ATTACHMENT D

Table No. 1 below provides a listing of Business Cases[1] not previously included in the Company's original filing in Dockets UE-220053, et. al., and where actual 2023 additions were below the $500,000 and +/- 10% "significant cost variance" threshold. A summary description of the listed Business Case follows.

Table No. 1 – Business Case Amount Variance - As-Filed versus Actual – Below "Significant Cost Variance" Threshold

Business Case	Filed 2023 Budgeted TTP Plan Gross Plant	Actual TTP Gross Plant	Variance $ over/(under) Gross Plant
Gas Airway Heights HP Reinforcement	$ -	$ (4,593)	$ (4,593)
Gas Warden HP Reinforcement	$ -	$ 4,354	$ 4,354
N Lewiston Autotransformer - Failed Plant	$ -	$ 9,613	$ 9,613
Long Lake Plant Upgrade	$ -	$ 10,793	$ 10,793
Gas Operator Qualification Compliance	$ -	$ 31,087	$ 31,087
Primary URD Cable Replacement	$ -	$ 66,024	$ 66,024
Apprentice/Craft Training	$ -	$ 62,970	$ 62,970
Gas HP Pipeline Remediation Program	$ -	$ 139,102	$ 139,102
Nine Mile Powerhouse Crane Rehab	$ -	$ 229,461	$ 229,461
Gas ERT Replacement Program	$ -	$ 236,730	$ 236,730
Asset Monitoring System	$ -	$ 264,723	$ 264,723
Meter Minor Blanket	$ -	$ 246,446	$ 246,446
Westside 230/115kV Station Brownfield Rebuild Project	$ -	$ 269,092	$ 269,092
Clearwater Wind Generation Interconnection	$ -	$ 273,300	$ 273,300
CIP v5 Transition - Cyber Asset Electronic Access	$ -	$ 191,787	$ 191,787
Strategic Initiatives - Clean Energy Fund 2	$ -	$ 55,340	$ 55,340
Strategic Initiatives - UIASSIST	$ -	$ 100,527	$ 100,527
Misc. accrual reversals, corrections or additional TTP	$ -	$ (1,299)	$ (1,299)

Gas Airway Heights HP Reinforcement

The Gas Planning department routinely runs an analysis (load study) on Avista's natural gas distribution system to identify areas of the system with insufficient capacity to serve existing Firm customer loads on a design day (Avista defines design day as the projected system demand for a "coldest day on record" weather event). These deficient areas are given a priority level based on the severity of the risk associated with insufficient system capacity. Load studies performed by the Gas Planning department, as well as pressure monitoring during cold weather events, has shown that there is insufficient pressure at the west end of the Fairchild-Spokane High Pressure (HP) Main. This HP main supplies gas to the Airway Height, Spokane Airport, and SW area of Spokane. This deficiency is expected to start during the winter of 2019-2020.

Since this area has insufficient capacity to serve Firm customers on a design day, a cold weather action plan as been developed. This plan outlines particular activities that could be implemented such as the manual on-sight monitoring of system pressures, a media blast to request a temporary thermostat turndown, taking extraordinary measures to manually improve the capacity of the system by bypassing regulator stations or manually shedding load (shutting off customers

[1] Excludes Business Cases with a transfer-to-plant (TTP) value +/- $2,500, which have been accumulated in the "Misc. accruals reversals, corrections or additional TTP" line.

completely), and/or preparing relight lists (to restore service to customers who have lost natural gas service).

Avista has determined it is not appropriate to rely upon a cold weather action plan for the safe and reliable operation of the natural gas distribution system. These are stop gas measures put in place because of a known capacity deficiency until a permanent reinforcement project can be completed. Operating in this mode requires Avista employees to work in extremely cold situations, which results in increased operations and maintenance expense (O&M expense) due to overtime pay and increased safety risks to our employees performing the manual intervention (i.e., working outdoors and driving vehicles in cold, snowy, and icy conditions). Additionally, these activities are last-ditch efforts to maintain service, and they do not represent a guarantee that service will be able to be maintained to customers paying a firm natural gas rate.

Gas Warden HP Reinforcement

Gas supply to Warden, Washington currently has two constraints. 1) The town is supplied natural 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 Expenditure Request (ER) is specific to the work and costs associated with Avista's distribution system upgrades.

As a result of current capacity/supply constraints, industrial natural 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 natural gas customer in Warden has also shared that they wish to increase their plant's capacity and natural gas usage.

The recommended solution for increasing the capacity of Avista's distribution system is to perform an update 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.

