EXH. RJR-5C
DOCKET UE-191037
COLSTRIP UNIT 4 SALE
WITNESS: RONALD J. ROBERTS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Application of **PUGET SOUND ENERGY** **For an Order Authorizing the Sale of All of Puget Sound Energy's Interests in Colstrip Unit 4 and Certain of Puget Sound Energy's Interests in the Colstrip Transmission System**	**Docket UE-191037**

FOURTH EXHIBIT (CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

RONALD J. ROBERTS

ON BEHALF OF PUGET SOUND ENERGY

REDACTED VERSION

FEBRUARY 19, 2020

PUGET SOUND ENERGY

Report to the Board of Directors

Board Colstrip Approval Presentation

October 21, 2019

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ATTACHMENTS

PROPOSED BOARD RESOLUTIONS

PUGET SOUND ENERGY, INC.

PROPOSED BOARD RESOLUTIONS

<u>Approval of Colstrip Unit 4 Purchase and Sale Agreement and Related Transactions</u>

WHEREAS, Puget Sound Energy, Inc. ("***PSE***") is the owner with respect to a twenty-five percent (25%) undivided interest in the 740 MW Colstrip Unit 4, a coal-fired, base-load electric generation facility located in Colstrip, Montana and in all associated real property, equipment, common real property and common equipment and facilities and all rights incidental thereto (the "***Colstrip 4 Interests***");

WHEREAS, PSE has been engaged in negotiations with Northwestern Corporation (the "***Buyer***") with respect to the purchase by Buyer of the Colstrip 4 Interests pursuant to the Colstrip Unit 4 Purchase and Sale Agreement substantially in the form presented at this meeting) (the "***Purchase Agreement***");

WHEREAS, pursuant to the Purchase Agreement, PSE, as the owner of the Colstrip 4 Interests would sell and transfer to the Buyer the Colstrip 4 Interests (the "***Transaction***");

WHEREAS, management has presented information to the Board of Directors of PSE (the "***Board***") regarding the negotiation of the Purchase Agreement and management's assessment of the strategic, operational and financial benefits of the proposed Transaction;

WHEREAS, with input from management, the Board has considered information relating to the proposed Transaction as the Board has deemed appropriate;

WHEREAS, the Board has given due and proper consideration to all other matters and things that are necessary or appropriate to enable it to evaluate and reach an informed conclusion as to the transactions contemplated by the Purchase Agreement; and

WHEREAS, the Board has determined that it is in the best interest of PSE that PSE enter into the Purchase Agreement and consummate the Transaction on the terms and subject to the conditions set forth in the Purchase Agreement;

NOW THEREFORE, BE IT RESOLVED, that, after review of all necessary information relating to the proposed Transaction , the Board hereby determines that the Purchase Agreement, the Transaction and the other transactions contemplated by the Purchase Agreement are in the best interest of PSE.

RESOLVED FURTHER, that the Board hereby adopts and approves the Purchase Agreement, in substantially the form attached hereto as **Exhibit A** and approves and authorizes the Transaction and the other transactions contemplated by the

Purchase Agreement, including, without limitation, the Power Purchase Agreement (as defined in the Purchase Agreement); the Transmission Acquisition Agreement (as defined in the Purchase Agreement) and the Water Rights Transfer Certificate (as defined in the Purchase Agreement);

RESOLVED FURTHER, that the officers of PSE are, and each of them hereby is, authorized in the name and on behalf of PSE to execute and deliver the Purchase Agreement, together with such modifications thereto as any of such officers shall approve, the execution thereof on behalf of PSE to be conclusive evidence of such approval by the Board.

RESOLVED FURTHER, that PSE's officers are, and each of them hereby is, authorized to negotiate, execute and deliver the other agreements contemplated by the Purchase Agreement, including, without limitation, the Power Purchase Agreement (as defined in the Purchase Agreement); the Transmission Acquisition Agreement (as defined in the Purchase Agreement) and the Water Rights Transfer Certificate (as defined in the Purchase Agreement), the execution thereof by such officer(s) to be conclusive evidence that such agreements, documents and instruments are hereby approved.

RESOLVED FURTHER, that PSE's officers are, and each of them hereby is, authorized to do and perform or cause to be done or performed all other acts necessary or desirable in order to effectuate the transactions contemplated by the Purchase Agreement, including, but not limited to, (i) the engagement, by written contract or otherwise, of any and all persons deemed necessary, appropriate or desirable to effectuate the transactions contemplated by the Purchase Agreement and related documents, upon such terms and conditions as such officers, or any of them, may deem appropriate, and to pay all fees and expenses incurred in connection therewith, (ii) the preparation and filing with appropriate governmental authorities of all applications, notifications, certificates, reports, statements or other documents or instruments relating to the Transaction and the other transactions contemplated by the Purchase Agreement, including any applications, certificates or other filings required under the rules and regulations of the Securities and Exchange Commission and the laws of the State of Washington, and to arrange for payment of any fees required in connection therewith, and (iii) all such other acts and things which any one or more of them shall deem necessary, advisable or appropriate in order to carry out the intent and purpose of the foregoing, and the taking of any and all such actions and the performance of any and all such things in connection therewith shall conclusively establish each such officer's authority therefor from PSE and the approval and ratification thereof by the Board.

RESOLVED FURTHER, that each of the officers of PSE or any of them are authorized, in the name and on behalf of PSE, to perform such acts and to execute and deliver such documents as they or any of them deem necessary or advisable to carry out the intent and purpose of these resolutions, including, but not limited to, the execution of any necessary or advisable agreements, instruments, certificates, affidavits, or other documents in connection therewith, and the taking of any and all such actions and the execution of any and all such documents or instruments in connection with the foregoing shall conclusively establish their authority therefor from PSE and the approval and ratification thereof by the Board.

BOARD PRESENTATION

PUGET SOUND ENERGY

PSE/Northwestern Colstrip Unit 4 Transaction

Presented to PSE’s Board of Directors

Steve Secrist
Ron Roberts
Sam Osborne

October 21, 2019

Recommendation

PSE PUGET SOUND ENERGY

- Based on new legislation, the determination of need, the identification and analysis of alternatives, and the described benefits of the proposed transaction, management requests that the Board of Directors approve resolutions for PSE to execute a transaction with Northwestern for:
  - a) The sale of PSE’s interest in Unit 4
  - b) A transitional PPA, and
  - c) The sale of a portion of PSE’s Colstrip transmission line

Presentation Outline

- Transaction terms & conditions
- Need for resource
- Comparative analysis
- Risks & mitigations
- Benefits
- Appendix

Terms & Conditions

Purchase & Sale Agreement

- PSE will transfer its interest in Unit 4 to NWE for $1
- PSE will retain:
  - Its existing interest in Unit 3 (185 MW)
  - Pre-closing claims and liabilities
  - Future pro rata share of decommissioning and remediation costs
  - Pre-closing taxes
- NWE will assume:
  - Post closing decommissioning or demolition costs associated with post closing additions
  - Post closing remediation costs associated with post closing NWE environmental releases or negligence
- Conditions Precedent:
  - Approvals from PSE and NWE Boards
  - Applicable regulatory approvals
  - ROFR requirements of the Colstrip Owner Agreement

Transmission Sale

- PSE will transfer to NWE 95 MW of its Colstrip Transmission system at book value ($1.1M)
- Upon completion of the PPA, PSE will transfer another 90 MW of its Colstrip transmission system at book value ($1.0M)
- PSE will retain its ownership of transmission system associated with Units 1&2 (307 MW)
  - NWE will have a ROFR for these transmission rights should PSE hereafter decide to sell its interest

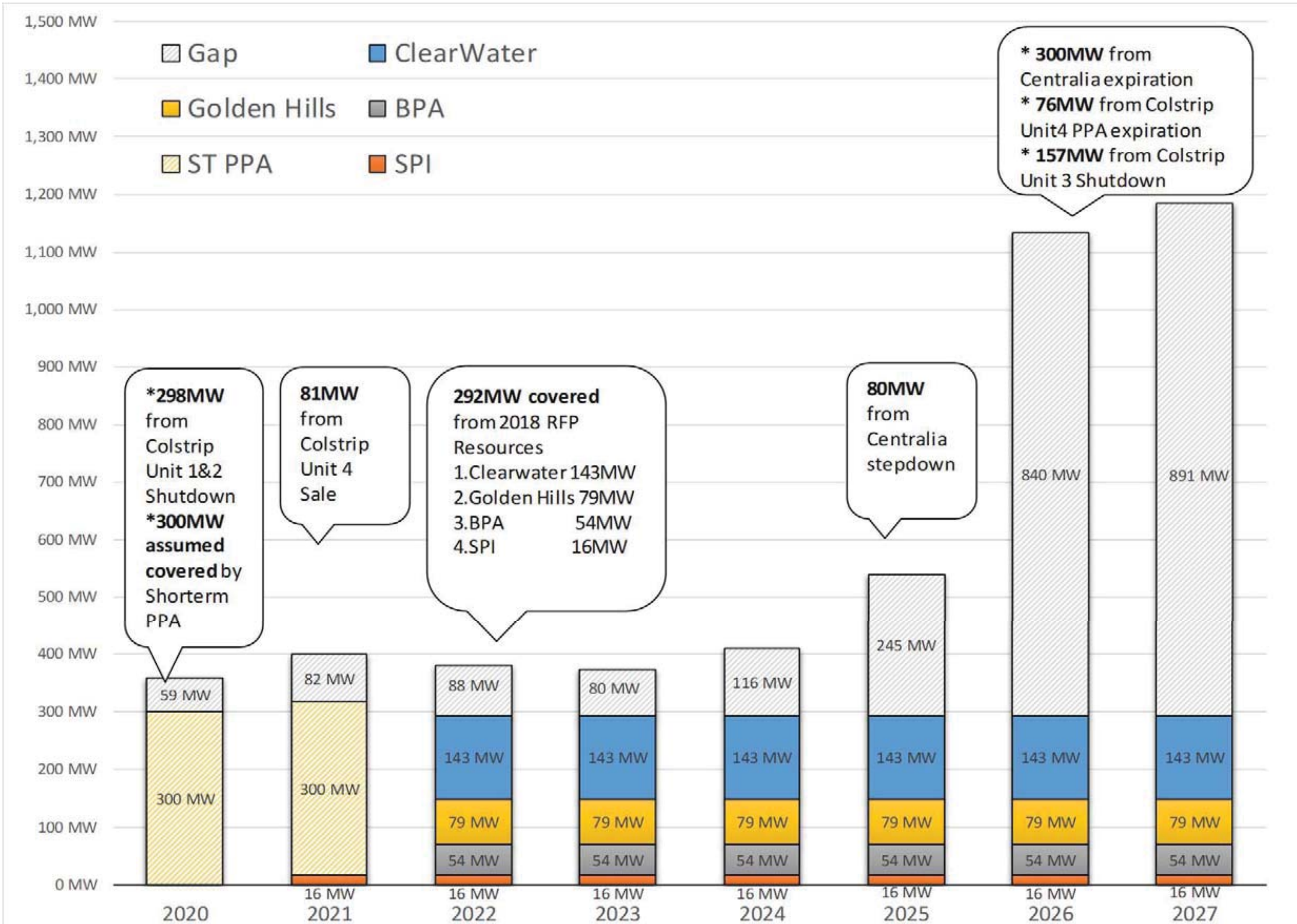
Power Purchase Agreement (PPA)

- Term: June 1, 2020 – May 15, 2025
- Price: Mid-C Day Ahead Price (Northwest Trading Hub)
- Amount: 90 MW

The Need for this transaction

- Colstrip represents PSE’s single greatest source of GHG emissions
- Under the Washington Clean Energy Transformation Act (CETA), PSE will be prohibited from serving customers with coal generated electricity after 2025, but CETA also provides:
  - Accelerated depreciation
  - Recovery of decommissioning and remediation costs going forward
- Under the Colstrip Owner & Operator Agreement, a shutdown of any unit arguably requires unanimous approval; likewise, the exit of any owner from Colstrip ownership would require the unanimous consent of all other owners
- Northwestern intends to continue operation of Unit 4 into the foreseeable future
- The all-in costs of continued ownership and operation of Colstrip by PSE is higher than current and projected market prices
- Engineering life: Colstrip Unit 4 was put into service in 1986 (33 years ago)
- PSE’s Enterprise Risk Management analysis specifically notes the following key risks for 2020:
  - Evolving regulatory policy
  - Community and investor activism
- PSE customers have expressed a strong interest in the elimination of coal generation by PSE

Peak Capacity Need after 2018 RFP Resources



Alternatives

PSE has explored alternatives to the pending transaction that include:

- 2018 Shutdown: rejected by ownership (unanimity argument pursuant to Colstrip Owner & Operator Agreement (O&O Agreement)
  - Montana punitive legislation efforts
- 2019 three-way transaction (NWE/Talen/PSE): rejected by PSE as uneconomic
- Continued Operation
  - CETA requires PSE to exit coal generation by 2025
  - O&O agreement would arguably require continued funding of operational costs post 2025
  - No viable taker for PSE share of generation post 2025

Risks & Mitigations

PSE PUGET SOUND ENERGY

Transaction Risk	Mitigation
▪ Continued operation of Unit 3 ▪ Montana punitive legislation	▪ The sale of Unit 4 provides NWE its generation needs going forward ▪ PSE will be transferring its interest in Unit 4 to the local IOU
▪ Subsequent Unit 4 transactions between NWE and other Colstrip Owners	▪ PSE negotiated a most favored nations clause in the PSA.
▪ Transmission on PSE System for potential future generation opportunities	▪ PSE is retaining its ownership of Colstrip transmission associated with Units 1&2 (307 MW) for potential future IRP related opportunities
Regulatory Risk	**Mitigation**
▪ WUTC approval	▪ The transaction is not effective until approved by the UTC; if UTC approves with conditions or decision is overturned, then either Party has right to terminate
Environmental Risk	**Mitigation**
▪ GHG (carbon) emissions	▪ PSE will accelerate its glide path to 2025 compliance and subject to final resolution of Unit 3, facilitate compliance with CETA and significantly reduce PSE GHG emissions
▪ Decommissioning and remediation obligations	▪ CETA provides for future decommissioning and remediation costs

Benefits

PUGET SOUND ENERGY

- Provides an exit strategy for Unit 4
- Provides the [redacted]
- Provides estimated savings of $91 million (npv) over the term of the PPA
- Mitigates risks of contractually required payment of operating costs post 2025
- Achieves an immediate reduction in GHG emissions for the PSE generation portfolio
- Provides reliable generation transition to exit of coal by 2025
- Cost of continued operation of Unit 4 averages $42/MWh through 2025; Cost of PPA and market purchases is estimated at $32/MWh through 2025
- Annual average reduction of 350,000 metric tons of CO2

REDACTED VERSION

Appendix

Regulatory Process

- PSE must file a petition for approval of the proposed transaction with NWE , including supporting testimony and exhibits. The petition will seek approval and prudence of:
  (i) The sale of Unit 4 to NWE
  (ii) A transitional PPA with NWE
  (iii) The sale of a portion (approximately 25%) of PSE's interest in the Colstrip Transmission System at book value ($2.1M)

- PSE anticipates requesting that the WUTC expedite the hearing of the petition. Below is a projected schedule of an expedited proceeding

PSE's Prefiled Direct Testimony	December 11, 2019
Staff, Public Counsel, and Intervenor Response Testimony	January 24, 2020
PSE Rebuttal Testimony	February 14, 2020
Evidentiary Hearing	Week of March 2, 2020
Simultaneous Initial Briefs	March 20, 2020
Simultaneous Reply Briefs	April 6, 2020
Requested Effective Date	May 8, 2020

MEMORANDUM

MEMORANDUM

October 21, 2019

To:	PSE Board of Directors
cc:	Ron Roberts
Subject:	Proposed Transactions with NorthWestern Energy for (i) the Sale of Puget Sound Energy's Interests in Unit 4 of the Colstrip Steam Generating Station, (ii) the Sale of Certain of PSE's Interests in the Colstrip Transmission System; and (iii) a Power Purchase Agreement with NorthWestern Energy for 90 MW of Output of Colstrip Unit 4

A. Introduction

The purpose of this Memorandum is to describe:

- A series of proposed transactions with NorthWestern Energy, including
  - the sale of the interests of Puget Sound Energy ("PSE") in Colstrip Unit 4 to NorthWestern Energy;
  - the sale of certain interests of PSE in the Colstrip Transmission System to NorthWestern Energy; and
  - a power purchase agreement with NorthWestern Energy for 90 MW of Output of Colstrip Unit 4, commencing June 1, 2020, and expiring on May 15, 2025 (the "NorthWestern Energy PPA").
- The need for such proposed transactions.
- The principal commercial terms and conditions of the proposed transactions.
- The analyses supporting the selection by PSE of the proposed transactions.
- Key risk factors related to the proposed transactions.

