/- 10% "significant cost variance" threshold. A summary description of the listed Business Case follows.

<u>Table No. 1 – Business Case Amount Variance - As-Filed versus Actual – Below "Significant Cost Variance"</u> Threshold

						Variance \$
		20	22 TTP Plan	20	022 Actual TTP	over/(under)
Business Case	įΨ		Gross Plant 💌		Gross Plant ▼	Gross Plant 💌
Gas Warden HP Reinforcement		\$	-	\$	202,293	\$ 202,293
Strategic Initiatives - Real Time Power System Simulator		\$	-	\$	2,529	\$ 2,529
Telecommunication & Network Distribution location Security		\$	-	\$	120,514	\$ 120,514

### **Gas Warden HP Reinforcement**

Gas supply to Warden, Washington currently has two constraints. 1) The town is supplied gas from the fully-subscribed and capacity-constrained Moses Lake lateral (owned by Williams NWP). Warden has a design-day need projected to be 1,472 dekatherm per day (Dth/day). Avista has Firm transportation capacity for 1,180 Dth/day. The capacity gap of 292 Dth/day can be served on a non-Firm basis, but there is a risk of not being able to serve Firm customers in Warden during severe cold weather events. In order to meet our obligation to serve current Firm loads in Warden on a peak day, Avista requires incremental capacity from Williams NWP. Williams NWP provided an estimate of \$9.85 million to increase the capacity of the Moses Lake lateral. 2) The high pressure (HP) supply line into town has reached its capacity. Sufficient capacity is defined as pressures at or above 90 pounds per square inch (psig) in a HP distribution system on a design day analysis. Gas Engineering will be responsible for distribution system changes. This ER is specific to the work and costs associated with Avista's distribution system upgrades.

As a result of current capacity/supply constraints, industrial gas growth opportunities are hampered within the Port of Warden Industrial Park as well as other sites in the area. Grant County Economic Development Council and the Port of Warden have contacted Avista several times related to different commercial ventures interested in the Port site. Avista's largest gas customer in Warden, Washington Potato, has also shared that they wish to increase their plant's capacity and gas usage.

The recommended solution for increasing the capacity of Avista's distribution system is to perform an uprate of the existing 4" HP line. The uprate will increase the Maximum Allowable Operating Pressure (MAOP) of the pipeline from 150 psig to 250 psig. The capacity of the uprated pipeline will nearly double from 98 Mcfh to 195 Mcfh.

### Strategic Initiative – Real Time System Simulator

Enabling a flexible and realistic utility test environment requires specialized equipment, called a real time power system simulator (RTS). The RTS consists of specialized computing hardware connected to dedicated simulation software, plus the ability to interface to equipment being tested. This is known as hardware-in-the-loop simulation (HIL). The proposed solution to the need of the Integrated Test Facility is procuring and RTS solution.

### ATTACHMENT D

The proposed integrated test facility, which will reside within the Scott Morris Center for Energy Innovation, has the goal to contribute to the successful integration of evolving grid edge technologies. To date, a significant barrier to deploying new devices on the grid centers on the development of operational confidence, standards, and procures necessary to integrate new technologies safely, reliably and cost effectively. Simulated grid environments accelerate the ability to develop, validate and operationalize new grid solutions. The Integrate Test Facility requires simulation equipment to meet its goals.

### **Telecommunication & Network**

Security is an expectation of companies today by customers. Especially companies considered critical infrastructure. Protecting communication infrastructure is vital as many of Avista's business processes depend on network communications, and without them, they could not function which could have an impact on our day-to-day operations that are needed to support our customers. The capital budget requested, funds the security protections that benefit Avista customers, as the enhancements maintain and enhance Avista's security posture to minimize the risks associated with attacks at Avista telecommunication & network distribution locations.

#### Net Plant After ADFIT Approved per Two-Year Rate Plan - Order 10/04, per Dockets UE-220053, UG-220054, UE-210854 (Consolidated)

	W	ashington Electric			Wasl	hington Natural G	as
AS-FILED	2022 EOP	2023 AMA	2024 AMA		2022 EOP	2023 AMA	2024 AMA
RATE BASE: PLANT IN SERVICE				RATE BASE: PLANT IN SERVICE			
Intangible	245,398	242,477	242,331	Underground Storage	34,690	35,395	36,814
Production	1,018,802	1,035,013	1,057,251	Distribution Plant	646,599	662,437	698,288
Transmission	647,493	659,623	689,767	General Plant	164,330	163,735	162,015
Distribution	1,459,437	1,495,321	1,601,342				
General	325,249	328,072	330,561				
Total Plant in Service	3,696,379	3,760,506	3,921,252	Total Plant in Service	845,619	861,567	897,117
ACCUMULATED DEPRECIATION				ACCUMULATED DEPREC/AMORT			
Intangible	(124,723)	(130,904)	(137,436)	Underground Storage	(13,209)	(13,464)	(13,987)
Production	(469,836)	(482,874)	(510,771)	Distribution Plant	(181,521)	(188,443)	(202,537)
Transmission	(172,273)	(177,972)	(189,335)	General Plant	(64,965)	(67,861)	(68,055)
Distribution	(436,100)	(452,568)	(483,918)				
General	(111,780)	(117,806)	(117,249)				
Total Accumulated Depreciation	(1,314,712)	(1,362,123)	(1,438,709)	Total Accum. Depreciation/Amort.	(259,695)	(269,768)	(284,579)
NET PLANT	2,381,667	2,398,383	2,482,543	NET PLANT	585,924	591,799	612,538
DEFERRED TAXES	(412,969)	(414,327)	(416,981)	DEFERRED FIT	(82,363)	(81,651)	(80,192)
NET PLANT AFTER ADFIT	1,968,698	1,984,056 (1)	2,065,562 (1)	NET PLANT AFTER ADFIT	503,561	510,148 (1	532,346 (1

(1) Net Plant After ADFIT approved per Order 10/04, per Dockets UE-220053, UG-220054, UE-210854(Consolidated) as of AMA 2023 Rate Year 1 (RY1) and AMA 2024 Rate Year 2 (RY2). Other balances, including EOP 2022, not specifically approved per Black Box Settlement of overall approved Revenue Requirement over the Two-Year Rate Plan. While individual balances by functional groups/components not specifically approved, amounts are illustrative of required amounts to result in the overall Net Plant After ADFIT balances approved for RY1 and RY2, and are supported by Avista's direct filed general rate case.