N Lewiston Autotransformer - Failed Plant

The North Lewiston 230/115 kV Transformer 1 (McGraw-Edison Serial Number C-06237-5-2) located in Lewiston, Idaho failed in February 2021. A replacement transformer has been ordered and will be installed in 2022. The North Lewiston 230/115kV Transformer 1 provides the

transformation capacity needed for the system to meet performance requirements as defined by System Planning and System Operations.

The North Lewiston 230/115 kV Transformer 1 was 40 years old when it failed. Following the failure, an investigation was performed with testing and an internal inspection. The investigation concluded the transformer had a failed winding. The decision to replace the 230/115 kV Transformer 1 was made based on an evaluation of alternatives, which also included rebuilding the existing transformer and utilizing a spare transformer within Avista's system.

Long Lake Plant Upgrade

The existing Long Lake equipment ranges in age from 20 to more than 100 years old. We have experienced an increase in forced outages at Long Lake over the past six years, almost zero in 2011 and increasing every year since then. This is caused by equipment failures on a number of different pieces of equipment. Long Lake serves Avista's allocated north electric district providing power to our transmission grid and local distribution power sources. The primary drivers for the Long Lake Plant Upgrade are Performance & Capacity, Asset Condition, and Failed Plant & Operations. Four alternatives were considered for solutions to replacing the aged and failing equipment; (1) Install four new 30MW vertical units, (2) Construct a new one-unit powerhouse, (3) Construct a new two-unit powerhouse, and (4) Alternative 4 and the recommended alternative, replace the existing units in kind. An anticipated program budget of $60.5M has been developed from a Class 4 Estimate.

Upgrading our Long Lake Plant will enable our generation fleet to continue to provide safe and reliable power to our customers. If not approved, the Long Lake powerhouse would continue to operate as it has for the past 10 years. O&M costs would continue to rise. In an additional 10 years, if the trend continues, average O&M costs will rise from $285k in 2005 to $590k in 2014 and projected to be $900k in 2024. Due to the condition of the generators, it is likely that one of the generators or another piece of major equipment will fail and permanently disable equipment, increasing forced outage numbers.

Gas Operator Qualification Compliance

As an operator of natural gas infrastructure, Avista Utilities is required by regulation to minimize the impact of safety and integrity of the pipeline facilities due to human error that may result from an individual's lack of knowledge, skills, or abilities during the performance of certain activities, or covered tasks. Craft Training and Gas Operations are responsible for ensuring a qualified and competent workforce. This is partially accomplished by evaluating and qualifying internal and contract employees on Operator Qualification tasks specific to Avista's natural gas infrastructure.

This business case will provide the tooling, vehicles, and equipment necessary to enable internal Avista Evaluators to evaluate Avista "non-peer" employees and contract personnel under the United States Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations for Operator Qualification. Further, the tooling, vehicles and equipment may be used by Avista's Evaluators to maintain proficiency in the tasks required by the program and to design, construct

and implement new testing tools, techniques and technologies. Not providing these resources would result in the Evaluators being unable to perform their duties, possibly resulting in regulatory penalties and incidents that impact Avista's customers and the public.

Primary URD Cable Replacement

The primary driver for the Underground Residential Development (URD) Cable Replacement Program is to improve system reliability by removing URD cable with a high failure rate. The other driver is to reduce O&M costs related to responding to customer outages caused by the failed cable.

This work is needed to complete the replacement of the un-jacketed first generation underground primary distribution cable referred to as URD cable. This first generation URD cable was installed from 1971to 1982. There was over 6,000,000 feet of URD cable installed during this time period. Subsequent to installation, the URD cable began to experience an increasing failure rate. From 1992 to 2005, the cable failure rates quadrupled from 2 faults to I faults per 10 miles of cable. The faults reached a peak of 238 annual failures in 2007. Increased capital funding to replace this URD cable from 2005 through 2009 helped stabilize the failure rates. Continued funding and replacement of the cable has enabled a downward trend in failures. Cable installed after 1982 has not shown the high failure rate.

Apprentice/Craft Training

Avista manages 11 Federally regulated apprenticeships that require instructional aides and equipment deemed necessary to provide quality instruction. [Regulated by 29 CFR 29 & 30] The Joint Apprenticeship Training Committee (JATC) administers these apprenticeships. These funds are used to purchase tools, materials and equipment for training apprentices and journey workers in all crafts. These tools and materials provide for related instruction that is closely correlated with the practical experience and training received on the job. The trained and competent workforce produced through the various apprenticeships benefits customers in all Avista service territories. These apprenticeship programs further benefit Avista's customers by providing a safe, proficient and skilled workforce.