- The benefits of the proposed transactions.

- Recommendation to PSE's Board of Directors for approval to enter into the proposed transactions.

The proposed transactions would be a valuable step in preparing PSE for the period beginning January 1, 2026, in which PSE will no longer be able to serve retail customer loads with power from coal-fired generation. The principal benefits of the proposed transaction are as follows:

(i) the proposed transactions allow PSE to dispose of its interests in Colstrip Unit 4 while simultaneously benefitting customers from lower power prices;

(ii) PSE projects that the proposed transactions provide benefits to retail customers for the period 2020 through 2025 with a projected net present value of

- $58 million, if PSE does not hedge market prices associated with either (a) the net reduction of 95 MW of capacity resulting from the proposed transactions or (b) the 90 MW of output from Colstrip Unit 4 that PSE will purchase under the NorthWestern Energy PPA; or

- $37 million, if PSE (a) hedges market prices associated with the net reduction of 95 MW of capacity resulting from the proposed transactions or (b) but does not hedge market prices associated with the 90 MW of output from Colstrip Unit 4 that PSE will purchase under the NorthWestern Energy PPA.

(iii) The loss of capacity resulting from the sale of Colstrip Unit 4 will be partially mitigated by the NorthWestern Energy PPA, which will allow PSE to purchase 90 MW of output of Colstrip Unit 4 during the period beginning June 1, 2020, and expiring on May 15, 2025;

(iv) PSE caps its liabilities associated with compliance costs associated with Colstrip Unit 4 as of the date of closing of the Colstrip Unit 4 Purchase and Sale Agreement; and

(v) PSE will accelerate its path to compliance with the Washington Clean Energy Transformation Act (subject to final resolution of Colstrip Unit 3) and significantly reduce PSE's greenhouse gas emissions with an annual average reduction of 350,000 metric tons of carbon dioxide.

Based on the declining economics of Colstrip Units 3 & 4, the enactment of the Washington Clean Energy Transformation Act that prohibits PSE from serving its customers with coal-fired generation on and after January 1, 2026, the identification and analysis of alternatives considered by PSE, and the described benefits of the proposed transactions, PSE management recommends that the Board of Directors adopt the Resolutions (Section I) approving (i) the sale of PSE's interests in Colstrip Unit 4 to NorthWestern Energy, (ii) the sale of certain PSE's interests in the Colstrip Transmission System, and (iii) the execution of the NorthWestern Energy PPA for 90 MW of output of Colstrip Unit 4 with a term commencing on June 1, 2020, and expiring on May 15, 2025.

B. Need for the Proposed Transaction

The Colstrip Generating Station faces a changing landscape of evolving energy markets, new environmental regulation, potential carbon pricing, aging infrastructure, periodic litigation, and potential valuation differences among the six owners. As these factors influence operations of the Colstrip Generating Station, PSE continually evaluates its ownership interests in these assets, as it does all the assets within PSE's portfolio.

1. [redacted]

[redacted]

REDACTED
VERSION

[redacted]

[redacted]

1 [redacted]

REDACTED
VERSION

[redacted]

[redacted]

[redacted]

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> [redacted]
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> [redacted]

[redacted]

[redacted]

2. [redacted]

[redacted]

REDACTED VERSION

[redacted]

[redacted]

[redacted]

3. [redacted]

[redacted]

a. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

REDACTED
VERSION

[redacted]

b. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

(i) [redacted]

(ii) [redacted]

(iii) [redacted]

(iv) [redacted]

[redacted]

4. [redacted]

[redacted]

[redacted]

	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

5. [redacted]

[redacted]

[redacted] [redacted]

[redacted] [redacted]

[redacted] [redacted]

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[redacted]

(iv) [redacted]

(v) [redacted]

(vi) [redacted]

- [redacted]
- [redacted];
- [redacted]
- [redacted]

[redacted]

(i) [redacted]

(ii) [redacted]

(iii) [redacted]

(iv) [redacted]

(v) [redacted]

(vi) [redacted]

[redacted]

[redacted]

REDACTED VERSION

[redacted]

[redacted]

[redacted]

REDACTED
VERSION

[redacted]

6. [redacted]

[redacted]

[redacted]

[redacted].

C. PSE's Evaluations of Its Continued Ownership Interests in Colstrip Units 3 & 4

As previously discussed, PSE continually evaluates its ownership interests in its Colstrip Generating Station assets. In 2018, PSE considered the potential of closing Colstrip Units 3 & 4 but ultimately determined that such an action would be extremely difficult, if not impossible, due to the provisions of the Ownership and Operation Agreement that requires unanimity among the owners to effectuate a closure. PSE was first approached by [redacted] during the first have of 2019 regarding a potential sale of PSE's interests in Colstrip Units 3 & 4. Ultimately, the transaction proposed by [redacted] which was conditioned, in part, on the [redacted], failed because [redacted]

[redacted]. Subsequent to the failure of the condition precedent to the transaction proposed by [redacted], NorthWestern Energy approached PSE in July 2019 regarding a potential sale of PSE's interests in Colstrip Unit 4. As discussed below, discussions between PSE and NorthWestern Energy initiated in July 2019 have resulted in the proposed transaction for which PSE now seeks approval.

1. Deal Proposed by Talen Montana and NorthWestern Energy in the First Half of 2019

The principal commercial terms of the deal proposed by [redacted] in the first half of 2019 were as follows:

Table 4. Summary of the Principal Commercial Terms of the Deal Proposed by [redacted] in the First Half of 2019

General:	[redacted]
Purchase Price:	[redacted]
Purchased Assets:	[redacted]

REDACTED VERSION

[redacted]

Retained Assets: [redacted]

- [redacted]
- [redacted]
- [redacted]

Assumed Liabilities: [redacted]

[redacted]

Excluded Liabilities: [redacted]

Environmental Costs: [redacted]

Conditions Precedent: [redacted]

- [redacted]
- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted]

[redacted]

[redacted]

(See **Attachment 14** for the presentation to the PSE Board of Directors of the initial outline of the proposal of [redacted] see also **Attachment 15** for a term sheet regarding the proposed [redacted] previously provided to the Board of Directors on May 9, 2019.)

As previously mentioned, [redacted]. (See **Attachment 16** for Tom Lutey, "'Save Colstrip' Plan Falls Through on Last Day of Montana Legislature," Billings Gazette, dated April 25, 2019, regarding the failure of the

Montana legislation to pass the legislation.) [redacted]

The preliminary analyses conducted by PSE indicated that the proposal failed to provide any benefits to PSE customers. At the time of the analysis in May of 2019, PSE projected that continued operations of Colstrip Units 3 & 4 on a "business as usual" basis would cost PSE customers a net present value of $641 million through the end of calendar year 2025. In comparison, PSE projected that the proposal of [redacted] would cost PSE customers a net present value of $826 million over the same period. Therefore, the proposal of [redacted] in the first half of 2019 would have cost PSE customers a net present value of $185 million when compared to PSE continuing ownership of Colstrip Units 3 & 4 through the end of calendar year 2025. (See **Attachment 17** for PSE's initial comparison of the proposal of [redacted] to a "business as usual" scenario in which PSE continues to own and operate its existing shares of Colstrip Units 3 & 4 through the end of calendar year 2025.)

2. Deal Proposed by NorthWestern Energy in July 2019

In July 2019, NorthWestern Energy approach PSE regarding a potential sale of PSE's interests in Colstrip Unit 4. The principal commercial terms of the deal proposed by NorthWestern Energy in July of 2019 were as follows:

Table 5. Summary of the Principal Commercial Terms of the Deal Proposed by NorthWestern Energy in July of 2019

General:	NorthWestern Energy would acquire all of PSE's ownership interests and rights in Colstrip Unit 4 in such a manner that, following closing of the proposed

transaction, NorthWestern Energy would own fifty-five percent (55%) of Colstrip Unit 4.

Purchase Price: One dollar ($1.00)

Purchased Assets: The purchased assets would include all rights, title and interest of PSE in Colstrip Unit 4, including PSE's pro rata interest (with respect to its interest in Colstrip Unit 4) in the Common Facilities (as defined in the Common Facilities Agreement), real property (both generating and non-generating), real property leases, inventory (including fuel), contracts for goods or services, security deposits (including PSE's share of any working capital deposit held by Talen Montana), prepaid expenses, fuel contracts with coal suppliers, and emission allowances.

Retained Assets: PSE would retain all of its rights, title and interest in the following:

- Colstrip Units 1, 2, and 3, including PSE's pro rata interest (with respect to its interest in Colstrip Units 1, 2, and 3) in the Common Facilities, real property (both generating and non-generating), real property leases, inventory (including fuel), contracts for goods or services, security deposits (including PSE's share of any working capital deposit held by Talen Montana), prepaid expenses, fuel contracts with coal suppliers, and emission allowances; and

- Other retained assets that may be identified in the course of negotiating the definitive agreement.

Assumed Liabilities: NorthWestern Energy would assume certain specified liabilities of PSE associated with the purchased assets upon closing of the proposed transaction. The assumed liabilities will include only specified liabilities in respect of the purchased assets, including liabilities and

	claims with respect to the purchased assets arising after closing of the proposed transaction.
Excluded Liabilities:	PSE would retain and have exclusive responsibility for (i) all liabilities and obligations not related to the purchased assets and (ii) all liabilities and obligations relating to the purchased assets other than the assumed liabilities.
Environmental Costs:	PSE would bear its pro rata share of remediation costs, decommissioning costs and miscellaneous shutdown costs.
Conditions Precedent:	The closing of the proposed transaction would be subject to the following conditions precedent: • Receipt of all necessary consents and approvals for the transaction by governmental bodies, including approval of FERC under section 203 of the Federal Power Act, approval of the Montana Public Service Commission and the WUTC, and expiration or early termination of the waiting period under the Hart-Scott-Rodino Act, to the extent each such approval is required. • Either no other owner of Colstrip Units 3 & 4 exercise its right of first refusal to acquire any of the interests being transferred to NorthWestern Energy by PSE under the Ownership and Operations Agreement or the parties' receipt of the written consent of the other owners of Colstrip Unit 4 to the transfer of PSE's interests to NorthWestern Energy pursuant to the Ownership and Operations Agreement. • Closing of NorthWestern Energy's acquisition of certain of PSE's interests in the Colstrip Transmission System.

- Effectiveness of the NorthWestern Energy PPA.

NorthWestern Energy PPA: PSE would enter into a power purchase agreement with NorthWestern Energy for up to 90 MW of output from Colstrip Unit 4 with a term commencing on hour ending 0100 on June 1, 2020, through hour ending 2400 on May 15, 2025. The pricing under the NorthWestern Energy PPA would be the higher of

(i) the Mid C Day-Ahead Index Price for on-peak and off-peak periods, as applicable, as published by the Intercontinental Exchange for the applicable day of delivery; and

(ii) the marginal operating cost of Colstrip Unit 4.

Colstrip Transmission System Interests: PSE would sell a pro rata share of its interests in the Broadview-to-Townsend segment of the Colstrip Transmission System to Northwestern Energy at book value.

If PSE were to sell all of its interests in Colstrip Unit 4 to NorthWestern Energy, this would result in a reduction of 185 MW in generating capacity for PSE. The NorthWestern Energy PPA would replace 90 MW of the capacity reduction through May 15, 2025, leaving PSE with a net reduction of 95 MW of capacity through May 15, 2025. For purposes of analysis, PSE assumed that it would replace all of the lost capacity during the term of the NorthWestern Energy PPA with power purchased at the Mid C Day-Ahead Index Price for on-peak and off-peak periods, as applicable, as published by the Intercontinental Exchange for the applicable day of delivery. This is the most likely pricing of the NorthWestern Energy PPA and the market price that PSE would likely pay unless PSE were to acquire a new resource to fill the net reduction of 95 MW of capacity through May 15, 2025.

Using the assumptions outlined in the previous paragraph, PSE initially projected that the transaction proposed by NorthWestern Energy would provide benefits to customers under the most conservative of scenarios. In the initial quantitative analysis conducted, PSE projected that its customers would benefit from a reduction in power costs with a present value of $10/MWh. (See **Attachment 18** for PSE's initial quantitative analysis of the deal proposed by NorthWestern Energy (assuming no hedging).) If, however, PSE were to hedge the net reduction of 95 MW in capacity that PSE would purchase from the market, then PSE's customers would benefit from a reduction in power costs with a present value of $4/MWh. (See **Attachment 19** for PSE's initial quantitative analysis of the deal proposed by NorthWestern Energy (assuming hedging of the net reduction of 95 MW of capacity).)

Based on the favorable projections of PSE regarding the commercial terms of the deal proposed by NorthWestern Energy, PSE entered into a non-binding letter of intent with NorthWestern Energy on August 14, 2019. (See **Attachment 20** for the non-binding letter of intent between PSE and NorthWestern Energy.) PSE provided details of the proposed transaction with NorthWestern Energy to the Board of Directors on August 19, 2019. (See **Attachment 21** for the materials provided to the Board of Directors regarding the proposed deal with NorthWestern Energy.)

On August 26, 2019, PSE received the following indicative pricing and terms from Westmoreland Mining for coal supply for Colstrip Units 3 & 4, beginning January 1, 2020:

Table 6. Summary of the Indicative Prices and Terms from Westmoreland Mining for Coal Supply for Colstrip Units 3 & 4, beginning January 1, 2020

Term:	January 1, 2020 - December 31, 2025

PSE Minimum Annual Volume: [redacted]

Price: [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

(See **Attachment 22** for a summary of the indicative pricing and terms of new coal supply agreement with Westmoreland Mining, dated August 26, 2019.)