Actual GRC Modeled Activity		Wasl	hing	ton Electric	(000s)				Washing	gton N	atural Gas	(000	s)
Transfers to Plant (additions)	2	2022 EOP	20	23 AMA	2	024 AMA	Transfers to Plant (additions)	20	22 EOP	202	3 AMA	20	24 AMA
Year of Additions:		2022		2023		2024	Year of Additions:		2022	2	2023		2024
As-Filed Transfers-To-Plant (2)	\$	167,665	\$	64,127	\$	160,746	As-Filed Transfers-To-Plant	\$	46,387	\$	15,948	\$	35,550
Actual Transfers-To-Plant	\$	214,330					Actual Transfers-To-Plant	5	54,698				
Variance Over/(Under) Authorized	\$	46,665					Variance Over/(Under) Authorized	\$	8,311				
Total Plant in Service	\$	3,737,562					Total Plant in Service \$	3	853,585				
Net plant After ADFIT							Net plant After ADFIT						
	\$						·	,					
Accumulated Depreciation	\$	(1,329,930)					Accumulated Depreciation \$	)	(265,490)				
Deferred Taxes	\$	(405,812)					Deferred Taxes	3	(83,863)				
Net Plant After ADFIT	\$	2,001,820	\$	-	\$	-	Net Plant After ADFIT	3	504,232	\$	-	\$	-
Variance Over/(Under) Authorized	\$	33,122						3	671				
` ′ ′							<del>-</del>						
xcludes 2022 Colstrip Units 3 and 4 additio	ns (	transfers-to-pla	ant).										

# AVISTA UTILITIES WASHINGTON ELECTRIC RESULTS (\$ '000s)

	As Authorized								
	09.30.2021 AMA ROO	Deferred FIT Rate Base	Restate 09.2021 AMA Rate Base to EOP	09.30.2021 EOP Restated Total	PF AMI Amortization	PF 09.2021 EOP Rate Base to 12.31.2021 EOP	PF EIM Capital 2021-2022 Additions	PF 12.2021 EOP Wildfire Additions	REMOVED - PF 12.2021 EOP Colstrip Additions
RATE BASE		Adj. 1.01	Adj. 2.15		Adj. 3.04	Adj. 3.15	Adj. 3.17	Adj. 3.18	Adj. 3.19
PLANT IN SERVICE									
Intangible	\$230,718	\$0	\$7,692	\$238,410	\$0	\$4,504	\$7,172	\$99	\$0
Production	948,067	0	14,773	962,840	0	7,849	78	0	(2,001)
Transmission	575,635	0	32,625	608,260	0	14,068	33	726	0
Distribution	1,327,782	0	29,355	1,357,137	0	19,613	44	1,677	0
General	294,532	0	10,592	305,124	0	10,374	484	2	0
Total Plant in Service	3,376,734	0	95,037	3,471,771	0	56,408	7,811	2,504	(2,001)
ACCUMULATED DEPRECIATION/AMORT									
Intangible	(\$84,845)	\$0	(\$7,817)	(\$92,662)	\$0	(\$2,856)	(\$1,227)	(\$2)	\$0
Production	(423,739)	0	(14,429)	(438,168)	0	(3,724)	(3)	0	(2,998)
Transmission	(158,761)	0	(751)	(159,512)	0	(1,777)	(1)	(2)	0
Distribution	(384,189)	0	(15,212)	(399,401)	(\$20,967)	(6,858)	(1)	(3)	0
General	(99,285)	0	(5,762)	(105,047)	0	(1,143)	(42)	0	0
Total Accumulated Depreciation	(1,150,819)	0	(43,971)	(1,194,790)	(20,967)	(16,358)	(1,274)	(7)	(2,998)
NET PLANT	2,225,915	0	51,066	2,276,981	(20,967)	40,050	6,537	2,497	(4,999)
ACCUMULATED DEFERRED TAXES	(428,637)	(680)		(406,194)		(5,216)	(235)		9
Net Plant After ADFIT	1,797,278	(680)	74,189	1,870,787	(20,967)	34,834	6,302	2,497	(4,990)

<sup>[1]</sup> As-filed had the PF AMI amortization classified as intangibles, reclassified below to distribution (meters). No impact on overall balances.

<sup>[2] 2022</sup> Actual Activity excludes Colstrip capital additions.

<sup>[3]</sup> The PF AMI amortization adjustment was recorded in January 2022. Therefore, it's included in the 2022 activity.

<sup>[4]</sup> Two main variances in transfers to plant for calendar year 2022 relate to the KF\_Fuel Yard Equipment Replacement (\$31.1 million system) and New Revenue-Growth (\$25.4 million system) Business Cases as seen on Attachment A - Variances Summary.

# AVISTA UTILITIES WASHINGTON ELECTRIC RESULTS (\$ '000s)

	Provisional Capital Groups 2022 Adds EOP	Provisional Wildfire 2022 Capital EOP & O&M	REMOVED - Provisional Colstrip 2022 Capital Additions	12 ME 12.2022 EOP Net Plant
RATE BASE	Adj. 4.01	Adj. 4.04	Adj. 4.06	
PLANT IN SERVICE				
Intangible	(\$4,853)	\$66	\$0	\$245,398
Production	50,036	0	0	1,018,802
Transmission	21,649	2,757	0	647,493
Distribution	69,477	11,489	0	1,459,437
General	8,788	477	0	325,249
Total Plant in Service	145,097	14,789	0	3,696,379
ACCUMULATED DEPRECIATION/AMORT				
Intangible	(\$6,978)	(\$31)	\$0	(\$103,756)
Production	(12,973)	0	(11,969)	(469,835)
Transmission	(10,942)	(39)	0	(172,273)
Distribution	(29,646)	(190)	0	(457,066)
General	(5,540)	(9)	0	(111,781)
Total Accumulated Depreciation	(66,079)	(269)	(11,969)	(1,314,711)
NET PLANT	79,018	14,520	(11,969)	2,381,668
ACCUMULATED DEFERRED TAXES	(620)	(714)	1	(412,969)
Net Plant After ADFIT	78,398	13,806	(11,968)	1,968,699