Support of apprenticeship at Avista through this capital program aligns strategically to Avista's Mission and Focus Areas. In order to deliver innovative energy solutions safely, responsibly, and affordably, Avista must have a field workforce of highly proficient professionals. This professionalism is achieved through apprenticeship. Without this funding, Avista will not have the ability to train in-house. This leaves Avista's customers without critical craft positions needed for energy delivery. Further, there is a potential that regulating bodies may de-certify Avista's Apprentice program, leaving Avista without the ability to train in-house and require significant expense to meet labor demands and maintain required skillsets.

Gas HP Pipeline Remediation Program

This Business Case will address capital remediation work associated with the high pressure (>60psig) pipeline systems. The driver for this work is integrity and compliance related. Examples

include incomplete construction records, exposed water crossings, and addressing High Consequence Areas (HCA). In most cases the remediation will involve installing new sections of pipe.

Each project is unique in scope, location, and cost. This can cause the year to year spend to vary greatly by state. HCA work is also dynamic as population growth causes more dwellings to be built near the transmission system, resulting in potential projects to mitigate. Changes in dwellings and use of dwellings along the Transmission System are reviewed annually to ensure compliance with Federal Rules.

Completion of these projects is necessary to ensure the integrity of Avista's natural gas system, the safety of the general public, and compliance with Federal Rules.

Nine Mile Powerhouse Crane Rehab

The Nine Mile Falls Generator Bay and Access Bay bridge cranes were replaced in 1993 prior to the Units 3 and 4 replacement project. Both cranes are Kone brand 35ton cranes with service class for both cranes being H1 – light duty. The Nine Mile powerhouse cranes were beyond their useful life. Their duty cycle was too low to support continuous work during future unit overhauls with both replacement controls and mechanical parts no longer supported by the manufacturer and must be custom fabricated. The Generator floor crane trolley was out of service, limiting Avista's capability to respond to a turbine generator failure. During the 2018 Maintenance Assessment, the cranes were identified as high risk due to their current condition.

The recommended solution included replacement of each crane's hoist and trolley system and installing a modern hoist and trolley. This approach was a modern in-kind replacement of the current powerhouse cranes and would provide a lasting solution to meet current and future crane demands.

The estimated cost of the project was $1,500,000 in order to rehabilitate both bridge cranes. The service code for this program was Electric Direct and the jurisdiction for the project was Allocated North serving our electric customers in Washington and Idaho. Operating Nine Mile safely and reliably provides our customers with low cost, reliable power while ensuring the region has the resources it needs for the Bulk Electric System (BES).

Gas ERT Replacement Program

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 does not recommend replacing the battery in ERT modules for these reasons.

Asset Monitoring System

The yearly amount of approximately $250k is based on Asset Monitoring Systems that are needed to track the condition of our Assets. These systems are in both our Hydro and Thermal Generation Plants. They are not part of the Generation Control System that is used for real-time control and monitoring. There is a need to update the existing systems and install new systems to monitor the condition of our Assets. These Asset Monitoring Systems are used to influence our Maintenance and Capital planning. The budget amounts were based on 2022 quotes for replacing, updating, and installing new systems. These systems will interface with the corporate network and therefore need to be updated periodically to keep up with changing software and security needs.

Meter Minor Blanket

The meter minor blanket is used to charge the labor associated with new electric meter installations in Washington and Idaho due to the replacement of failed plant (meters) that can no longer gather or communicate accurate consumption data. Failed plant is a result of various reasons including but not limited to, age, weather/environmental damage, hardware failure, or radio communication failures.

A meter must be installed as soon as possible to accurately capture customer energy consumption data. For this reason, Avista must sustain a continuous stock of each electric meter type and budget the required labor to install these meters.

The Meter Minor Blanket Business Case is driven by tariff requirements that mandate Avista's obligation to serve existing customer load within our franchised area. Annual spending is approximately $250k per year.

Westside 230/115kV Station Brownfield Rebuild Project

The existing Westside #1 230/115 kV transformer exceeds its applicable facility rating for the P1 event of the Westside #2 230/115 kV transformer. System performance analysis indicates an inability of the system to meet the performance requirements in Table 1 of NERC TPL-001-4 in

scenarios representing 2017 Heavy Summer for P1 events. While Avista intends to avoid proactively shedding customer load, an operating procedure to shed non-consequential load can be used until 2021 to mitigate system deficiencies (non-consequential load shedding is considered acceptable through the 84 month implementation of TPL-001-4).