PSE subsequently refined its quantitative analysis and determined that the proposed transaction would provide a benefit to PSE customers over the period 2020 through 2025 with a net present value of (i) $94 million if PSE were to not hedge any of the reduction of 185 MW in capacity and (ii) $61 million if PSE were to hedge the net reduction of 95 MW in capacity:

Table 7. Quantitative Analysis of the Benefits of the Principal Commercial Terms of the Deal Proposed by NorthWestern Energy in July of 2019

	(A)	(B)	(C)
		Scenario 1	Scenario 2
Line	*$ in millions*	No hedging	Hedge 95MW
1	**Operational cost**		
2	Colstrip unit 4 continuing operations	$209 M	$209 M
3	90MW 5-year PPA + 95MW replacement	$115 M	$148 M
4	PPA Savings NPV	$94 M	$61 M
5			
6	**Operational cost ($/MWh)**		
7	Colstrip unit 4 continuing operations	$45.4/MWh	$45.4/MWh
8	90MW 5-year PPA + 95MW replacement	$24.9/MWh	$31.7/MWh
9	Savings $/MWh	$20.6/MWh	$13.7/MWh

(See **Attachment 23** for the results of the refined quantitative analysis of the deal proposed by NorthWestern Energy performed by PSE in late August of 2019.) The results of this refined quantitative analysis were presented to the Board of Directors on September 4, 2019. (See **Attachment 24** for presentation to the Board of Directors, dated September 4, 2019, regarding the deal proposed by NorthWestern Energy.)

At the time that it conducted the quantitative analysis presented in Table 7 above and provided to the Board of Directors on September 4, 2019, PSE had not had the opportunity to incorporate the indicative prices and terms of the new coal supply agreement in such analysis. PSE subsequently revised its quantitative analysis using the prices and terms of the new coal supply agreement. This revised quantitative analysis continued to project significant benefits to customers, although the projected benefit has decreased substantially:

Table 8. Quantitative Analysis of the Benefits of the Principal Commercial Terms of the Deal Proposed by NorthWestern Energy in July of 2019 Revised to Reflect Indicative Prices and Terms for Coal Supply

	(A)	(B)	(C)
		Scenario 1	**Scenario 2**
Line	*$ in millions*	**No hedging**	**Hedge 95MW**
1	**Operational cost**		
2	Colstrip Unit 4 continuing operations	$168 M	$168 M
3	90MW 5-year PPA + 95MW replacement	$110 M	$131 M
4	PPA Savings NPV	$58 M	$37 M
5			
6	**Operational cost ($/MWh)**		
7	Colstrip Unit 4 continuing operations	$43.1/MWh	$43.1/MWh
8	90MW 5-year PPA + 95MW replacement	$28.2/MWh	$33.4/MWh
9	Savings $/MWh	$14.9/MWh	$9.7/MWh

(See **Attachment 25** for the results of the refined quantitative analysis of the deal proposed by NorthWestern Energy that reflect the indicative pricing and terms of a new coal supply agreement conducted by PSE on September 11, 2019.)

The reduction in customer benefits reflected in Table 8 above reflect the substantial difference in pricing structure proposed by Westmoreland Mining. In its initial quantitative analysis, PSE projected a much higher cost per ton (approximately $44.00 per ton) than the cost per ton reflected in the indicative pricing ($27.00 per ton). PSE had used the $44.00 per ton in its initial analysis because that price reflected the most recent information to PSE available at that time based on a Westmorland Rosebud Mining proposal provided earlier in the year. The change in pricing structure results in a lower dispatch cost for Colstrip Unit 4 (i.e., a reduction in capacity factor from seventy percent (70%) to fifty-nine percent (59%) because the all-in costs are embedded in the variable costs:

Table 9. Comparison of Coal Supply Costs Used in Board Presentation Dated September 4, 2019, With the Quantitative Analysis Dated September 11, 2019 of the Indicative Coal Prices Proposed by Westmoreland Mining

	(A)	(B)	(C)	(D)
		Average over the term of the contract		
Line	*$ in millions*	Sep 11	Sep 4	Difference
1	PSE's share of Unit 4 capacity	185 MW	185 MW	–
2	Output (MWh)	950,819	1,128,966	(178,147)
3	Coal Tons	595,058	706,549	(111,491)
4	Net capacity factor	59%	70%	-11%
5				
6	**Colstrip operational cost**			
7	Fixed operating expenses	$14 M	$13 M	$1 M
8	Capital	$4 M	$3 M	$1 M
9	Coal fixed	$0 M	$15 M	($15) M
10	Dispatch cost	$20 M	$18 M	$2 M
11	**Operational expense**	$38 M	$48 M	($10) M
12	**PSE Expense**			
13	Property Tax	$3 M	$3 M	$0 M
14	**Total PSE Expense**	**$3 M**	**$3 M**	**$0 M**
15				
16	**Total cost (5-year average)**	**$41 M**	**$51 M**	**($10) M**
17				
18	Dispatch cost (line 10 / 2)	$21/MWh	$16/MWh	$5/MWh
19	Total cost $/MWh (line 16 / 2)	$43/MWh	$45/MWh	($2)/MWh
20	Coal cost per Ton	$27/Ton	$44/Ton	($17)/Ton

(See **Attachment 25.)** If the dispatch rate for Colstrip Units 3 & 4 does, in fact, decrease due to the coal supply pricing structure, then PSE would be relying more on market purchases or purchases from alternative resources and less on Colstrip Units 3 & 4 to meet customer loads. Therefore, the customer benefits of the sale of PSE's interests in Colstrip Unit 4 have reduced accordingly.

D. Regulatory and Legal Issues Associated with the Proposed Transactions

1. Need for WUTC Approval of the Proposed Transfer of Property Necessary or Useful in the Performance of PSE's Duties to the Public

Revised Code of Washington (RCW) 80.12.020(1) requires a public service company to obtain approval of the WUTC for the sale of facilities, which are necessary or useful in the performance of its duties to the public:

> No public service company shall sell … the whole or any part of its … properties or facilities whatsoever, which are necessary or useful in the performance of its duties to the public … without having secured from the [WUTC] an order authorizing it to do so.

RCW 80.12.020(1). Washington Administrative Code (WAC) 480-143-180 defines property that is necessary or useful in the performance of a public service company's duties to the public as follows:

> Necessary or useful includes all property except items that:
>
> (1) Are substituted with or replaced by items of equal or greater value or usefulness;
>
> (2) Are surplus and unneeded assets for which full value is received;
>
> (3) Are obsolete; or
>
> (4) Are excluded from the public service company's rate base by [WUTC] order, or otherwise.

WAC 480-143-180. PSE's interests in Colstrip Unit 4 do not meet any of the exceptions provided in WAC 480-143-180. Therefore, PSE's interests in Colstrip Unit 4 are necessary or useful in the performance of PSE's duties to the public, and PSE must obtain WUTC approval of the sale of PSE's interests in Colstrip Unit 4.

The rules in Chapter 480-143 Washington Administrative Code (WAC) apply to any public service company that seeks WUTC approval of a proposed sale of properties or facilities pursuant to RCW 80.12.020(1). WAC 480-143-120 provides that "[a] public service company may not complete a transfer of property necessary or useful to perform its public duties unless the company first applies for, and obtains, [WUTC] approval." The WUTC must deny any application pursuant to RCW 80.12.020(1) if the WUTC finds that the proposed transaction is not consistent with the public interest,

> If, upon the examination of any application and accompanying exhibits, or upon a hearing concerning the same, the [WUTC] finds the proposed transaction is not consistent with the public interest, it shall deny the application.

WAC 480-143-170.

Chapter 480-143 WAC contains sparse procedural requirements for a public service company to obtain WUTC approval for the transfer of property necessary or useful of a public service company to perform its public duties. WAC 480-143-110 requires the public service company to file an application for approval with the WUTC "by mail or in person or as the [WUTC] otherwise may provide." WAC 480-143-160 requires the WUTC to "examine all applications for transfers and accompanying exhibits" and provides that the WUTC "may set an application for hearing and require all parties to the transaction to appear and give testimony."

PSE anticipates filing with the WUTC a petition for approval of the proposed transaction with NorthWestern Energy, including supporting testimony and exhibits. The petition will seek approval of:

(i) the sale of PSE's interests in Colstrip Unit 4 to NorthWestern Energy;

(ii) the sale of certain of PSE's interests in the Colstrip Transmission System to NorthWestern Energy; and

(iii) the NorthWestern Energy PPA for 90 MW of capacity from Colstrip Unit 4 with a term beginning on June 1, 2020, and expiring on May 15, 2021.

As previously mentioned, the WUTC regulations governing the transfer of property necessary or useful of a public service company to perform its public duties does not contained detail procedural requirements. Accordingly, PSE anticipates requesting that the WUTC expedite the hearing of the petition. Below is a projected schedule of an expedited proceeding:

Table 10. Anticipated Requested WUTC Procedural Schedule of PSE

Filing of PSE's Application and Prefiled Direct Testimony and Supporting Exhibits**:**	December 11, 2019
Staff, Public Counsel, and Intervenor Response Testimony**:**	January 24, 2020
PSE Rebuttal Testimony:	February 14, 2020
Evidentiary Hearing:	Week of March 2, 2020
Simultaneous Briefs:	March 20, 2020
Requested Date of Order:	May 8, 2020

PSE believes that the requested schedule identified in Table 10 above is reasonable and allows sufficient time for the WUTC to conduct the necessary processes while allowing PSE and NorthWestern Energy sufficient time to close the transactions so that PSE may begin taking deliveries under the NorthWestern Energy PPA beginning June 1, 2020. Nonetheless, PSE recognizes that the procedural schedule approved by the WUTC may be affected by other factors, including other pending matters and rulemakings before the WUTC and the schedules of the WUTC commissioners.

2. Request for Modification in Depreciation Schedules for Colstrip Unit 4 to Reflect the Sale of PSE's Interests in the Unit

As previously discussed, the Washington Clean Energy Transformation Act requires the WUTC to accelerate depreciation for any coal-fired resource or qualified transmission line owned by an investor-owned utility to no later than December 31, 2025. In its pending general rate case in WUTC Dockets UE-190529 and UG-190530, PSE proposed to shorten the depreciable lives of Colstrip Units 3 & 4 to December 31, 2025, to comply with the statute. Specifically, the depreciation schedule for these units is discussed in more detail in the Prefiled Direct Testimony of John J. Spanos, Exh. JJS-1T, in those dockets with respect to the limited depreciation study addressing Colstrip Units 3 & 4, and the Prefiled Direct Testimony of Susan E. Free, Exh. SEF-1T, with respect to the adjustment to the revenue requirement associated with this change.

PSE will request that the depreciation schedule for Colstrip Unit 4 established by the WUTC in Dockets UE-190529 and UG-190530 not change as a result of the proposed sale of PSE's interests in Colstrip Unit 4. PSE will propose to (i) reduce its operating assets by the undepreciated book value of its interests in Colstrip Unit 4; (ii) create a regulatory asset in an amount equal to the undepreciated book value of its interests in Colstrip Unit 4; and (iii) allow PSE to continue to recover amortization on the newly created regulatory asset reflecting the undepreciated book value of its interests in Colstrip Unit 4 in accordance with the depreciation schedule for Colstrip Unit 4 established by the WUTC in Dockets UE-190529 and UG-190530 in conformity with the Washington Clean Energy Transformation Act. These proposals should allow PSE to recover any potential stranded costs associated with Colstrip Unit 4 while maintaining the significant customer benefits created by the proposed transactions.

3. Compliance with Greenhouse Gas Requirements

RCW 70.235.020, added in 2008, requires Washington State to achieve the same levels of greenhouse gas emissions as 1990 levels by 2020, to reduce emissions to 25% below 1990 levels by 2035, and reduce emissions to 50% below 1990 levels by 2050. These codes also set requirements for reporting of greenhouse gases.

RCW 80.80.040 established standards for greenhouse gas emissions. Beginning July 1, 2008, the greenhouse gas emissions performance standard for all baseload electric generation for which electric utilities enter into *long-term financial commitments* on or after such date must be the lower of:

> (i) One thousand one hundred pounds of greenhouse gases per megawatt-hour; or
>
> (ii) The average available greenhouse gas emissions output as determined under RCW 80.80.050.

RCW 80.80.040(1).

The term "long-term financial commitment" is defined in the statute as

> [a] new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

RCW 80.80.010(16)(b). In other words, an electric utility may enter into a contract for baseload electric generation with a term less than five (5) years without violating the greenhouse gas emissions standards of Chapter 80.80 RCW. As previously mentioned, the NorthWestern PPA for the purchase of up to ninety (90) MW of capacity for Colstrip Unit 4 is for a term less than five years (i.e., June 1, 2020, through May 15, 2025). Therefore, PSE will be in compliance with Chapter 80.80 RCW by entering into the NorthWestern Energy PPA because such agreement does not meet the definition of a "long-time financial commitment".

E. Summary of Material Terms of the Proposed Agreements

1. Material Terms of the Colstrip Unit 4 Purchase and Sale Agreement

The principal commercial terms of the Colstrip Unit 4 Purchase and Sale Agreement are summarized below.

a. Sale by PSE and Purchase by NorthWestern Energy of the Colstrip 4 Interests

The Colstrip Unit 4 Purchase and Sale Agreement proposes the sale by PSE to NorthWestern Energy of the following:

(i) Colstrip 4 Interests. PSE will sell to NorthWestern Energy all of PSE's twenty-five percent (25%) undivided interest in the 740 MW Colstrip Unit 4 to NorthWestern Energy (the "Colstrip 4 Interests");

(ii) Colstrip 4 Real Property Interests. PSE will transfer to NorthWestern Energy the portion of PSE's real property rights associated with the Colstrip 4 Interests (the "Colstrip 4 Real Property Interests");

(iii) Common Facilities Interests. PSE will transfer to NorthWestern Energy the portion of PSE's interest in the common facilities and associated assets related to the Colstrip 4 Interests (the "Common Facilities Interest"); and

(iv) Colstrip 4 Material Contract Interests. PSE will transfer to NorthWestern Energy the portion of PSE's rights under the contracts, leases and agreements related to the Colstrip 4 Interests (the "Colstrip 4 Material Contract Interests").