		Actual		
09.30.2021 EOP Restated Total	PF 09.2021 EOP Rate Base to 12.31.2021 EOP (Actual Data)	12.31.2021 EOP Restated Total	2022 Actual Activity [2] [3]	12 ME 12.2022 EOP Net Plant
	Actual		Actual	
\$238,410 962,840	\$5,407 4,067	\$243,817 966,907	\$6,158 68,389	\$249,975 1,035,296
608,260	10,464	618,724	32,634	651,357
1,357,137	25,517	1,382,654	102,344	1,484,998
305,124	6,007	311,131	4,805	315,936
3,471,771	51,461	3,523,232	214,330	3,737,562
(\$92,662) (438,168)	(\$5,705) (7,443)	(\$98,367) (445,611)	(\$8,716) (26,743)	
(159,512)	(3,281)	(162,793)	(12,083)	(174,876
(399,401)	(7,745)	(407,146)	(53,934)	(461,080
(105,047)	(2,934)	(107,981)	(6,556)	(114,538
(1,194,790)	(27,109)	(1,221,899)	(108,032)	(1,329,930
2,276,981	24,353	2,301,334	106,298	2,407,632
(406,194)	2,356	(403,838)	(1,975)	
1,870,787	26,709	1,897,496	104,324	2,001,820

Incremental Net Plant After ADFIT - Actual vs. Authorized [4]

33,121

Business Cases as seen on Attachment A - Varian

<sup>[1]</sup> As-filed had the PF AMI amortization classifie

<sup>[2] 2022</sup> Actual Activity excludes Colstrip capital

<sup>[3]</sup> The PF AMI amortization adjustment was reco

<sup>[4]</sup> Two main variances in transfers to plant for ca

**AVISTA UTILITIES** WASHINGTON NATURAL GAS RESULTS (\$ '000s)

`		As Authorized									
	09.30.2021 AMA ROO	Deferred FIT Rate Base	Restate 09.2021 AMA Rate Base to EOP	09.30.2021 EOP Restated Total	PF AMI Amortization	PF 09.2021 EOP Rate Base to 12.31.2021 EOP	Provisional Capital Groups 2022 Adds EOP	12 ME 12.2022 EOP Net Plant			
RATE BASE		Adj. 1.01	Adj. 2.15		Adj. 3.04	Adj. 3.15	Adj. 4.01				
PLANT IN SERVICE											
Underground Storage	\$32,352	\$0	\$737	\$33,089	\$0	\$189	\$1,412	\$34,690			
Distribution Plant	571,039	0	21,202	592,241	0	9,479	44,879	646,599			
General Plant	158,395	0	2,983	161,378	0	2,856	96	164,330			
Total Plant in Service	761,786	0	24,922	786,708	0	12,524	46,387	845,619			
ACCUMULATED DEPRECIATION/AMORT											
Underground Storage	(\$12,363)	\$0	(\$233)	(\$12,596)	\$0	(\$120)	(\$493)	(\$13,209)			
Distribution Plant	(161,309)	0	(5,546)	(166,855)	0	(2,943)	(11,723)	(181,521)			
General Plant	(52,407)	0	(4,044)	(56,451)	(4,097)	(1,279)	(3,138)	(64,965)			
Total Accumulated Depreciation	(226,079)	0	(9,823)	(235,902)	(4,097)	(4,342)	(15,354)	(259,695)			
NET PLANT	535,707	0	15,099	550,806	(4,097)	8,182	31,033	585,924			
ACCUMULATED DEFERRED TAXES	(97,558)	227	11,396	(85,935)	0	2,566	1,006	(82,363)			
Net Plant After ADFIT	438,149	227	26,495	464,871	(4,097)	10,748	32,039	503,561			

<sup>[1]</sup> The PF AMI amortization adjustment was recorded in January 2022. Therefore, it's included in the 2022 activity.
[2] The main variance in transfers to plant for calendar year 2022 relate to the New Revenue-Growth Business Case (\$25.4 million system).

### AVISTA UTILITIES WASHINGTON NATURAL GAS RESULTS (\$ '000

	Actual							
	09.30.2021 EOP Restated Total	PF 09.2021 EOP Rate Base to 12.31.2021 EOP (Actual Data)	12.31.2021 EOP Restated Total	2022 Actual Activity [1]	12 ME 12.2022 EOP Net Plant			
RATE BASE		Actual		Actual				
PLANT IN SERVICE								
Underground Storage	\$33,089	\$296	\$33,385	\$1,469	\$34,854			
Distribution Plant	592,241	9,954	602,195	52,526	654,720			
General Plant	161,378	1,930	163,308	703	164,011			
Total Plant in Service	786,708	12,180	798,888	54,698	853,585			
ACCUMULATED DEPRECIATION/AMORT								
Underground Storage	(\$12,596)	(\$121)	(\$12,717)	(\$501)	(\$13,218)			
Distribution Plant	(166,855)	(3,316)	(170,171)	(19,057)	(189,228)			
General Plant	(56,451)	(1,774)	(58,225)	(4,819)	(63,044)			
Total Accumulated Depreciation	(235,902)	(5,211)	(241,113)	(24,377)	(265,490)			
NET PLANT	550,806	6,968	557,774	30,321	588,095			
ACCUMULATED DEFERRED TAXES	(85,935)	500	(85,435)	1,572	(83,863)			
Net Plant After ADFIT	464,871	7,468	472,339	31,893	504,232			

Incremental Net Plant After ADFIT - Actual vs. Authorized [2] 671

<sup>[1]</sup> The PF AMI amortization adjustment was reco [2] The main variance in transfers to plant for cale