Westside Transformer Replacement was the recommended solution. Replace the existing Westside transformers with 250 MVA rated transformers and reconstruct both the 230 kV and 115 kV buses at the station to double bus, double breaker. All associated system deficiencies will be mitigated.

Clearwater Wind Generation Interconnection

Avista is a joint owner in the 500kV Colstrip Transmission System and party to the Colstrip Project Transmission Agreement ("Agreement"). Under Federal Energy Regulatory Commission ("FERC") rules and the Agreement, Avista must comply with all rules and procedures governing the interconnection of new generation facilities with the Colstrip Transmission System. Pursuant to the Agreement, Clearwater Energy Resources, LLC requested interconnection of a 750MW wind project at Broadview ("Clearwater Wind Project"), all required study processes were completed, and Avista executed a Large Generator Interconnection Agreement with the developer on May 22, 2019 ("LGIA").

Avista and the joint owners of the Colstrip Transmission System are obligated to fund their respective shares of all Transmission Provider Interconnection Facilities and Network Upgrades applicable to the interconnection of a Large Generator Interconnection project. Failure to fund this project will result in Avista being in breach of both the Agreement and the LGIA, and would be a violation of FERC rules governing generation interconnection. Such obligations arise from Avista's ownership in the Colstrip Transmission System, which has benefited Avista retail native load customers over the life of the Colstrip Project.

Avista's allocation of costs for the construction of required facilities for the Clearwater Wind Project was originally estimated to be $650,600, in 2018 dollars. The original Business Case was submitted and approved, July 2019. Overall project cost was reduced to $570,000 per the in-year adjustment request approved June 17, 2020. Applicable service code and jurisdiction are 098-ED, common system-wide, electric direct.

CIP v5 Transition - Cyber Asset Electronic Access

Avista, as a regulated utility, is required to meet North American Electric Reliability Corporation ("NERC") Critical Infrastructure Protection ("CIP") Reliability Standards ("Standards"). Specifically, Avista has been complying with CIP Version.3 Standards ("CIPv3") and needs to transition to CIP Version.5 Standards ("CIPv5").

This Business Case supports achieving compliance for Low Impact Bulk Electric System Cyber Systems by implementing electronic access controls. Avista, as a regulated utility, is required to meet NERC GIP standards. The two alternatives are to achieve compliance or do nothing and accept fines from regulators. Not being complaint and accepting fines it not considered a viable alternative. The recommended solution was to implement the controls necessary to achieve

compliance. This business case provides the funding to implement the controls to achieve compliance.

Strategic Initiatives - Clean Energy Fund 2

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 competitiveness of its economy. New types of energy and energy service models can create opportunities for utilities to act as trusted brokers between providers and 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.

Strategic Initiatives - UIASSIST

The UIASSIST project seeks to better enable and demonstrate the integration of grid automation, energy storage, and renewable energy resources with enhanced cyber security across the energy domains of the United States and India. Avista is but one of 30 collaborating entities from the United States and India incorporating 10 different test sites. The partners include universities, national laboratories, solution providers, and utilities. Avista's role in the project is to leverage the Innovation Lab to provide circuit and power hardware in the loop simulation, demonstration assets in the form of the WSU microgrid, and operational data sharing via Avista's Digital Exchange platform. The total project is $39.7M with $7.5M provided by DOE, $7.5M provided by U.S. partners, $7.5M provided by the India government (GOI) and $17.2M provided by India partners. Avista's capital cost share for the project is $350,000 while the DOE is providing $480,000 grant.

Avista is witnessing accelerating customer adoption of rooftop solar, as well as energy storage. DOE considers grid efficient buildings (GEB) to be viable resources for grid utilization and Avista has developed the South Landing eco-district, which is world leading example of a GEB. How should Avista plan for DERs and GEBs and what types of operational controls and procedures are needed? The renewable energy eco-system is relatively immature when compared to existing utility "bread and butter" infrastructure projects. Within the utility, the design specifications and work practices have not been established to support the implementation of inverter-based assets. Also, the product vendors, suppliers and contractors within the eco-system lack market maturity and are typically operating under thin financial margins. Avista intends to produce standardized design and operational procedures for the WSU microgrid and to successfully demonstrate the results with the larger UIASSIST team. Additionally, the university can leverage Avista's foundation control framework as a platform to build their research layers. This project represents how the Avista Innovation Lab is developing the foundational building blocks to operationalize the technology platforms within the utility as well as support university research goals. The standards developed for this project can be leveraged for DERs in future years. Non-participation in this phase of the overall project would be damaging to Avista's reputation with respect to the partners and the U.S. DOE. That reputation is currently considered top tier.