The Colstrip 4 Interests, the Colstrip 4 Real Property Interests, the Common Facilities Interest, and the Colstrip 4 Material Contract Interests are referred to in this Memorandum as the "Transferred Assets").

b. Assets and Liabilities Retained by PSE

PSE will retain the following assets and liabilities under the terms and conditions of the Colstrip Unit 4 Purchase and Sale Agreement:

(i) all of PSE's interest in Colstrip Units 1 & 2 and Colstrip Unit 3;

(ii) claims arising out of liabilities occurring prior to closing, including environmental liabilities and pension liabilities;

(iii) future decommissioning and demolition costs in connection with the Colstrip 4 Interests (excluding decommission or demolition costs arising from post-closing improvements to the Colstrip 4 Interests);

(iv) any obligation or liability related to or arising out of any of the excluded assets identified in Exhibit B to the Colstrip Unit 4 Purchase and Sale Agreement;

(v) any obligation or liability related to or arising out of actions pending as of closing against PSE or any of its affiliates;

(vi) any obligation or liability related to or arising out of PSE's conduct of the business or ownership of the Colstrip 4 Interests prior to closing;

(vii) any ERISA liability or any obligation or liability related to or arising out of any collective bargaining agreement of PSE, whether prior to, on or after closing;

(viii) any ERISA liability or any obligation or liability related to or arising out of any collective bargaining agreement of Talen Montana on or prior to closing and any compliance with or violations of labor laws by Talen Montana on or prior to closing;

(ix) any tax obligation or liability of PSE; and

(x) any obligation or liability of PSE for any debt.

c. Liabilities Assumed by NorthWestern Energy

NorthWestern Energy assumes all liabilities and obligations related to the Colstrip 4 Interests arising after closing.

d. Purchase Price

As consideration for the purchase of the Transferred Assets, NorthWestern Energy will pay to PSE a purchase price of one dollar ($1.00).

e. Conditions Precedent to Closing:

The Colstrip Unit 4 Purchase and Sale Agreement includes customary conditions precedent, including delivery of certain documentation, the representations and warranties of the parties remain true and correct as of closing, the delivery of necessary consents, no order or decree of a court or governmental authority has been issued that would prevent closing, termination of all liens except permitted liens, payment of the purchase price, and no event causing or constituting a material adverse effect has occurred or is occurring. Additional conditions precedent include the following:

(i) the other owners of Colstrip Units 3 & 4 (i.e., Avista, PacifiCorp, Portland General, and Talen Montana) have either declined to exercise or executed a waiver of their rights of first refusal contained in Section 24 of the Ownership and Operations Agreement;

(ii) execution of the Colstrip Transmission System Purchase and Sale Agreement by both NorthWestern Energy and PSE;

(iii) approval of NorthWestern Energy's acquisition of the Colstrip 4 Interests by the Federal Energy Regulatory Commission ("FERC");

(iv) approval of NorthWestern Energy's acquisition of the Colstrip 4 Interests by the Montana Public Service Commission; and

(v) approval of PSE's sale of the Colstrip 4 Interests by the WUTC.

f. Representations and Warranties of PSE

The Colstrip Unit 4 Purchase and Sale Agreement includes customary representations and warranties provisions for PSE, including the following:

(i) Organization and Good Standing. PSE is a public utility corporation duly organized, validly existing, and in good standing under the laws of the State of Washington.

(ii) Authority. PSE has all requisite power and authority and as of the closing will have obtained all other applicable governmental, statutory, regulatory or other consents, licenses, waivers or exemptions necessary to execute and deliver the Colstrip Unit 4 Purchase and Sale Agreement and closing documents and to perform its obligations under the Colstrip Unit 4 Purchase and Sale Agreement and closing documents.

(iii) Enforceability. The Colstrip Unit 4 Purchase and Sale Agreement has been, and the closing documents, when executed and delivered, will be, duly and validly executed and delivered by and is a valid and binding agreement of PSE.

(iv) Title to Colstrip 4 Interests. PSE owns the Colstrip 4 Interests free and clear of all liens, other than permitted liens.

(v) No Violation or Breach. Assuming that all of the required regulatory approvals and PSE's consents have been obtained, neither the execution and delivery of the Colstrip Unit 4 Purchase and Sale Agreement and closing documents will result in a violation or breach of, or default under, any provision of the organizational documents of PSE or any material contract under which PSE or the assets comprising Colstrip 4 Interests is bound.

(vi) Consents. No consent, approval, authorization or permit of, or filing with or notification to, any person is required for or in connection with the execution and delivery of the Colstrip Unit 4 Purchase and Sale Agreement except for (a) the required regulatory approvals; (b) expressly identified third-party consents, filings, and notices, and (c) immaterial consents, approvals, authorizations, permits, filings or notices.

(vii) Material Contracts. PSE is not party to any contract reasonably necessary for NorthWestern Energy's use of the Colstrip 4 Interests after closing to which NorthWestern Energy is not also a party.

(viii) No Disputes; Litigation. There is no action pending, or to PSE's knowledge, threatened in writing against PSE, except for actions that would not have a material adverse effect on PSE's ability to perform its obligations under the closing documents.

(ix) Brokerage Fees and Commissions. Neither PSE nor any of its affiliates has incurred any obligation or entered into any agreement for any investment banking, brokerage, or finder's fee or commission in respect of Colstrip Unit 4 Purchase and Sale Agreement the closing documents for which NorthWestern Energy or any of affiliates shall incur any liability.

(x) Bankruptcy. There are no bankruptcy, reorganization, or arrangement proceedings pending against, being contemplated by, or to the knowledge of PSE threatened against, PSE.

g. Representations and Warranties of NorthWestern Energy

The Colstrip Unit 4 Purchase and Sale Agreement includes customary representations and warranties provisions for NorthWestern Energy, including the following:

(i) Organization and Good Standing. NorthWestern Energy is a public utility corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware.

(ii) Authority. NorthWestern Energy has all requisite power and authority and as of the closing will have obtained all other applicable governmental, statutory, regulatory or other consents, licenses, waivers or exemptions necessary to execute and deliver the Colstrip Unit 4 Purchase and Sale Agreement and closing documents and to perform its obligations under the Colstrip Unit 4 Purchase and Sale Agreement and closing documents.

(iii) Enforceability. The Colstrip Unit 4 Purchase and Sale Agreement has been, and the closing documents, when executed and delivered, will be, duly and validly executed and delivered by and is a valid and binding agreement of NorthWestern Energy.

(iv) No Violation or Breach. Assuming that all of the required regulatory approvals and NorthWestern Energy's consents have been obtained, neither the execution and delivery of the Colstrip Unit 4 Purchase and Sale Agreement and closing documents will result in a violation or breach of, or default under, any provision of the organizational documents of NorthWestern Energy or any material contract under which NorthWestern Energy is bound.

(v) Consents. No consent, approval, authorization or permit of, or filing with or notification to, any person is required for or in connection with the execution and delivery of the Colstrip Unit 4 Purchase and Sale Agreement except for (a) the required regulatory approvals; (b) expressly identified third-party consents, filings, and notices, and (c) immaterial consents, approvals, authorizations, permits, filings or notices.

(vi) No Disputes; Litigation. There is no action pending, or to NorthWestern Energy's knowledge, threatened in writing against NorthWestern Energy, except for actions that would not have a material adverse effect on NorthWestern Energy's ability to perform its obligations under the closing documents.

(vii) Brokerage Fees and Commissions. Neither NorthWestern Energy nor any of its affiliates has incurred any obligation or entered into any agreement for any investment banking, brokerage, or finder's fee or commission in respect of Colstrip Unit 4 Purchase and Sale Agreement the closing documents for which PSE or any of affiliates shall incur any liability.

(viii) Bankruptcy. There are no bankruptcy, reorganization, or arrangement proceedings pending against, being contemplated by, or to the knowledge of NorthWestern Energy threatened against, NorthWestern Energy.

(ix) Regulatory Matters. NorthWestern Energy represents and warrants that, with respect to its acquisition of the Colstrip 4 Interests, it does not need approvals from any governmental authority other than, and would not reasonably be expected to result in a denial of any required regulatory approvals by, FERC and the Montana Public Service Commission.

h. Access

PSE agrees (i) to cooperate in facilitating reasonable access to PSE's records, personnel, offices and other facilities and properties related to the Colstrip 4 Interests and (ii) to permit NorthWestern Energy to make copies and inspections of records as reasonably requested, and (iii) furnish NorthWestern Energy with financial and operating data and other information with respect to the Colstrip 4 Interests as NorthWestern Energy may from time to time reasonably request.

i. Confidentiality

Each party agrees to maintain in confidence all information made available to it under the Colstrip Unit 4 Purchase and Sale Agreement and to cause their respective officers, directors, agents, employees, representatives, consultants, and advisors to maintain in confidence all information made available to them under the Colstrip Unit 4 Purchase and Sale Agreement, all as provided in the Mutual Non-Disclosure Agreement, dated July 19, 2019, between PSE and NorthWestern Energy.

j. Covenants

The Colstrip Unit 4 Purchase and Sale Agreement includes customary covenants of PSE and NorthWestern Energy, including the following:

(i) Exclusivity. PSE grants NorthWestern Energy the exclusive right to acquire the Colstrip 4 Interests until the earlier of the closing or termination of the Colstrip Unit 4 Purchase and Sale Agreement.

(ii) Conduct of Business. PSE shall conduct its business related to the Colstrip 4 Interests in the ordinary course in accordance with past practice and not make any material change with respect thereto, including

(a) complying in all material respects with the Ownership and Operations Agreement;

(b) using commercially reasonable efforts to preserve and protect the Colstrip 4 Interests subject to the terms of the Ownership and Operations Agreement and applicable laws;

(c) consulting with and being directed by NorthWestern Energy regarding any approvals of the Project Committee in connection with the Colstrip 4 Interests;

(d) not assigning, terminating, amending, giving any consent with respect to or waiving any rights under, in any material respect, any material contract;

(e) not taking any action or entering into any commitment with respect to or in contemplation of any liquidation, dissolution, recapitalization, reorganization, or other winding up of its business or operations related to the Colstrip 4 Interests, except as required by applicable laws;

(f) not granting any express further lien on any of the Colstrip 4 Interests, except for permitted liens, and terminating those liens that will be terminated, without cost to NorthWestern Energy, at closing; and

(g) providing prompt written disclosure to NorthWestern Energy of all relevant information which comes to the attention of PSE which may constitute a breach of any of PSE's representations and warranties set forth in the Colstrip Unit 4 Purchase and Sale Agreement.

(iii) <u>Public Announcements</u>. No party shall issue, or permit any agent or affiliate of such party to issue, any press releases or otherwise make any public statements with respect to the Colstrip Unit 4 Purchase and Sale Agreement or the closing documents, except when and to the extent that such release or statement is deemed in good faith by the releasing party to be required to obtain the required regulatory approvals or by applicable law.

(iv) <u>Actions by Parties</u>. Each party agrees to use commercially reasonable efforts to satisfy the conditions to the closing set forth in the Colstrip Unit 4 Purchase and Sale Agreement.

(v) Further Assurances. Each party will execute and deliver further agreements, certificates, documents or opinions and take such other action, as may be reasonably necessary to carry out the purposes and intents of the Colstrip Unit 4 Purchase and Sale Agreement.

(vi) Records. NorthWestern Energy will maintain the records in accordance with its records retention policy as maintained in compliance with applicable laws and commercially responsible practices. If any of the records pertain to any claim or dispute pending on the date upon which such records would be destroyed pursuant to NorthWestern Energy's records retention policy, NorthWestern Energy shall maintain any of the records designated by PSE until such claim or dispute is finally resolved and the time for all appeals has been exhausted.

(vii) Privilege. NorthWestern Energy will not intentionally waive the attorney/client, work product, or like privilege of PSE with respect to any of the records existing as of the closing date, without PSE's prior written consent.

(viii) Regulatory and Other Authorizations and Consents Filings. Each party will use commercially reasonable efforts to obtain all authorizations and consents necessary for its execution and delivery of, and the performance of its obligations under, the Colstrip Unit 4 Purchase and Sale Agreement and will cooperate fully with the other party in promptly seeking to obtain all such authorizations and consents, giving notices, and making filings.

(ix) Required Regulatory Approvals. The parties agree to use commercially reasonable efforts to gather and obtain all necessary information, consult with each other, consider and incorporate reasonable comments, and complete filings in connection with the required regulatory approvals (i.e., approval by FERC of NorthWestern Energy's acquisition of the Colstrip 4 Interests, approval of the Montana Public Service Commission of NorthWestern Energy's acquisition of the Colstrip 4 Interests, and approval of the WUTC of PSE's sale of the Colstrip 4 Interests). During the process to obtain required regulatory approvals, the parties commit to consult with each other, provide supplemental information, and provide prompt written notice to the other party of all discussions and correspondence with the applicable regulatory authorities that reasonably relates to or bears upon such filings. The parties agree to use commercially reasonable efforts and to act in good faith to expedite and obtain the required regulatory approvals.

(x) Fees and Expenses. All fees and expenses incurred in connection with the Colstrip Unit 4 Purchase and Sale Agreement and the closing documents will be paid by the party incurring such fee or expense, whether or not the closing shall have occurred.

(xi) Tax Matters. After closing, each party will provide each other with cooperation and information related to the Colstrip Generating Station and the Colstrip 4 Interests as the parties reasonably may request in (a) filing any tax return, amending any tax return, or claiming any tax refund; (b) determining any liability for taxes or any right to tax refunds or (c) conducting or defending any audit, examination, claim or other proceeding in respect of taxes.

(xii) Transfer Taxes. Each party will be responsible under applicable law for payment of fifty percent (50%) of all transfer taxes.

(xiii) Right of First Refusal. PSE will use its commercially reasonable efforts to notify and seek a waiver from each of the other owners of Colstrip Units 3 & 4 with respect to their rights of first refusal contained in Section 24 of the Ownership and Operations Agreement. PSE will immediately notify NorthWestern Energy if at any time any of the other owners of Colstrip Units 3 & 4 exercises or indicates its intent to exercise any such right of first refusal.

(xiv) Updates to Disclosure Schedules. Prior to and up to ten (10) days prior to the closing, PSE shall provide written notice to NorthWestern Energy of any fact, matter, condition, event or circumstance that, individually or in the aggregate, renders PSE unable, without amending the disclosure schedules, to satisfy the condition precedent under the Colstrip Unit 4 Purchase and Sale Agreement.

(xv) Transfers of Interests. If, at any time prior to closing, NorthWestern Energy enters into any contract, agreement, arrangement or other understanding with respect to the purchase of any interests of Colstrip Units 1 & 2, Colstrip Unit 3 or Colstrip Unit 4 on terms (individually or in the aggregate) more favorable to the seller of such interests than the terms as agreed upon in the Colstrip Unit 4 Purchase and Sale Agreement, NorthWestern

Energy will amend the Colstrip Unit 4 Purchase and Sale Agreement to reflect such more favorable terms.

k. Liability

PSE will be responsible for losses arising from the ownership or operation of the Colstrip 4 Interests, Colstrip Units 3 & 4, or the common facilities that are wholly or partially caused by or arise from events or occurrences which took place before the closing date based on its pre-closing date project shares (i.e., PSE's 25 percent share of Colstrip Units 3 & 4 before closing). NorthWestern Energy (and not PSE) will be responsible for losses arising from the ownership or operation of the Colstrip 4 Interests that are wholly or partially caused by or arise from events or occurrences which took place on or after closing.