Row Labels	Sum of Q4 2021 TOTAL - System	Sum of 2022 TOTAL - System	Sum of WA - Electric Q4 2021 TOTAL	Sum of WA - Electric 2022 TOTAL	Sum of WA - Natural Gas 2021 TOTAL	Sum of WA - Natural Gas 2022 TOTAL
1 Yr Software	-	-	-	-	-	(0)
2 Yr Software	31,593	2,536,031	15,097	1,211,838	4,767	382,681
3 Yr Software	4,417,715	10,379,082	2,114,207	5,085,846	663,895	1,473,185
5 Yr Software	9,956,113	36,770,602	5,063,030	21,530,640	1,427,417	2,897,539
E Distribution	40,209,958	155,604,894	26,424,658	105,878,316	-	-
G Distribution	21,373,877	96,557,204	-	-	10,413,249	53,340,249
Gas Storage	476,167	2,363,329	•	-	296,032	1,469,277
General	10,121,704	22,712,743	6,098,654	10,519,168	914,472	3,574,212
Hardware	2,887,985	8,885,748	1,384,142	4,859,165	432,286	1,106,068
Intangible	-	12,960	-	12,960	-	-
Production - Hydro	6,469,293	78,681,865	4,239,975	51,568,094	-	-
Production - Other	78,617	968,976	51,526	635,067	-	-
Production - Thermal	164,086	32,223,366	107,542	21,119,194	-	-
Transmission	15,703,488	50,572,850	10,292,140	33,145,859	-	-
Transportation	1,243,318	7,059,269	580,352	3,099,845	178,823	395,918
Grand Total	113,133,914	505,328,919	56,371,322	258,665,992	14,330,942	64,639,128

Electric	WA Ele	ctric	
PLANT IN SERVICE	 Q4 2021		2022
Intangible	\$ 7,192,334	\$	27,841,285
Production	\$ 4,399,042	\$	73,322,355
Transmission	\$ 10,292,140	\$	33,145,859
Distribution	\$ 26,424,658	\$	105,878,316
General	\$ 8,063,148	\$	18,478,178
Total Plant in Service	\$ 56,371,322	\$	258,665,992

Natural Gas		WA Natur	ral Gas	
PLANT IN SERV	ICE	Q4 2021		2022
	Underground Storage	\$ 296,032	\$	1,469,277
	Distribution Plant	\$ 10,413,249	\$	53,340,249
	General Plant	\$ 3,621,660	\$	9,829,602
Total Plant in Serv	rice	\$ 14,330,942	\$	64,639,128

Activity Code	Retirements
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		Q4 2021								2022														
Functional Area	Tota	al\$	WA	\-E\$	WA	\-G \$	ID-E	\$	ID-0	G \$	OR-	G \$	То	tal \$	WA	4-E \$	W	4-G \$	ID-	E\$	ID-0	G \$	OR	R-G \$
E Distribution	\$	(1,517,417)	\$	(908,017)	\$	-	\$	(609,401)	\$	-	\$	-	\$	(4,765,532)	\$	(3,534,240)	\$	-	\$	(1,231,291)	\$	-	\$	-
G Distribution	\$	(795,237)	\$	-	\$	(459,688)	\$	-	\$ (	(157,967)	\$ (1	77,583)	\$	(1,755,282)	\$	-	\$	(814,702)	\$	-	\$	(283,455)	\$	(657,125)
General	\$	(3,305,340)	\$	(1,517,531)	\$	(841,546)	\$	(688,607)	\$	(97,521)	\$ (1	60,135)	\$	(23,008,551)	\$	(11,616,614)	\$	(3,255,323)	\$	(5,310,398)	\$ (	1,056,176)	\$	(1,770,040)
Intangibles	\$	(3,735,856)	\$	(1,785,173)	\$	(563,732)	\$	(829,852)	\$ (	(209,404)	\$ (3	347,696)	\$	(43,002,775)	\$	(21,683,551)	\$	(5,657,051)	\$	(10,079,773)	\$ (	2,101,368)	\$	(3,481,032)
Production - Hydro	\$	(208,856)	\$	(136,884)	\$	-	\$	(71,972)	\$	-	\$	-	\$	(91,553)	\$	(60,004)	\$	-	\$	(31,549)	\$	-	\$	-
Production - Other	\$	(213,461)	\$	(139,902)	\$	-	\$	(73,559)	\$	-	\$	-	\$	(528,370)	\$	(346,294)	\$	-	\$	(182,076)	\$	-	\$	-
Production - Thermal	\$	(84,983)	\$	(55,698)	\$	-	\$	(29,285)	\$	-	\$	-	\$	(6,894,090)	\$	(4,526,612)	\$	-	\$	(2,367,478)	\$	-	\$	-
Transmission	\$	266,605	\$	171,368	\$	-	\$	95,237	\$	-	\$	-	\$	(781,224)	\$	(511,957)	\$	-	\$	(269,267)	\$	-	\$	-
Transportation - Tools	\$	(1,504,754)	\$	(538,341)	\$	(286,389)	\$	(356,344)	\$ (	(179,629)	\$ (1	44,051)	\$	(3,991,532)	\$	(2,056,707)	\$	(214,217)	\$	(1,176,825)	\$	(308,542)	\$	(235,243)
Grand Total	\$	(11.099.300)	\$ (	(4.910.177)	\$ (	(2.151.355)	\$	(2.563.783)	\$ (	644.520)	\$ (8	329,464)	\$	(84.818.910)	\$	(44.335.979)	\$	(9.941.293)	\$	(20.648.657)	\$ (	3.749.540)	\$	(6.143.440)

Electric		WA E	le	ctric
PLANT IN SERVICE		Q4 2021		2022
	Intangible	\$ (1,785,173)	\$	(21,683,551)
	Production	\$ (332,485)	\$	(4,932,910)
	Transmission	\$ 171,368	\$	(511,957)
	Distribution	\$ (908,017)	\$	(3,534,240)
	General	\$ (2,055,872)	\$	(13,673,321)
Total Plant in Service		\$ (4,910,177)	\$	(44,335,979)
Natural Gas		WA Nat	ur	al Gas
PLANT IN SERVICE		Q4 2021		2022
	Underground Storage	\$ -	\$	-
	Distribution Plant	\$ (459,688)	\$	(814,702)
	General Plant	\$ (1,691,667)	\$	(9,126,591)
Total Plant in Service		\$ (2,151,355)	\$	(9,941,293)