If the parties are unable to agree whether particular losses are at least partially the result of events, occurrences, or conditions from before or after the closing date, the parties agree to attempt to settle such disagreement by mutual discussion between executives from both parties. If any such disagreement is not resolved within thirty (30) days of receipt of a notice of such dispute, the parties will jointly retain an independent third-party consultant (with expertise in the subject matter giving rise to the liability) to promptly determine when the events or occurrences that caused or gave rise to the losses in question took place. The independent third-party consultant will act as an impartial and neutral arbitrator in carrying out its duties. If the independent third-party consultant determines that the losses in question were at least partially caused by or partially arose from events or occurrence from prior to the closing date, then PSE will be responsible for those losses. If the independent third-party consultant determines that losses in question were wholly caused by or wholly arose from events or occurrence after the closing date, NorthWestern Energy will be responsible for those losses.

l. Indemnification

The Colstrip Unit 4 Purchase and Sale Agreement includes customary indemnification provisions (e.g., indemnification with respect to breaches or inaccuracies in any of the representations, warranties, covenants, agreement, or other obligation of such party).

If closing of the Colstrip Unit 4 Purchase and Sale Agreement occurs, PSE will indemnify NorthWestern Energy for:

- any failure by PSE to pay, perform or discharge any excluded liability under the agreement;
- any failure by PSE to pay, perform or discharge any retained liability under the agreement;
- any liability, obligation or commitment of PSE relating to the Colstrip 4 Interests not assumed by NorthWestern Energy under the agreement;
- any taxes of, or attributable to, PSE and the Colstrip 4 Interests for all pre-closing periods;
- all transfer taxes;
- any fraud, willful misconduct or gross negligence in connection with the agreement by PSE or its affiliates; or
- any claim by a third-party or liability to a third-party to the extent it seeks to hold NorthWestern Energy responsible for more than the share of any losses set forth in the liability provisions of the Colstrip Unit 4 Purchase and Sale Agreement.

If closing of the Colstrip Unit 4 Purchase and Sale Agreement occurs, NorthWestern Energy will indemnify PSE for:

- any failure of NorthWestern Energy to pay, discharge or perform any of the assumed liabilities under the agreement;

- any fraud, willful misconduct or gross negligence in connection with the agreement by NorthWestern Energy; or

- any claim by a third-party or liability to a third-party to the extent it seeks to hold PSE responsible for more than the share of any losses provided for in the liability provisions of the Colstrip Unit 4 Purchase and Sale Agreement.

m. Termination

The Colstrip Unit 4 Purchase and Sale Agreement may be terminated prior to closing:

- at any time by mutual written agreement of PSE and NorthWestern Energy; or

- by either PSE or NorthWestern Energy upon the material breach of the agreement by the other, to be effective, if curable, upon the breaching party’s failure to cure within five (5) business days of notice given, and if incurable, upon notice given.

PSE may generally terminate the Colstrip Unit 4 Purchase and Sale Agreement prior to closing:

- at any time after any final, non-appealable decision is made by the applicable governmental authority denying any required regulatory approval; or

- at any time after December 31, 2020, if the Closing has not yet occurred.

NorthWestern Energy may generally terminate the Colstrip Unit 4 Purchase and Sale Agreement prior to closing:

- if a fact, matter, condition, event or circumstance first disclosed in an update from PSE has had or would reasonably be expected to have a material adverse effect;

- at any time after any final, non-appealable decision is made by the applicable governmental authority denying any required regulatory approval;

- at any time after December 31, 2020, if the Closing has not yet occurred;
- at any time after December 31, 2020, if any order or decree by any federal or state court or governmental authority exists which would delay or otherwise impair the consummation of the sale of the Colstrip 4 Interests;
- at any time if any other Colstrip owner exercises a right of first refusal offered to it by PSE (pursuant to the terms of the Ownership and Operations Agreement); or
- if PSE has failed to deliver to NorthWestern Energy the Right of First Refusal Resolution Notice within the time specified in the Colstrip Unit 4 Purchase and Sale Agreement.

n. Effect of Termination

In the event of termination of the Colstrip Unit 4 Purchase and Sale Agreement pursuant to its terms,

- all filings, applications and other submissions made to any governmental authority shall, to the extent practicable, be withdrawn from the governmental authority to which they were made; and
- except for those access and confidentiality obligations set forth in the access and confidentiality provisions of the agreement, neither PSE nor NorthWestern Energy shall have any further obligation under the agreement.

There shall be no liability of any shareholder, partner, member, director, officer, employee, advisor or representative of PSE or NorthWestern Energy or any affiliate thereof or any other person (including any shareholder, partner, member, director, officer, employee, advisor or representative thereof) in connection with any liability or other obligation of PSE or NorthWestern Energy or any affiliate thereof, whether under the Colstrip Unit 4 Purchase and

Sale Agreement or otherwise in connection with the transactions contemplated by the Colstrip Unit 4 Purchase and Sale Agreement.

o. Dispute Resolution

In the event of a dispute between PSE or NorthWestern Energy under the Colstrip Unit 4 Purchase and Sale Agreement, the parties will attempt to settle such dispute by mutual discussions. If any dispute is not resolved within thirty (30) days of receipt of a dispute notice, then, upon either party's request, the dispute shall be finally and exclusively resolved by arbitration. The arbitration shall be held in accordance with the Commercial Arbitration Rules of the American Arbitration Association, then in effect, except as modified by the Colstrip Unit 4 Purchase and Sale Agreement. The arbitration shall be held, and the award shall be issued in Chicago, Illinois.

Any arbitrator appointed shall be a retired judge, preferably from a Federal District Court or Federal Court of Appeals, or a practicing attorney with no less than twenty (20) years of experience and an experienced arbitrator and if possible shall have experience with disputes relating to electric power infrastructure. The arbitrator is not empowered to award damages in excess of compensatory damages, and each party hereby irrevocably waives any right to recover consequential, punitive, exemplary or similar damages with respect to any dispute. The arbitrator's award shall allocate all costs of the arbitration, including the fees and expenses of the arbitrator and reasonable attorneys' fees, costs and expert witness expenses of the parties. The award shall be final and binding on the Parties and may be enforced in any court having jurisdiction.

p. Governing Law

The Colstrip Unit 4 Purchase and Sale Agreement is to be governed by, enforced, and interpreted in accordance with the laws of the State of Delaware without regard to principles of conflicts of laws.

2. Material Terms of the Colstrip Transmission System Purchase and Sale Agreement

The principal commercial terms of the Colstrip Transmission System Purchase and Sale Agreement are summarized below.

a. Sale by PSE and Purchase by NorthWestern Energy of the Puget Transmission Assets

The Colstrip Transmission System Purchase and Sale Agreement proposes the sale by PSE and purchase by NorthWestern Energy of the following assets, free and clear of all liens other than certain permitted liens:

(i) Puget Transmission Assets. The Puget Transmission Assets, which consist of the following:

(a) Initial Purchase Assets. The Initial Purchase Assets, which consist of an undivided interest in PSE's interest in the Colstrip Transmission System representing not less than 95 MW, consisting of not less than a four and 2/10ths percent (4.2%) interest in the Colstrip-to-Broadview segment and a four and 9/10ths percent (4.9%) interest in the Broadview-to-Townsend segment of the Colstrip Transmission System (the "Initial Purchase Assets").

(b) Option Assets. The Option Assets, which consist of an option of NorthWestern Energy to acquire an undivided ownership interest in PSE's interest in the Colstrip Transmission System representing not less than 90 MW, consisting of not less than a four percent (4%) interest in the Colstrip-to-Broadview segment and a four and 2/10ths percent (4.2%) interest in the Broadview-to-Townsend segment of the Colstrip Transmission System (the "Option Assets").

(ii) Puget Transmission Assets Real Property Interests. PSE will transfer to NorthWestern Energy the portion of PSE's real property rights associated with the Puget Transmission Assets (the "Puget Transmission Assets Real Property Interests"); and

(iii) Puget Transmission Assets Material Contract Interests. PSE will transfer to NorthWestern Energy the portion of PSE's rights under the contracts, leases and agreements related to the Puget Transmission Assets (the "Puget Transmission Assets Material Contract Interests").

b. Sale by PSE and Purchase by NorthWestern Energy of the Puget Transmission Assets

PSE will retain the following assets and liabilities under the terms and conditions of the Colstrip Transmission System Purchase and Sale Agreement:

(i) all of PSE's interest in the Colstrip Transmission System other than the Puget Transmission Assets;

(ii) claims arising out of liabilities occurring prior to closing, including environmental liabilities;

(iii) any obligation or liability related to or arising out of any of the excluded assets;

(iv) any obligation or liability related to or arising out of (a) any real property lease or sublease not included in the Puget Transmission Assets Real Property Interests and (b) any contract not included in the Puget Transmission Assets Material Contract Interests;

(v) any obligation or liability related to or arising out of any Puget Transmission Assets Real Property Interests or Puget Transmission Assets Material Contract Interests to the extent such obligation or liability relates to or arises out of the time period prior to closing;

(vi) any obligation or liability related to or arising out of actions pending as of closing against PSE or its affiliates;

(vii) any obligation or liability related to or arising out of the PSE's conduct of the business or ownership of the Puget Transmission Assets prior to closing;

(viii) any ERISA Affiliate liability or any obligation or liability related to or arising out of any collective bargaining agreement of PSE, whether prior to, on or after closing;

(ix) any obligation or liability of any kind or nature relating to (a) taxes of PSE; and (b) taxes related to PSE's conduct of the business or ownership of the Puget Transmission Assets prior to closing; and

(x) any obligation or liability of PSE for any debt.

c. Purchase Price

At least three business days prior to the closing for the acquisition of each of the Initial Purchase Assets and the Option Assets, PSE will deliver to NorthWestern Energy a calculation of the depreciated net book value of the Initial Assets and the Option Assets, respectively. The purchase price for the Initial Purchase Assets will be the depreciated net book value of the Initial Assets, and the purchase price for the Options Assets will be the depreciated net book value of the Options Assets.

d. Allocation of Purchase Price

The allocation of the purchase price will be allocated in compliance with section 1060 of the Internal Revenue Code. NorthWestern Energy will prepare an allocation schedule setting forth NorthWestern Energy's determination of the allocation within thirty (30) days after closing. If PSE objects to any item of the schedule, it must provide written objection to NorthWestern Energy within ten (10) days of receipt of the schedule. If PSE does not timely object to the schedule, PSE shall be deemed to have approved the schedule. If the parties are unable to resolve any such dispute within fifteen (15) days after NorthWestern Energy's receipt of PSE's written objection to the schedule, the dispute will be submitted to an independent accounting firm for a final and binding determination..

e. Assumption of Liabilities by NorthWestern Energy

NorthWestern Energy will assume the liabilities and obligations of PSE related to the Puget Transmission Assets acquired at closing, including those liabilities and obligations contained in the Puget Transmission Assets Material Contracts Interests, but solely with respect to liabilities or obligations arising after closing.

f. Real Property Taxes

PSE will be responsible for all real property taxes imposed on or with respect to the Puget Transmission Assets Real Property Interests for all tax periods ending on or prior to closing. Any real property tax reductions or refunds for or relating to a period prior to closing will be for the account of PSE. If NorthWestern Energy receives a property tax refund or credit with respect to the Puget Transmission Assets Real Property Interests for or relating to a period prior to closing, NorthWestern Energy will remit to PSE the portion of such refund or credit relating to the period prior to closing.

g. Conditions Precedent to Closing on the Initial Purchase Assets

The Colstrip Transmission System Purchase and Sale Agreement includes customary conditions precedent, including delivery of certain documentation, the representations and warranties of the parties remain true and correct as of closing, the delivery of necessary consents, no order or decree of a court or governmental authority has been issued that would prevent closing, termination of all liens except permitted liens, payment of the purchase price, and no event causing or constituting a material adverse effect has occurred or is occurring. Additional conditions precedent include the following:

(i) delivery of the purchase price for the Initial Purchase Assets by NorthWestern Energy;

(ii) execution of the Colstrip Unit 4 Purchase and Sale Agreement by both parties;

(iii) all other owners of the Colstrip Transmission System have either declined to exercise or executed a waiver of their rights of first refusal contained in Section 28 of the Colstrip Project Transmission Agreement;

(iv) approval of NorthWestern Energy's acquisition of the Initial Purchase Assets by FERC;

(v) approval of NorthWestern Energy's acquisition of the Initial Purchase Assets by the Montana Public Service Commission; and

(vi) approval of PSE's sale of the Initial Purchase Assets by the WUTC.

h. Conditions Precedent to Closing on the Option Assets

The Colstrip Transmission System Purchase and Sale Agreement includes customary conditions precedent, including delivery of certain documentation, the representations and warranties of the parties remain true and correct as of closing, the delivery of necessary consents, no order or decree of a court or governmental authority has been issued that would prevent closing, termination of all liens except permitted liens, payment of the purchase price, and no event causing or constituting a material adverse effect has occurred or is occurring. Additional conditions precedent include the following:

(i) delivery of the purchase price for the Option Assets by NorthWestern Energy;

(ii) approval of NorthWestern Energy's acquisition of the Option Assets by FERC;

(iii) approval of NorthWestern Energy's acquisition of the Option Assets by the Montana Public Service Commission; and

(iv) approval of PSE's sale of the Option Assets by the WUTC.

i. Representations and Warranties of PSE

The Colstrip Transmission System Purchase and Sale Agreement includes customary representations and warranties provisions for PSE, including the following:

(i) <u>Organization and Good Standing</u>. PSE is a public utility corporation duly organized, validly existing, and in good standing under the laws of the State of Washington.

(ii) <u>Authority</u>. PSE has all requisite power and authority and as of the closing will have obtained all other applicable governmental, statutory, regulatory or other consents, licenses, waivers or exemptions necessary to execute and deliver the Colstrip Transmission System Purchase and Sale Agreement and closing documents and to perform its obligations under the Colstrip Transmission System Purchase and Sale Agreement and closing documents.

(iii) <u>Enforceability</u>. The Colstrip Transmission System Purchase and Sale Agreement has been, and the closing documents, when executed and delivered, will be, duly and validly executed and delivered by and is a valid and binding agreement of PSE.

(iv) <u>Title to Puget Transmission Assets</u>. PSE owns the Puget Transmission Assets free and clear of all liens, other than permitted liens.

(v) <u>No Violation or Breach</u>. Assuming that all of the required regulatory approvals and PSE's consents have been obtained, neither the execution and delivery of the Colstrip Transmission System Purchase and Sale Agreement and closing documents will result in a violation or breach of, or default under, any provision of the organizational documents of PSE or any material contract under which PSE or Puget Transmission Assets are bound.

(vi) Consents. No consent, approval, authorization or permit of, or filing with or notification to, any person is required for or in connection with the execution and delivery of the Colstrip Transmission System Purchase and Sale Agreement except for (a) the required regulatory approvals; (b) expressly identified third-party consents, filings, and notices, and (c) immaterial consents, approvals, authorizations, permits, filings or notices.

(vii) Material Contracts. PSE is not party to any contract reasonably necessary for NorthWestern Energy's use of Puget Transmission Assets after closing to which NorthWestern Energy is not also a party.

(viii) Actions Pending. There is no action pending, or to PSE's knowledge, threatened in writing against PSE, except for actions that would not have a material adverse effect on PSE's ability to perform its obligations under the closing documents.

(ix) Compliance with Laws. PSE has complied in a timely manner and in all material respects with all applicable laws that specifically apply to the Puget Transmission Assets.

(x) Real Property. PSE has good and valid title to or interest in all of the Puget Transmission Assets Real Property Interests, free and clear of any liens, except for permitted liens.

(xi) Material Changes Since December 31, 2018. Since December 31, 2018, there has been no material adverse effect with respect to the Puget Transmission Assets.

(xii) Brokerage Fees and Commissions. Neither PSE nor any of its affiliates has incurred any obligation or entered into any agreement for any investment banking, brokerage, or finder's fee or commission in respect of Colstrip Transmission System Purchase and Sale Agreement or the closing documents for which NorthWestern Energy or any of affiliates shall incur any liability.

(xiii) Bankruptcy. There are no bankruptcy, reorganization, or arrangement proceedings pending against, being contemplated by, or to the knowledge of PSE threatened against, PSE.

(xiv) Tax Matters. PSE has filed or will fil all tax returns associated with the Puget Transmission Assets; all such tax returns are or will be true and correct in all material respects; there are no audits or claims threatened against PSE relating to the Puget Transmission Assets in respect of taxes; and there are no liens for taxes upon the Puget Transmission Assets.

(xv) Material Contracts. PSE has provided or will provide to NorthWestern Energy all material agreements necessary for the use and operation of the Puget Transmission Assets.

(xvi) Licenses. PSE has provided or will provide to NorthWestern Energy all material licenses, permissions, authorizations, and consents necessary for the use and operation of the Puget Transmission Assets.

(xvii) Insurance. PSE's insurance policies are in full force and effect and fully paid, and, except as otherwise provided in the agreement, no claim is outstanding against PSE under any such policy of insurance.

(xviii) Environmental Matters. Except as otherwise disclosed in the agreement, the Puget Transmission Assets have been operated and maintained in compliance with all environmental laws and in a manner that will not give rise to any liability under any environmental laws and PSE has not received any written notice that the Puget Transmission Assets are in violation of the provisions of any environmental law.

(xix) No Employees or Benefits Plans. PSE does not have any employees that are stationed or provide services at, or with respect to, the Puget Transmission Assets and does not maintain, sponsor, contribute to, is not required or obligated to contribute to, and is not a party to any employee benefit plan related to the Puget Transmission Assets that are being transferred to NorthWestern Energy.

(xx) Labor Matters. PSE is not a party to any collective bargaining or other labor union contract relating to the personnel servicing the Puget Transmission Assets.

(xxi) Intellectual Property. To PSE's knowledge, the conduct of PSE's business in connection with the Puget Transmission Assets does not infringe upon or otherwise violate the intellectual property rights of any person, and no person is infringing upon or otherwise violating the intellectual property rights of PSE or the Puget Transmission Assets.

(xxii) Books and Records. The records of the Seller relating to the Puget Transmission Assets have been made available to NorthWestern Energy prior to the execution of the agreement.

(xxiii) No Options. There are no outstanding options or other rights or agreements for the purchase from PSE of any of the Puget Transmission Assets.

(xxiv) Undisclosed Liabilities. Except as disclosed in the agreement, the Puget Transmission Assets are not subject to any liability or obligation, except (a) liabilities arising in the ordinary course of business under any contract or commitment, (b) those liabilities or obligations incurred in the ordinary course of business since December 31, 2018, and (c) liabilities that have not had, and are not reasonably likely to have, individually or in the aggregate, a material adverse effect.

(xxv) Puget Transmission Assets Operations. To PSE’s knowledge, the Puget Transmission Assets are currently in operating order consistent with past practices.

(xxvi) Affiliate Transactions. Other than as disclosed in the agreement, no affiliate of PSE is a party to any material agreement necessary to the use or operation the Puget Transmission Assets.

j. Representations and Warranties of NorthWestern Energy

The Colstrip Transmission System Purchase and Sale Agreement includes customary representations and warranties provisions for NorthWestern Energy, including the following:

(i) Organization and Good Standing. NorthWestern Energy is a public utility corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware.

(ii) Authority. NorthWestern Energy has all requisite power and authority and as of the closing will have obtained all other applicable governmental, statutory, regulatory or other consents, licenses, waivers or exemptions necessary to execute and deliver the Colstrip Transmission System Purchase and Sale Agreement and closing documents and to perform its obligations under the Colstrip Transmission System Purchase and Sale Agreement and closing documents.

(iii) Enforceability. The Colstrip Transmission System Purchase and Sale Agreement has been, and the closing documents, when executed and delivered, will be, duly and validly executed and delivered by and is a valid and binding agreement of PSE.

(iv) No Violation or Breach. Assuming that all of the required regulatory approvals and NorthWestern Energy's consents have been obtained, the execution and delivery of the Colstrip Transmission System Purchase and Sale Agreement and closing documents will result not in a violation or breach of, or default under, any provision of the organizational documents of PSE or any material contract under which PSE or the Puget Transmission Assets are bound.

(v) Consents. No consent, approval, authorization or permit of, or filing with or notification to, any person is required for or in connection with the execution and delivery of the Colstrip Transmission System Purchase and Sale Agreement except for (a) the required regulatory approvals; (b) expressly identified third-party consents, filings, and notices, and (c) immaterial consents, approvals, authorizations, permits, filings or notices.

(vi) No Disputes; Litigation. There is no action pending, or to NorthWestern Energy's knowledge, threatened in writing against NorthWestern Energy, except for actions that would not have a material adverse effect on NorthWestern Energy's ability to perform its obligations under the closing documents.

(vii) Brokerage Fees and Commissions. Neither NorthWestern Energy nor any of its affiliates has incurred any obligation or entered into any agreement for any investment banking, brokerage, or finder's fee or commission in respect of Colstrip Transmission System Purchase and Sale Agreement the closing documents for which PSE or any of affiliates shall incur any liability.

(viii) Bankruptcy. There are no bankruptcy, reorganization, or arrangement proceedings pending against, being contemplated by, or to the knowledge of NorthWestern Energy threatened against, NorthWestern Energy.

(ix) Regulatory Matters. NorthWestern Energy represents and warrants that, with respect to its acquisition of the Puget Transmission Assets, it does not need approvals from any governmental authority other than, and would not reasonably be expected to result in a denial of any required regulatory approvals by, FERC and the Montana Public Service Commission.

k. Access

PSE agrees (i) to cooperate in facilitating reasonable access to PSE's records, personnel, offices and other facilities and properties related to the Puget Transmission Assets and (ii) to permit NorthWestern Energy to make copies and inspections of records as reasonably requested, and (iii) furnish NorthWestern Energy with financial and operating data and other information with respect to the Puget Transmission Assets Puget Transmission Assets as NorthWestern Energy may from time to time reasonably request.

l. Confidentiality

Each party agrees to maintain in confidence all information made available to it under the Colstrip Transmission System Purchase and Sale Agreement and to cause their respective officers, directors, agents, employees, representatives, consultants, and advisors to maintain in confidence all information made available to them under the Colstrip Transmission System Purchase and Sale Agreement, all as provided in the Mutual Non-Disclosure Agreement, dated July 19, 2019, between PSE and NorthWestern Energy.

m. Covenants

The Colstrip Transmission System Purchase and Sale Agreement includes customary covenants of PSE and NorthWestern Energy, including the following:

(i) Exclusivity. PSE grants NorthWestern Energy the exclusive right to acquire the Puget Transmission Assets until the earlier of the closing or termination of the Colstrip Transmission System Purchase and Sale Agreement.

(ii) Conduct of Business. PSE shall conduct its business related to the Puget Transmission Assets in the ordinary course in accordance with past practice and not make any material change with respect thereto, including

(a) complying in all material respects with the Ownership and Operations Agreement;

(b) using commercially reasonable efforts to cause the Puget Transmission Assets to conduct its business, in the ordinary course in accordance with past practice, and not make any material change with respect thereto;

(c) using commercially reasonable efforts to preserve intact the Puget Transmission Assets in accordance with prudent utility practices;

(d) taking all commercially reasonable efforts to preserve and protect the Puget Transmission Assets;

(e) not assigning, terminating, amending, giving any consent with respect to or waiving any rights under, in any material respect, any material contract;

(f) not taking any action or entering into any commitment with respect to or in contemplation of any liquidation, dissolution, recapitalization, reorganization, or other winding up of its business or operations related to the Puget Transmission Assets;

(g) not granting any express further lien on any of the Puget Transmission Asset, except for permitted liens, and terminating those liens that will be terminated, without cost to NorthWestern Energy, at closing; and

(h) providing prompt written disclosure to NorthWestern Energy of all relevant information which comes to the attention of PSE which may constitute a breach of any of PSE's representations and warranties set forth in the Colstrip Transmission System Purchase and Sale Agreement.

(iii) Public Announcements. No party shall issue, or permit any agent or affiliate of such party to issue, any press releases or otherwise make any public statements with respect to the Colstrip Transmission System Purchase and Sale Agreement or the closing documents, except when and to the extent that such release or statement is deemed in good faith by the releasing party to be required to obtain the required regulatory approvals or by applicable law.

(iv) Actions by Parties. Each party agrees to use commercially reasonable efforts to satisfy the conditions to the closing set forth in the Colstrip Transmission System Purchase and Sale Agreement.

(v) Further Assurances. Each party will execute and deliver further agreements, certificates, documents or opinions and take such other action, as may be reasonably necessary to carry out the purposes and intents of the Colstrip Transmission System Purchase and Sale Agreement.

(vi) Records. NorthWestern Energy will maintain the records in accordance with its records retention policy as maintained in compliance with applicable laws and commercially responsible practices. If any of the records pertain to any claim or dispute pending on the date upon which such records would be destroyed pursuant to NorthWestern Energy's records retention policy, NorthWestern Energy shall maintain any of the records designated by PSE until such claim or dispute is finally resolved and the time for all appeals has been exhausted.

(vii) Amendment of Colstrip Project Transmission Agreement. The parties will cooperate in good faith to (i) amend the Colstrip Project Transmission Agreement to reflect the transactions contemplated by the Colstrip Transmission System Purchase and Sale Agreement and (ii) obtain all consents from the other owners of the Colstrip Transmission System necessay for such amendment.

(ix) Privilege. NorthWestern Energy will not intentionally waive the attorney/client, work product, or like privilege of PSE with respect to any of the records existing as of the closing date, without PSE's prior written consent.

(x) Regulatory and Other Authorizations and Consents Filings. Each party will use commercially reasonable efforts to obtain all authorizations and consents necessary for its execution and delivery of, and the performance of its obligations under, the Colstrip Transmission System Purchase and Sale Agreement and will cooperate fully with the other party in promptly seeking to obtain all such authorizations and consents, giving notices, and making filings.

(xi) Required Regulatory Approvals. The parties agree to use commercially reasonable efforts to gather and obtain all necessary information, consult with each other, consider and incorporate reasonable comments, and complete filings in connection with the required regulatory approvals (i.e., approval by FERC of NorthWestern Energy's acquisition of the Puget Transmission Assets, approval of the Montana Public Service Commission of NorthWestern Energy's acquisition of the Puget Transmission Assets, and approval of the WUTC of PSE's sale of the Puget Transmission Assets). During the process to obtain required regulatory approvals, the parties commit to consult with each other, provide supplemental information, and provide prompt written notice to the other party of all discussions and correspondence with the applicable regulatory authorities that reasonably relates to or bears upon such filings. The parties agree to use commercially reasonable efforts and to act in good faith to expedite and obtain the required regulatory approvals.

(xii) <u>Fees and Expenses</u>. All fees and expenses incurred in connection with the Colstrip Transmission System Purchase and Sale Agreement and the closing documents will be paid by the party incurring such fee or expense, whether or not the closing shall have occurred.

(xiii) <u>Tax Matters</u>. After closing, each party will provide each other with cooperation and information related to the Colstrip Transmission System and the Puget Transmission Assets as the parties reasonably may request in (a) filing any tax return, amending any tax return, or claiming any tax refund; (b) determining any liability for taxes or any right to tax refunds or (c) conducting or defending any audit, examination, claim or other proceeding in respect of taxes.

(xiv) <u>Transfer Taxes</u>. Each party will be responsible under applicable law for payment of fifty percent (50%) of all transfer taxes.

(xv) <u>Right of First Refusal</u>. PSE will use its commercially reasonable efforts to notify and seek a waiver from each of the other owners of the Colstrip Transmission System with respect to their rights of first refusal contained in Section 28 of the Colstrip Project Transmission Agreement. PSE will immediately notify NorthWestern Energy if at any time any of the other owners of Colstrip Transmission System exercises or indicates its intent to exercise any such right of first refusal.

(xvi) <u>Updates to Disclosure Schedules</u>. Prior to and up to ten (10) days prior to the closing, PSE shall provide written notice to NorthWestern Energy of any fact, matter, condition, event or circumstance that, individually or in the aggregate, renders PSE unable, without amending the disclosure schedules, to satisfy the condition precedent under the Colstrip Transmission System Purchase and Sale Agreement.

n. Indemnification

The Colstrip Transmission System Purchase and Sale Agreement includes customary indemnification provisions (e.g., indemnification with respect to breaches or inaccuracies in any of the representations, warranties, covenants, agreement, or other obligation of such party).

If closing of the Colstrip Transmission System Purchase and Sale Agreement occurs, PSE will indemnify NorthWestern Energy for:

- any failure by PSE to pay, perform or discharge any excluded liability under the agreement;
- any failure by PSE to pay, perform or discharge any retained liability under the agreement;
- any liability, obligation or commitment of PSE relating to the Puget Transmission Assets not assumed by NorthWestern Energy under the agreement;
- any taxes of, or attributable to, PSE and the Puget Transmission Assets for all pre-closing periods;
- all transfer taxes; or
- any fraud, willful misconduct or gross negligence in connection with the agreement by PSE or its affiliates.

If closing of the Colstrip Transmission System Purchase and Sale Agreement occurs, NorthWestern Energy will indemnify PSE for:

- any failure by NorthWestern Energy to pay, perform or discharge any assumed liability under the agreement; or
- any fraud, willful misconduct or gross negligence in connection with the agreement by NorthWestern Energy.

o. Limitations of Liability

Neither party may not make a claim for indemnification until the total damages for which such party exceeds in the aggregate a threshold amount equal to one percent (1%) of the purchase price for the Initial Purchase Assets or the purchase price for the Option Assets, as applicable, and, once such amount is exceeded, indemnification may be sought for the full aggregate amount of damages. The aggregate damages for which PSE may be subject to claims of indemnification related to breaches of representations and warranties cannot exceed fifteen percent (15%) of the purchase price for the Initial Purchase Assets or the purchase price for the Option Assets, as applicable. The aggregate damages for which NorthWestern Energy may be subject to claims of indemnification related to breaches of representations and warranties cannot exceed ten percent (10%) of the purchase price for the Initial Purchase Assets or the purchase price for the Option Assets, as applicable.

p. Termination

The Colstrip Transmission System Purchase and Sale Agreement may be terminated prior to closing:

- at any time by mutual written agreement of PSE and NorthWestern Energy; or

- by either PSE or NorthWestern Energy upon the material breach of the agreement by the other, to be effective, if curable, upon the breaching party’s failure to cure within five (5) business days of notice given, and if incurable, upon notice given.

PSE may generally terminate the Colstrip Transmission System Purchase and .