ROO Flag	(blank)
GL Service	(Multiple Items)
GL FERC Acct	(Multiple Items)

	Colum Q4 20	nn Labels 21						2022					
Row Labels			of WA-E Activity	Sum of WA-G Activity	Sum of ID-E Activit	y Sum of ID-G Activity	Sum of OR-G Activity	Sum of Total Activity	Sum of WA-E Activity	Sum of WA-G Activity	Sum of ID-E Activity S	Sum of ID-G Activity St	um of OR-G Activity
E Distribution	\$	(11,769,021) \$	(7,745,485)	\$ -	\$ (4,023,53	7) \$ -	\$ -	\$ (72,063,625)	\$ (53,933,626)	\$ -	\$ (18,129,999)	\$ - \$	-
G Distribution	\$	(7,135,879) \$	-	\$ (3,316,093)	- \$	\$ (1,509,173)	\$ (2,310,613)	\$ (35,313,465)	\$ -	\$ (19,056,848)	) \$ - :	\$ (6,600,583) \$	(9,656,034)
General	\$	(4,987,797) \$	(2,619,514)	\$ (513,576)	\$ (1,106,72	1) \$ (291,592)	\$ (456,393)	\$ (9,154,590)	\$ (4,499,559)	\$ (1,944,163)	) \$ (1,671,511) \$	\$ (440,346) \$	(599,011)
Intangibles	\$	(10,535,917) \$	(5,704,619)	\$ (1,418,482)	\$ (2,223,82	9) \$ (449,881)	\$ (739,106)	\$ (14,190,295)	\$ (8,715,607)	\$ (2,038,229)	) \$ (2,249,513) :	\$ (448,415) \$	(738,531)
Production - Hydro	\$	(3,504,750) \$	(2,297,013)	\$ -	\$ (1,207,73	7) \$ -	\$ -	\$ (15,895,863)	\$ (10,418,149)	\$ -	\$ (5,477,714)	\$ - \$	-
Production - Other	\$	(2,532,310) \$	(1,659,676)	\$ -	\$ (872,63	4) \$ -	\$ -	\$ (10,451,289)	\$ (6,849,775)	\$ -	\$ (3,601,514)	\$ - \$	-
Production - Thermal	\$	(4,836,189) \$	(3,485,953)	\$ -	\$ (1,350,23	7) \$ -	\$ -	\$ (12,621,567)	\$ (9,475,115)	\$ -	\$ (3,146,452)	\$ - \$	
Transmission	\$	(5,007,220) \$	(3,281,367)	\$ -	\$ (1,725,85	3) \$ -	\$ -	\$ (18,438,188)	\$ (12,083,007)	\$ -	\$ (6,355,181)	\$ - \$	-
Transportation - Tools	\$	(159,943) \$	(314,979)	\$ 157,599	\$ (74,10	8) \$ 13,381	\$ 58,163	\$ (4,005,380)	\$ (2,056,920)	\$ (836,311)	) \$ (835,437) :	\$ (61,504) \$	(215,208)
Underground Storage	\$	(206,483) \$	-	\$ (120,835)	- \$	\$ (54,772)	\$ (30,877)	\$ (854,107)	\$ -	\$ (501,016)	) \$ - :	\$ (227,099) \$	(125,991)
#N/A	\$	- \$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - :	\$ - \$	
Grand Total	\$	(50,675,511) \$	(27,108,606)	\$ (5,211,387)	\$ (12,584,65	5) \$ (2,292,037)	\$ (3,478,825)	\$ (192,988,368)	\$ (108,031,756)	\$ (24,376,567)	) \$ (41,467,322)	\$ (7,777,948) \$	(11,334,775)

Electric						
ACCUMULATED DEPRECIATION/AMORT						
Intangible						
Production						
Transmission						
Distribution						
General						
Total Accumulated Depreciation						

	WA Ele	ectric
	Q4 2021	2022
\$	(5,704,619)	\$ (8,715,607
\$	(7,442,642)	\$ (26,743,038
\$	(3,281,367)	\$ (12,083,007
\$	(7,745,485)	\$ (53,933,626
\$	(2,934,493)	\$ (6,556,478
\$	(27.108.606)	\$ (108.031.756

Natural Gas
ACCUMULATED DEPRECIATION/AMORT
Underground Storage
Distribution Plant
General Plant
Total Accumulated Depreciation/Amortization

	WA Nati	ıral	Gae
	Q4 2021	ui ai	2022
\$	(120,835)	\$	(501,016)
\$	(3,316,093)		(19,056,848)
\$	(1,774,459)	\$	(4,818,703)
\$	(5.211.387)	\$	(24.376.567)

Sum of Monthly Activity						
	CD	CD	ED	GD	GD	<b>Grand Total</b>
FERC Account	AA	AN	AN	AN	OR	
282900	2,897,404	(7,991)	1,433,826	84,910	(320,541)	4,087,608
282919	(25,007)					(25,007)
283200			<u>-</u>			<u>-</u>
283333			1,718			1,718
283382			46,415			46,415
283750	117,972				-	117,972
283850	19,972		12,292		(2.2.2.2.1)	32,264
Grand Total	3,010,341	(7,991)	1,494,250	84,910	(320,541)	4,260,968
ED WA	0.458766892	0 50608677	0.6554			
GD WA	0.146576477		0.000.	0.70827		
\ =						
WA E	4 000 000	(4.0.44)	222 722			0.004.040
282900	1,329,233	(4,044)	939,730			2,264,918
282919	(11,472)		-			(11,472)
283200	-		-			-
283333	-		1,126			1,126
283382	<u>-</u>		30,420			30,420
283750	54,122		-			54,122
283850	9,162	(1.5.1)	8,056			17,219
Grand Total	1,381,045	(4,044)	979,332	-	-	2,356,332
WA G						
282900	424,691	(1,289)		60,139		483,541
282919	(3,665)	( , ,		•		(3,665)
283200	-					-
283333	-					_
283382	-					-
283750	17,292					17,292
283850	2,927					2,927
Grand Total	441,245	(1,289)	-	60,139	-	500,095