Sale Agreement prior to closing:

- at any time after any final, non-appealable decision is made by the applicable governmental authority denying any required regulatory approval; or

- at any time after December 31, 2020, if the closing has not yet occurred.

NorthWestern Energy may generally terminate the Colstrip Transmission

System Purchase and Sale Agreement prior to closing:

- if a fact, matter, condition, event or circumstance first disclosed in an update from PSE has had or would reasonably be expected to have a material adverse effect;

- at any time after any final, non-appealable decision is made by the applicable governmental authority denying any required regulatory approval;

- at any time after December 31, 2020, if the Closing has not yet occurred;

- at any time after December 31, 2020, if any order or decree by any federal or state court or governmental authority exists which would delay or otherwise impair the consummation of the sale of the Puget Transmission Assets;

- at any time if any other owner of the Colstrip Transmission System exercises a right of first refusal offered to it by PSE (pursuant to the terms of the Colstrip Project Transmission Agreement); or

- if PSE has failed to deliver to NorthWestern Energy the Right of First Refusal Resolution Notice within the time specified in the Colstrip Transmission System Purchase and Sale Agreement.

q. Effect of Termination

In the event of termination of the Colstrip Transmission System Purchase and Sale Agreement pursuant to its terms,

- all filings, applications and other submissions made to any governmental authority shall, to the extent practicable, be withdrawn from the governmental authority to which they were made; and

- except for those access and confidentiality obligations set forth in the access and confidentiality provisions of the agreement, neither PSE nor NorthWestern Energy shall have any further obligation under the agreement.

There shall be no liability of any shareholder, partner, member, director, officer, employee, advisor or representative of PSE or NorthWestern Energy or any affiliate thereof or any other person (including any shareholder, partner, member, director, officer, employee, advisor or representative thereof) in connection with any liability or other obligation of PSE or NorthWestern Energy or any affiliate thereof, whether under the Colstrip Transmission System Purchase and Sale Agreement or otherwise in connection with the transactions contemplated by the Colstrip Transmission System Purchase and Sale Agreement.

r. Dispute Resolution

In the event of a dispute between PSE or NorthWestern Energy under the Colstrip Transmission System Purchase and Sale Agreement, the parties will attempt to settle such dispute by mutual discussions. If any dispute is not resolved within thirty (30) days of receipt of a dispute notice, then, upon either party’s request, the dispute shall be finally and exclusively resolved by arbitration. The arbitration shall be held in accordance with the Commercial

Arbitration Rules of the American Arbitration Association, then in effect, except as modified by the Colstrip Transmission System Purchase and Sale Agreement. The arbitration shall be held, and the award shall be issued in Chicago, Illinois.

Any arbitrator appointed shall be a retired judge, preferably from a Federal District Court or Federal Court of Appeals, or a practicing attorney with no less than twenty (20) years of experience and an experienced arbitrator and if possible shall have experience with disputes relating to electric power infrastructure. The arbitrator is not empowered to award damages in excess of compensatory damages, and each party hereby irrevocably waives any right to recover consequential, punitive, exemplary or similar damages with respect to any dispute. The arbitrator's award shall allocate all costs of the arbitration, including the fees and expenses of the arbitrator and reasonable attorneys' fees, costs and expert witness expenses of the parties. The award shall be final and binding on the Parties and may be enforced in any court having jurisdiction.

s. Governing Law

The Colstrip Transmission System Purchase and Sale Agreement is to be governed by, enforced, and interpreted in accordance with the laws of the State of Delaware without regard to principles of conflicts of laws.

3. Material Terms of the NorthWestern Energy Power Purchase Agreement

The parties have agreed upon to use the WSPP Agreement as the master agreement from PSE's purchases of power from NorthWestern Energy from Colstrip Unit 4 through 2025. The principal commercial terms of the WSPP Agreement are summarized below.

a. The WSPP Agreement in General

The WSPP Agreement represents a default standardized contract for electric power sales and physical options. If the parties to a WSPP transaction do not mutually agree to changes to the WSPP Agreement, the terms of the WSPP Agreement will control. The WSPP Agreement, however, provides parties with the flexibility on the major terms to modify the agreement, by their mutual agreement, to be applied to any WSPP transaction as discussed below. The WSPP Agreement, by its terms, only applies to transactions between WSPP members, such as PSE and NorthWestern Energy. The principal commercial terms of the WSPP Agreement are summarized below.

i. **Product**

The WSPP Agreement sets forth three basic produces in its service schedules. PSE and NorthWestern Energy have agreed to use Service Schedule B (Unit Commitment Service), which is a sale from a specified unit (i.e., Colstrip Unit 4) for a specified period (through 2025). Other than through force majeure, Unit Commitment Service may be curtailed based upon the following conditions:

- upon mutually agreed upon recall provisions;
- when all or a portion of the specified unit is unavailable;
- to prevent system separation during an emergency (provided that prudent alternatives to curtailment have been exhausted);
- for the seller (i.e., NorthWestern Energy) to meet its public utility or statutory obligations; or
- due to the unavailability of transmission service.

The stipulated damages provision applies to failures to deliver or to take Service Schedule B power unless the parties agree otherwise.

ii. **Force Majeure**

Parties to a WSPP Agreement are required to exercise due diligence to overcome or avoid a force majeure event. A force majeure claim will not stand if a party's failure of performance is due to causes arising out of its own negligence or due to causes which it could remove or remedy. There are special provisions governing an interruption in transmission service. First, if the parties agreed on a specific transmission path at the time of the transaction, obtained firm transmission, and that firm transmission was interrupted, that would be a force majeure event. Second, if the parties did not agree on a specific transmission path, and a party's firm transmission was interrupted due to a force majeure event, then the party which booked the firm transmission may not declare force majeure if it could obtain alternate energy or means of delivering the energy to the delivery point.

iii. **Damages**

No punitive or consequential damages are allowed under the WSPP Agreement. The only damages allowed are essentially to cover damages. For a seller's failure to deliver, the seller will pay damages based on the purchaser's replacement price less the original contract price plus the amount of additional transmission costs less transmission savings. For a purchaser's failure to take service, the purchaser will pay damages based on the seller's new contract price less the original sales price plus any additional net transmission charges the seller incurs. Each party has a duty to minimize damages in a commercially reasonable manner.

iv. **Default**

Events of default are defined in the agreement to include the following

- the failure to make payment (when the payment date has been missed) within two business days of notice to provide payment;
- failure to provide clear and good title or to have made accurate representations and warranties;
- institution of proceedings indicating bankruptcy or insolvency; or
- failure to provide adequate assurances of creditworthiness within three business days of demand for such assurances.

In the event of default, the non-defaulting party may terminate all WSPP transactions between the parties so long as it exercises that right to terminate within thirty (30) days (or longer if the parties agree to an extension). Upon termination, liquidation of Service Schedule B transactions occur. Essentially, the value of the terminated transactions out to the date of termination will be estimated to determine the liquidated amounts plus costs associated with such termination. Revenues based on expected market prices, present valued, will be used in calculating the liquidation payments.

v. **Payment**

Unless the parties agree to different payment dates, payments are to be received on the twentieth (20th) day of the invoicing month or the tenth (10th) day after receipt of the bill, whichever is later. Interest for late payments is one percent per month unless the parties agree to a different rate. In the event of a dispute, the entire bill shall be paid when due. Parties have two years to audit and dispute bills.

vi. **Creditworthiness**

If one party has a reasonable basis for questioning the other party's creditworthiness or ability to perform, that party may require the other party to provide a letter of credit, a cash prepayment, collateral or security, a guarantee agreement, or some other mutually agreeable method of assuring performance. The second party has three business days to provide such assurances; failure to provide such assurances will be considered an event of default leading to termination and liquidation of all WSPP transactions between the parties. The second party's obligations to provide a letter of credit, deposits, etc. will be limited to the level of damages which the party would owe for non-performance; i.e. cover. The agreement also lists certain events which would allow calling for reasonable assurance, including the following:

- knowledge that one party is failing to perform under other contracts;
- a party exceeding any credit or trading limit;
- downgrading of debt below investment grade; and
- substantial changes in market prices which materially impact a party's ability to perform.

vii. **Netting**

Netting of payments is not required but is allowed under the WSPP Agreement. In order to facilitate matching of entities that wish to net, a member can execute the WSPP Netting Agreement (Exhibit A to the WSPP Agreement). If the counter-party has signed the WSPP Netting Agreement, then the parties will net. The members that have agreed to net are posted on the WSPP homepage.

viii. **Taxes**

Under the WSPP Agreement, the seller is liable for taxes to the delivery point, and the purchaser is liable for taxes from the delivery point.

ix. **Confidentiality**

Terms of transactions shall be confidential under the WSPP Agreement unless disclosure is required in a regulatory proceeding or in any other litigation, must be provided to NERC or a regional reliability council, or the parties agree to allow disclosure.

x. **Performance, Title, and Warranties**

The seller's obligation is to sell and deliver to the delivery point(s) in accordance with the WSPP Agreement and the applicable confirmation agreement. Purchaser's obligation is to receive and purchase at the delivery point in accordance with the WSPP Agreement and applicable confirmation agreement. Title to and risk of loss shall pass to purchaser at the delivery point. Seller warrants good title, free of liens or attachments but disclaims all other warranties including any warranty of merchantability or fitness for a particular purpose.

xi. **Mediation and Dispute Resolution**

Before binding dispute resolution or any other litigation may proceed, the parties must engage in non-binding mediation. This can be a conference with the chairman of the WSPP Operating Committee and the WSPP General Counsel or it can be mediation with a mediator. If mediation fails, the parties must use binding dispute resolution to resolve disputes involving the calculation of the stipulated damages and liquidation amounts. For all other disputes, binding dispute resolution is discretionary. The WSPP dispute resolution process will use arbitrators who will come from WSPP member companies as well as other sources. The procedures are set forth in Exhibit D to the WSPP Agreement.

xii. **Representations and Warranties**

In general, parties to a WSPP Agreement warrant that they possess the necessary authority to enter into the transactions and to carry out the terms of the agreements. Each party also represents that it is solvent and that this representation is maintained until such time as notification is provided to the contrary.

xiii. **Forward Contracts Exception**

The WSPP Agreement includes a forward contracts exception included for bankruptcy set-off purposes.

xiv. **Trade Option Exception**

The WSPP Agreement includes a trade option exception to make clear that the physical options under the WSPP Agreement are exempted from regulation by the Commodity Futures Trading Commission.

b. Confirmation between PSE and NorthWestern Energy

As previously discussed, the WSPP Agreement provides default standardized contract provisions for electric power sales and physical options, but parties to a transaction have the flexibility to modify the agreement, by their mutual agreement. Confirmation agreements include the specific terms to the transaction, including changes to the base WSPP Agreement to which the parties mutually agree. PSE and NorthWestern Energy have agreed upon a confirmation, the principal commercial terms of which are summarized below.

i. **Term**

The term of the confirmation requires deliveries of power to PSE from Colstrip Unit 4 commencing on hour ending 0100 on June 1, 2020, through hour ending 2400 on May 15, 2025. This term is less than five (5) years.

ii. **Delivery Point**

The high side of the 500 kV bus for Unit 4 in the Colstrip Switchyard, or, at NorthWestern Energy's option and with prior notice to PSE, at Mid-C. For deliveries to the 500 kV bus for Colstrip Unit 4, PSE will use its existing transmission rights to deliver the power to PSE's retail customers.

iii. **Type of Service**

The type of service is Unit Commitment Service from Colstrip Unit 4, Service Schedule B.

iv. **Contract Quantity**

The contract quantity is up to ninety (90) MW per hour.

v. **Contract Price**

Regardless of the delivery point, the contract price is the greater of (i) the Mid C Day-Ahead Index Price for on-peak and off-peak periods, as applicable, as published by the Intercontinental Exchange for the applicable day of delivery and (ii) the marginal operating cost of Colstrip Unit 4.

List of Attachments

1. U.S. Energy Information Administration, "More U.S. Coal-Fired Power Plants are Decommissioning as Retirements Continue," dated July 26, 2019

2. Thomson Reuters, "FACTBOX-U.S. Coal-Fired Power Plants Scheduled to Shut," dated August 16, 2019

3. Carbon Tracker, "42% of Global Coal Power Plants Run at a Loss," dated November 30, 2018

4. Collection of Articles From the Billings Gazette Regarding the Westmoreland Bankruptcy

5. Letter of Talen Montana, dated May 23, 2016, Resigning as Operator of Colstrip Units 3 & 4

6. Letter of Talen Montana, dated June 19, 2017, Withdrawing Its Resignation as Operator of Colstrip Units 3 & 4

7. Talen Montana Press Release, dated June 11, 2019, announcing the closure of Colstrip Units 1 & 2

8. Collection of Articles From the Billings Gazette Regarding the Litigation Between Talen Montana and PPL

9. 2019 Budget for Colstrip Units 3 & 4

10. Proposed 2020 Budget for Colstrip Units 3 & 4

11. List of Several Proposed Bills From The 2017 Montana Legislative Session That, If Passed, Would Have Affected the Colstrip Generating Station

12. List of Several Proposed Bills From The 2019 Montana Legislative Session That, If Passed, Would Have Affected the Colstrip Generating Station

13. Washington Clean Energy Transformation Act, Engrossed Second Substitute Senate Bill 5116

14. Presentation to the PSE Board of Directors of the Initial Outline of the Proposal of [redacted]

15. Term Sheet Regarding the Proposed [redacted] Previously Provided to the Board of Directors on May 9, 2019

REDACTED VERSION

16. Tom Lutey, "'Save Colstrip' Plan Falls Through on Last Day of Montana Legislature," Billings Gazette, dated April 25, 2019

17. Initial Comparison of the Proposal of [redacted] to a "Business as Usual" Scenario in Which PSE Continues to Own and Operate Its Existing Shares of Colstrip Units 3 & 4 Through the End of Calendar Year 2025

18. PSE's Initial Quantitative Analysis of the Deal Proposed by NorthWestern Energy (Assuming No Hedging)

19. PSE's Initial Quantitative Analysis of the Deal Proposed by NorthWestern Energy (Assuming Hedging of the Net Reduction of 95 MW of Capacity)

20. Non-Binding Letter of Intent Between PSE and NorthWestern Energy

21. Materials Provided to the Board of Directors Regarding the Proposed Deal with NorthWestern Energy

22. Summary of the Indicative Pricing and Terms of New Coal Supply Agreement with Westmoreland Mining, dated August 26, 2019

23. Results of the Refined Quantitative Analysis of the Deal Proposed by NorthWestern Energy Performed by PSE in Late August of 2019

24. Presentation to the Board of Directors, dated September 4, 2019, Regarding the Deal Proposed by NorthWestern Energy

25. Results of the Refined Quantitative Analysis of the Deal Proposed by NorthWestern Energy that Reflect the Indicative Pricing and Terms of a New Coal Supply Agreement Conducted by PSE on September 11, 2019