Sum of Monthly Activity						
	CD	CD	ED	GD	GD	<b>Grand Total</b>
FERC Account	AA	AN	AN	AN	OR	
282900	5,340,972	31,958	(5,336,149)	1,604,087	(327,378)	1,313,490
282919	(2,043,254)					(2,043,254)
283200			-			-
283333			6,871			6,871
283382			185,658			185,658
283750	(407,160)				-	(407,160)
283850	47,019		49,937		(	96,956
Grand Total	2,937,577	31,958	(5,093,683)	1,604,087	(327,378)	(847,438)
ED WA	0.458766892	0.50608677	0.6554			
GD WA	0.146576477		0.000	0.70827		
WA E						
282900	2,450,261	16,174	(3,497,312)			(1,030,877)
282919	(937,377)		-			(937,377)
283200	-		<b>-</b>			<u>-</u>
283333	-		4,503			4,503
283382	-		121,680			121,680
283750	(186,791)		-			(186,791)
283850	21,571	40.474	32,729			54,300
Grand Total	1,347,663	16,174	(3,338,400)	-	-	(1,974,563)
WA G						
282900	782,861	5,157		1,136,127		1,924,144
282919	(299,493)	-, -		,,		(299,493)
283200	-					-
283333	-					-
283382	-					-
283750	(59,680)					(59,680)
283850	6,892					6,892
Grand Total	430,580	5,157	-	1,136,127	-	1,571,863

# ATTACHMENT F Infrastructure Investment and Jobs Act / Inflation Reduction Act Grant Opportunities

Active Grant Tracking							
Key Dates Submitted & Awarded	Project Title Proposal	Grantor	Contact Internal Contact, Department; External Contact, Company	Status (Scoping, Preparing, In Process, Deferred, Completed)	Cost Avista's Cost Federal/State Cost Share %	Roles Avista's Role Project Sponsor	Agreement Term
5/8/2023	Hydroelectric Production Incentives DE-FOA-0003061 Section 242	DOE	Alexis Alexander	Preparing			
6/20/2023	Hydroelectric Efficiency Improvement Incentives DE-FOA-0003062 Section 243	DOE	Alexis Alexander	Preparing			
4/6/2023	Wildfire Risk Mitigation Accelerate Distribution Grid Hardening Plan and Wildfire Resiliency Program, including focus areas: Risk Based Vegetation, Automate Distribution, Emergency Response	DOE	Dave James, Wildfire Resiliency	In Process	50	Cost Share Avista Utilities	60 months
3/17/2023	Community Grid Platform Build future-looking grid to improve system efficiency, reliability, visibility, communication security, aggregation and integration of distributed energy resources, interoperability, and anticipate and mitigate the impacts of extreme weather or natural disasters.	DOE	Mike Diedesch, Innovation	In Process	50	Cost Share / Pilot Avista Utilities	60 months
	Clean Energy Fund 5 Grid Modernization	DOC	John Gibson	Scoping			
3/23/2023	Solar plus Storage for Resilient Communities  Avista Utilities, The Martin Luther King Community Center, and the City of Spokane partnered to submit a Department of Commerce solar plus storage grant application.	DOC	David Schafer	In Process	\$1,500,000	Subrecipient	Completion by June 30, 2024
3/23/2023	Tribal Formula Grant Funding for Energy Resilinece Investments	DOE	Meghan Pinch	In Process	\$991,000	Subrecipient  Spokane Tribe	
	Inland NW Rural Vitality Proposal	US Commerce Minority Business Development Agency (MBDA) Capital Readiness Program	Paul Kimmell				
3/1/2022	Clean Energy Fund 3/4. Grid Modernization Program Develop a design microgrid product to serve the Spokane Tribal for efficient energy consumption	Dept of Commerce	Megan Pinch, Regulatory	In Process	\$248,000 \$248,000 50/50%	To Be Determined Avista Utilities	
11/6/2022	Utility Residential Customer Arrearage Grant The purpose of this contract is to provide funding for public and private water, sewer, garbage, electric, and natual gas uiltities to address low-income arrearages compounded by the COVID-19 20 pandemic and the related economic downturn that were accrued between March 1, 2020 and December 31, 2021.	DOC	Ana Matthews	Active	\$6,128,248 No cost share	100% grant	11/1/2022- 6/30/2023
3/1/2021 11/11/2021	Avista Innovation Lab AIL Digital Data Platform  Data Platform Development for CEF2 - Funded by PNNL with DOE funds \$300K		Jon Thompson, Innovation  PNNL - Charlie Vartanian	Active	\$150,000 \$300,000 NA	Platform Builder, Data Host  Avista Utilities	11/11/21 - 09/30/24
2/1/2021	Connected Community Funding Opportunity Award US Department of Energy FOA: -0002206	DOE	John Gibson, Innovation EDO LLC	In Process	\$3,202,000 \$1,426,902 69%/31%	Cost Share / Pilot EDO LLC	2021-2026
9/1/2020 8/31/2020	U.S. Department of Energy FOA: DE-FOA-0002064	Georgia Institute of Technology	Kenneth Wilhelm, Innovation	Completed	\$244,605	Award Subrecipient	08/01/2020- 01/31/2022

### Exh. TCB-4

# ATTACHMENT F Infrastructure Investment and Jobs Act / Inflation Reduction Act Grant Opportunities

3/1/2019	2/11/2020	Clean Energy Fund III Eco-District Grid Enabled Buildings. Grid Modernization Program	Dept of Commerce	Mike Diedesch, Innovation & Ryan Cysewski , Substation	Active	\$7,975,000	Project Manager/Pilot	02/11/2020 - 09/30/2023
		Deploy electric and thermal resources in the HUB between the utility and the eco-district.		Forest Watkins, WA DOC		\$2,497,600	Avista Utilities	
		eco-district.				50/50%		
4/1/2017	4/4/2017	Clean Energy Fund II Transactive Grid - Microgrid	Dept of Commerce	Mike Diedesch, Innovation & Ryan Cysewski , Substation	Completed	\$8,652,201	Project Manager/Pilot	09/29/2016 - 03/31/2021
		Develop a micro-transactive grid in Spokane consisting of distributed energy resources including solar, energy storage, and automated buildings connected to a smart, dual fed distribution loop.		Bob Kirshmire, WA DOC		\$3,500,000	Avista Utilities	
		•				50/50%		
10/1/2017	10/1/2017 7/5/2018	Assist-US India Collabrative with smart distribution system with storage	UI	Mike Diedesch, Innovation	Completed	\$480,000	Cost Share Labor / Pilot	10/2/2017 - 10/1/2022
		Research and Development on distribution system modeling, energy storage microgrid, cyber security, energy mgmt, integrating DMS and DER Control.		Noel Schult & Anurag Srivastava, WSU		\$500,000	WSU-Prime Awardee	
						51/49%		
4/1/14	4/1/14 6/30/14	Clean Energy Fund I Energy Storage	Dept of Commerce	Kenny Dillon, Transmission	Completed	\$8,339,819	Project Manager/Pilot	06/30/2014- 06/30/2021
		Deployment and demonstration of Turner Energy Storage Battery Storage in Pullman at Schweitzer Engineering laboratories site.		Bob Kirshmire, WA DOC		\$3,200,000	Avista Utilities	
						50/50%		

Infrastructure Investment and Jobs Act / Inflation Reduction Act Grant Opportunities

## **Direct Infrastructure Investment and Jobs Act Focuses**

Area	Pursuing/ Eligible?	Title	Grantor/ Agency	Section	Example	Amount	Years	Timeframe for start of distribution
GRIP- Grid Security, Reliability & Resilience	Y	Preventing Outages and Enhancing the Resilience of the Grid (Wildfire Opportunities)	DOE	40101	Grid Hardening	\$5B	2022-26	Application Due Mid-Dec 2022
GRIP- Grid Security, Reliability & Resilience	Y	Grid Flexibility/SGIG 2.0 (Smart Grid Investment Grant)	DOE	40107	Expand Distribution Automation, ADMS, Scada to all stations	\$3B	2022-26	Application Due Mid-Dec 2022
Grid Deployment Office	Υ	Hydroelectric Efficiency Improvement Incentives	DOE	40332		\$75M	until expended	Not Specified
Grid Deployment Office	Y	Maintaining and Enhancing Hydroelectricity Incentives	DOE	40333	Post Falls Redevelopment	\$553.6M	until expended	Not Specified
Energy Research, Development, and Demonstration	Y	Office of Clean Energy Demonstrations	DOE	41201				Not Stated
Broadband	Y	Enabling Middle Mile Broadband Infrastructure	NTIA	Title IV	Leased Fiber Replacment, SCADA to all stations; Demonstration Project	\$1B	2022-26	2022-26
Transportation Electrification	Y	National Electric Vehicle Infrastructure (NEVI) Formula Program	DOE	Division J	next gen 1MW public DCFC charging site with two 150kW ports and two 350kW ports	\$5B	2023-2027	2024 (most likely due to delays in federal guidance and WSDOT RFP expected Q2 2023)
Cyber Security	N	Enhanced Grid Security	DOE	40125		\$250M/Yr	2022-26	Not Specified
Energy Research, Development, and Demonstration	N	Carbon Capture Technology Program	DOE	40303		\$100M	2022-26	Not Specified
Energy Research, Development, and Demonstration	N	Carbon Dioxide Transportation Infrastructure Finance and Innovation	DOE	40304		\$600M+300M	2022-23, 2024-26	Not Specified (More \$ Earlier)
Energy Research, Development, and Demonstration	N	Hydroelectric Production Incentive	DOE	40331		\$125M	until expended	Not Specified
Energy Research, Development, and Demonstration	N	Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative	DOE	40334		\$2M/Year	2022-26	No Later Than 9/30/2023
Energy Research, Development, and Demonstration	N	Clean Energy Demonstration Program on Current and Former Mine Land	DOE	40342		\$500M/year	2022-26	Not Specified
Building Electrification & Efficiency	N	Energy Efficient Transformer Rebate Program	DOE	40555		\$10M	2022-23	Not Stated (Shortest Window)

# ATTACHMENT F Infrastructure Investment and Jobs Act / Inflation Reduction Act Grant Opportunities

#### Indirect Infrastructure Investment and Jobs Act Focuses

Area	Pursuing/Eligit	Avista Impact	Title	Specifics / Opportunities	Who Is Eligible	Grantor/	Section Notes	Amount	Years	Timeframe for start
7.100	le?	mpact Y	Grants for EE & Renewables at	CETA/CEIP Alignment, Higher EE goals	Schools, for-profit orgs	Agency DOE	40541	\$500M	2022-26	Not Specified
Building Electrification & Efficiency	·		Schools	upcoming	Schools, for profit orgs	502	10311	<b>\$30011</b> 1	2022 20	not specifica
	Υ	Υ	Weatherization Assistance	Adding \$\$ to existing, Encourage partners	States , Partners (Awareness)	DOE	40551	\$3.5B	Expended	Not Specified
Building Electrification & Efficiency			Program	to get it; won't change what we do.						
Building Electrification & Efficiency	Y	Y	FF and Conservation Block Grants	Supports Clean Goals - EE, renewable,	Local Govts	DOE	40552 Revenue Impact, Energy Justice;	\$550M	Expended	Not Stated
			EE and conservation block draits	and TE, CETA/CEIP	Local Govis	DOL	Economic Development	ÇOSOIVI	Expended	Not Stated
Building Electrification & Efficiency										
	Y	Υ	Energy Conservation at Federal	Supports Clean Goals - EE	Federal Facilities	DOE	40554	\$250M	Expended	Not Stated
Building Electrification & Efficiency			Facilities							
,	Y	Υ	Grid Security, Reliability &	Demo projects: Tx, Dx, Storage,	Tribes, State , PUC, Local Govt	DOE	40103	\$5B	2022-26	180 Days
			Resilience Development &	Microgrids - 15% Match ID OEMR						,
Grid Security, Reliability & Resilience			Demonstration							
	Y	Υ	Wildland Risks Reductions	Prioritize Areas for Wildfire Risk	Dept of Interior	DOI & Forest	40803 Stakeholders: David H, Dave J	\$3.7B	2022-26	2022
				Reduction: Thinning, controlled burns,	.,	Service				
Grid Security, Reliability & Resilience				restoration						
	Y	Y	Congestion Mitigation and Air Quality (CMAQ) Improvement	Purchasing Medium, Heavy Duty Vehicles & Chargers, CETA/CEIP	Income, Minority	DOT	11115 Fleet/Vehicles	\$2.6B/Yr	2022-26	TBD - Existing formula
			Program	& Chargers, CETA/CET	income, willonly					program
Transportation & Port Electrification										
	Y	Υ	Grants for Charging & Fueling	Public Charging - Low-Income, Rural	Tribes, States, Local, SRTC, Port	DOT & DOE	11401 Charging - Rural/off highway -	\$2.5B	Expended	Within 1 Year
Transportation & Port Electrification			Infrastructure	Focus	Auth		TTHM Cons - Maintenance - how do we focus on Idaho			
	Y	Υ	Grants for Buses and Bus Facilities	Low/No Emission buses (Expand	Bus Operators, State/Local Govt	DOT	30018 Fleet/Vehicles; Revenue Impact	\$5.25B	2022-26	Existing Program
				STA/Pullman? Add Moscow/CDA?)						
Transportation & Port Electrification										
	Y	Υ	State Energy Program (SEP)	Electrify Fleets, State Vehicles, Taxis,	States	DOE	40109 Fleet/Vehicles; Revenue Impact	\$500M	2022-26	Formula State Distribution
Transportation & Port Electrification				Ridesharing (Rule making, Planning)						1/1/21
Transportation & Fort Electrification	Y	Υ	Clean School Bus Program	Zero Emissions or Natural Gas,	School Districts, States	EPA	71101 Fleet/Vehicles	\$5B	2022-26	TBD - EPA to issue
			cicuit school sus i rogium	Supporting Infrastructure	Serious districts, states	2.77	71101 Freedy Vermoles	<b>435</b>	2022 20	regulations
Transportation & Port Electrification										
	Y	Υ	Broadband Grants for States,	Middle-mile broadband - Focus on	States on a formula, Public or	Department of	Title 1	\$42.45B		State Determination Letter
			District of Columbia, Puerto Rico, and Territories	unserved and underserved first	Private Utility, PUDS	Commerce (DOC) &				180
			and remiones			National				
						Telecommunica				
						tions and				
						Information				
Broadband						Admistration (NTIA)				
	Y	Υ	National Electric Vehicle Formula	EV Charging	States on a formula basis	DOT & DOE	Division J Charging - State Highway-TTHM -	\$5B	Expended	Guidance in 90 Days
			Program				Cons Maintenance - How to focus		·	,
Transportation & Port Electrification							on Idaho			
	N	Υ	Energy Efficiency Revolving Loan	CETA; Revolving Loan	State Loan, biz res cust	DOE	40502	250M	20	22 2022
Dutilation Florateiff and a C. 500			Fund Capitalization Program							
Building Electrification & Efficiency	N	N	Rural and Municipal Utility		Small Utility	DOE	40124	\$250M/Yr	2022-26	180 Days
	IN	IN	Advanced Cybersecurity Grant		Small Utility	DUE	40124	JZJUIVI/YF	2022-20	TOO DAYS
			and Technical Assistance Program							
Cyber Security Grants		I								
cyse. security drains	N	Y	State and Local Cybersecurity	Cybersecurity experts, not us	Tribe	FEMA	70612	1B	2022-26	Not Specified
Cyber Security Grants		I	Grant Program							•
Energy Research, Development, and	N	Υ	Carbon Utilization Program	R&D	States, Local, Agencies	DOE	40302		2022-26	1 Year
Demonstration		<u> </u>	and a second sec							
Energy Research, Development, and	N	Υ	Carbon Removal	Air Capture Hub		DOE	40308	3.5B	2022-26	180 Days
Demonstration										
	N	N	Advanced Energy Manufacturing	Recycling for Manufacturers	Coal MinesClosed	DOE	40209 Stakeholders: Bruce H, Tom Dimps	5: 750M	2022-26	180 Days
		I	and Recycling Grant Program							
	?	Υ	Energy Auditor Training Grant	We hire this out.		DOE	40503	40M	2022-26	Not Specified
Building Electrification & Efficiency		ļ	Program							
	?	N	Cost-effective Codes	Energy Codes - Need to watch this for	States + Partner	DOE	40511	225M	2022-26	Not Specified
		I	Implementation for Efficiency and Resilience	impacts						
Building Electrification & Efficiency	1	1	nesilience							

# ATTACHMENT F Infrastructure Investment and Jobs Act / Inflation Reduction Act Grant Opportunities

#### Indirect Infrastructure Investment and Jobs Act Focuses

	Pursuing/Eligi	ib Avista				Grantor/					
Area	le?	Impact	Title	Specifics / Opportunities	Who Is Eligible	Agency	Section Notes	Amount	Years	Timeframe for start	
Energy Research, Development, and Demonstration	?	Y	Carbon Storage Validation and Testing	Carbon Sequestration, CO2 transport - Greg Rahn work maybe???	States, Local, Public Utility or Agency	DOE	40305	2.5B	2022-26	Not Specified	
Fransportation & Port Electrification	?	Y	Reduction of Truck Emissions at Port Facilities	Port Electrification, R&D	Not specified (but ports only)	DOT, EPA, DOE	11402	\$50M/Yr	2022-26	Annual by April 1	
Fransportation & Port Electrification	?	Y	Strengthening Mobility and Revolutionizing Transportation Grant Program	City demonstration projects: transportation, connected vehicles, smar grid	State and Local entities t	DOT	25005	\$100M/Yr	2022-26	Not Specified	
Transportation & Port Electrification	?	Y	Port Infrastructure Development Program	Port Electrification, EV charging or hydrogen refueling or medium/heavy duty, microgrids	Ports	DOT	Division J	\$450M/Yr	2022-26	Until 2036	

Indirect IJJA Focuses