Attachment 1

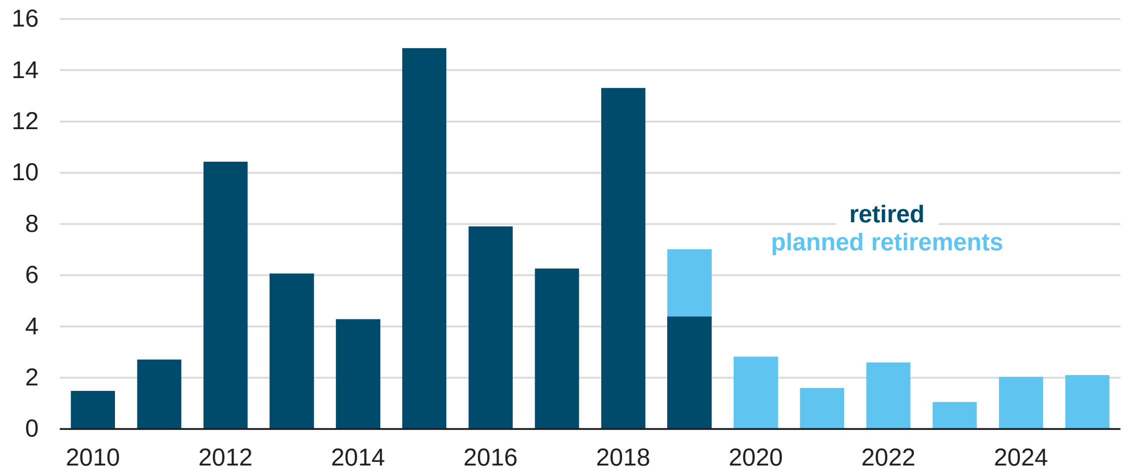
U.S. Energy Information Administration

Today in Energy

July 26, 2019

More U.S. coal-fired power plants are decommissioning as retirements continue

Total net summer capacity of retired and retiring coal units (2010-2025)
gigawatts



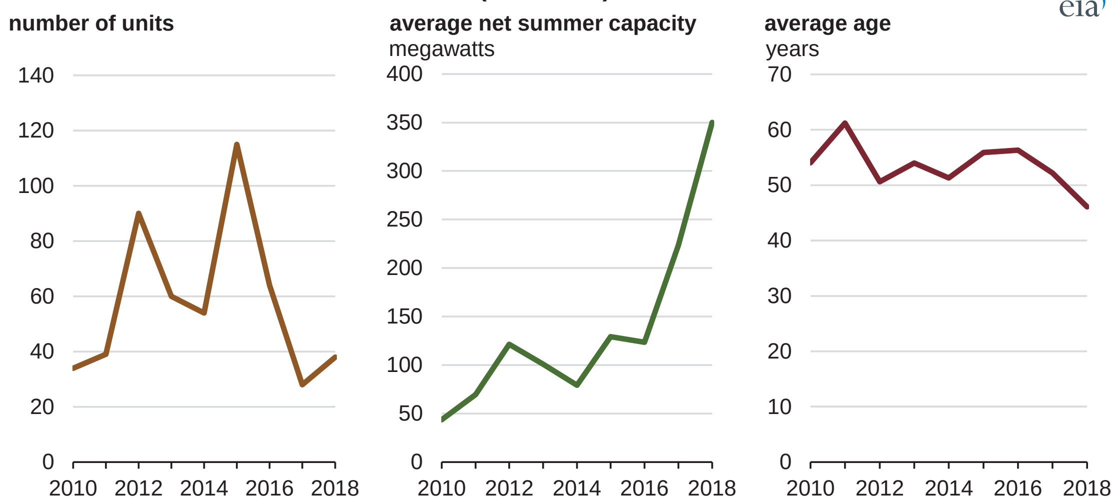
Source: U.S. Energy Information Administration, *Annual Electric Generator Report* and *Preliminary Monthly Electric Generator Inventory*

Between 2010 and the first quarter of 2019, U.S. power companies announced the retirement of more than 546 coal-fired power units, totaling about 102 gigawatts (GW) of generating capacity. Plant owners intend to retire another 17 GW of coal-fired capacity by 2025, according to the U.S. Energy Information Administration's (EIA) *Preliminary Monthly Electric Generator Inventory*. After a coal unit retires, the power plant site goes through a complex, multi-year process that includes decommissioning, remediation, and redevelopment.

Coal-fired power plants in the United States remain under significant economic pressure. Many plant owners have retired their coal-fired units because of relatively flat electricity demand growth and increased competition from natural gas and renewables. In 2018, plant owners retired more than 13 GW of coal-fired generation capacity, which is the second-highest annual total for U.S. coal retirements in EIA's dataset; the highest total for coal retirements, at 15 GW, occurred in 2015.

The annual number of retired U.S. coal units has declined since 2015, and the configuration of retired coal capacity has changed. Coal-fired units that retired after 2015 in the United States have generally been larger and younger than the units that retired before 2015. The U.S. coal units that retired in 2018 had an average capacity of 350 megawatts (MW) and an average age of 46 years, compared with an average capacity of 129 MW and average age of 56 years for the coal units that retired in 2015.

Characteristics of retired coal-fired units (2010-2018)

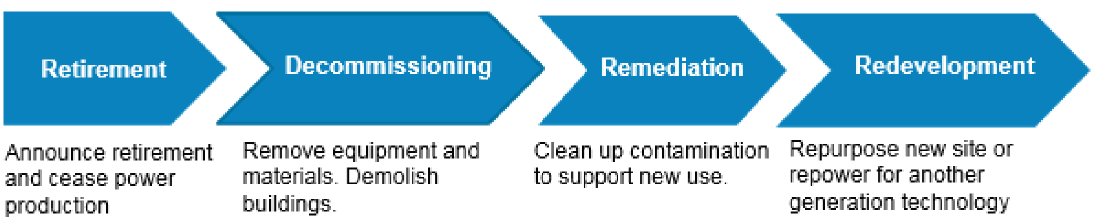


Source: U.S. Energy Information Administration, *Annual Electric Generator Report* and *Preliminary Monthly Electric Generator Inventory*

During a coal-fired plant's decommissioning process, the electric-generating equipment—such as precipitators, boilers, turbines, and generators—are shut down and operating permits are terminated. Unused coal and materials associated with both the generation process and the buildings and structures are removed. The electric-generating equipment may be used at other plants or sold as scrap.

Unlike nuclear plant decommissioning, which is closely regulated by the Nuclear Regulatory Commission, the physical process of decommissioning a coal-fired power plant is not as firmly regulated in terms of specific procedure. The time required to physically decommission a coal-fired power plant varies and sometimes overlaps with remediation and redevelopment.

Four main phases of coal power plant decommissioning



Source: U.S. Environmental Protection Agency

Remediation involves cleaning up hazardous materials to meet federal and state requirements. Remediation of coal combustion residuals (CCR), commonly known as coal ash, is the primary focus in coal plant decommissioning because it is one of the largest U.S. industrial waste streams. CCR can be disposed in onsite landfills or surface impoundments, known as coal ash ponds. CCR also can be moved offsite to be recycled into products such as concrete or wallboard.

The **redevelopment** of a decommissioned coal-fired plant may involve repurposing the site for another generation technology or some other commercial, industrial, or municipal application. Coal-fired power plants typically occupy land in or near downtown areas or along rivers, and they usually have access to railways, roadways, water, sewers, and other infrastructure.

Repowering a plant with natural gas-fired technology, such as a combined-cycle natural gas turbine plant, requires significantly less space than coal-fired configurations, which could cover hundreds of acres. Repowering a former coal-fired plant with natural gas-fired elements is a viable option for power providers because much of the critical infrastructure is already in place, including transmission lines, substations, and water.

Principal contributors: Slade Johnson, Kien Chau

Attachment 2

8/16/19 Reuters News 21:43:48

Reuters News

August 16, 2019

FACTBOX-U.S. coal-fired power plants scheduled to shut

8/16/19 Reuters News 21:43:48
Reuters News
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August 16, 2019

FACTBOX-U.S. coal-fired power plants scheduled to shut

Aug 16 (Reuters)

Aug 16 (Reuters) - U.S. power companies expect to retire or convert from coal to gas over 11,400 megawatts (MW) of coal-fired plants in 2019 after shutting over 13,000 MW in 2018, according to U.S. Energy Information Administration (EIA) and Thomson Reuters data.

The number of megawatts retired in 2018 was the second highest in a year behind 2015 when generators shut over 19,000 MW. One megawatt can power about 1,000 U.S. homes.

U.S. coal power capacity peaked around 317,400 MW in 2011, according to EIA data. It has declined every year since and was down to around 244,000 MW by the end of 2018. The total generating capacity in the United States - including coal, natural gas, renewables and nuclear - was almost 1.1 million MW in 2018.

Cheap gas from record shale production and rising use of renewable sources of power have kept electric prices low in recent years, making it uneconomic for generators to continue operating older, less efficient coal plants, especially if they need upgrades to meet increasingly strict federal and state environmental rules.

Coal had been the primary fuel for U.S. power plants for much of the last century, but its use has been declining since peaking in 2007. That was around the same time drillers figured out how to economically pull gas out of shale formations.

Gas overtook coal as the leading fuel for U.S. power plants in 2016, according to federal data, and has held that title ever since.

It takes roughly 175 million cubic feet of gas per day of gas to generate about 1,000 MW.

The following lists the U.S. coal plants expected to shut or be converted to other fuels over roughly the next decade.

Plants To Be Shut

Owner	Plant Name	Unit Size (MW)	State	Retire
Kimberly Clark	Kimberly Clark	9	PA	2019
Northern Star Generation	Cambria	88	PA	2019
FirstEnergy	Bruce Mansfield 3	830	PA	2019
Duke	Asheville 1	189	NC	2019
Duke	Asheville 2	189	NC	2019
Salt River Project	Navajo 1	750	AZ	2019
Salt River Project	Navajo 2	750	AZ	2019
Salt River Project	Navajo 3	750	AZ	2019
Talen	Colstrip 1	307	MT	2019
Talen	Colstrip 2	307	MT	2019
Colorado Springs	Martin Drake 1	77	CO	2019
OGE	Muskogee Unit	500	OK	2019
OGE	Muskogee Unit	500	OK	2019
Veolia Energy	Spruance 1	53	VA	2020
Veolia Energy	Spruance 2	53	VA	2020
Veolia Energy	Spruance 3	43	VA	2020
Veolia Energy	Spruance 4	43	VA	2020
NextEra	Indiantown 1	330	FL	2020
FirstEnergy	Sammis 1	180	OH	2020
FirstEnergy	Sammis 2	180	OH	2020
FirstEnergy	Sammis 3	180	OH	2020
FirstEnergy	Sammis 4	180	OH	2020
AEP	Conesville 4	780	OH	2020
Grand Haven	Sims 3	69	MI	2020
Talen	Wagner 2	118	MD	2020
Owensboro Municipal Util.	Elmer Smith 2	44	KY	2020
Northern Star Generation	Colver 1	110	PA	2020
Edgecombe Operating	Edgecombe 1	58	NC	2020
Edgecombe Operating	Edgecombe 2	58	NC	2020
PowerSouth Energy Co-op.	Charles R Lowman 1	80	AL	2020
PowerSouth Energy Co-op.	Charles R Lowman 2	238	AL	2020
PowerSouth Energy Co-op.	Charles R Lowman 3	238	AL	2020
Lansing Board of Water	Eckert 4	64	MI	2020
Lansing Board of Water	Eckert 5	63	MI	2020
Lansing Board of Water	Eckert 6	63	MI	2020
Montana-Dakota Utilities	Lewis & Clark 1	53	MT	2020
TransAlta	Centralia 1	688	WA	2020
TVA	Paradise 3	971	KY	2020
Allete	Taconite 1	79	MN	2020
Allete	Taconite 2	76	MN	2020
NRG	Dunkirk 1	75	NY	2020
NRG	Dunkirk 2	75	NY	2020
NRG	Dunkirk 3	185	NY	2020
NRG	Dunkirk 4	185	NY	2020
Cayuga Operating	Cayuga 1	152	NY	2020
Cayuga Operating	Cayuga 2	150	NY	2020
Somerset Operating	Somerset 1	686	NY	2020
Grand Haven	Sims 1	70	MI	2020
City of Springfield	Dallman 1	73	IL	2020

City of Springfield	Dallman 2	65	IL	2020
City of Springfield	Dallman 3	188	IL	2020
Portland General	Boardman 1	585	OR	2021
Otter Tail	Hoot Lake 2	58	MN	2021
Otter Tail	Hoot Lake 3	80	MN	2021
PSEG	Bridgeport 3	383	CT	2021
Emera	Big Bend 2	385	FL	2021
Alliant	Burlington 1	198	IA	2021
Montana-Dakota Utilities	Heskett 1	30	ND	2021
Montana-Dakota Utilities	Heskett 2	30	ND	2021
Emera	Big Bend 1	385	FL	2021
Berkshire -NV Energy	North Valmy 1	254	NV	2021
FirstEnergy	Sammis 5	291	OH	2022
FirstEnergy	Sammis 6	600	OH	2022
FirstEnergy	Sammis 7	600	OH	2022
FirstEnergy	Pleasants 1	644	WV	2022
FirstEnergy	Pleasants 2	644	WV	2022
AES	AES Hawaii 1	180	HI	2022
Duke	Gallagher 2	140	IN	2022
Duke	Gallagher 4	140	IN	2022
Xcel	Sherburne 2	682	MN	2022
Xcel	Comanche 1	470	CO	2022
Tri-State G & T	Nucla 1	12	CO	2022
Tri-State G & T	Nucla 2	12	CO	2022
Tri-State G & T	Nucla 3	12	CO	2022
Tri-State G & T	Nucla 4	64	CO	2022
Ameren	Meramec 3	261	MO	2022
Ameren	Meramec 4	335	MO	2022
PNM	San Juan 1	340	NM	2022
PNM	San Juan 4	507	NM	2022
CMS	Karn 1A	128	MI	2023
CMS	Karn 1B	128	MI	2023
CMS	Karn 2A	130	MI	2023
CMS	Karn 2B	130	MI	2023
Texas Municipal Power	Gibbons Creek 1	470	TX	2023
CenterPoint - Vectren	Brown 1	245	IN	2023
CenterPoint - Vectren	Brown 2	245	IN	2023
CenterPoint - Vectren	Culley 2	90	IN	2023
OPPD	North Omaha 4	138	NE	2023
OPPD	North Omaha 5	205	NE	2023
NiSource - NIPSCO	Schahfer 14	431	IN	2023
NiSource - NIPSCO	Schahfer 15	472	IN	2023
NiSource - NIPSCO	Schahfer 17	361	IN	2023
NiSource - NIPSCO	Schahfer 18	361	IN	2023
DTE	River Rouge 3	272	MI	2020-23
DTE	River Rouge 1	151	MI	2020-23
DTE	St Clair 2	154	MI	2020-23
DTE	St Clair 3	160	MI	2020-23
DTE	St Clair 6	311	MI	2020-23
DTE	St Clair 7	440	MI	2020-23
DTE	Trenton 9	520	MI	2020-23
TVA	Bull Run 1	870	TN	2024
CPS Energy	J T Deely 1	420	TX	2024
CPS Energy	J T Deely 2	420	TX	2024
Duke	G G Allen 1	162	NC	2024
Duke	G G Allen 2	162	NC	2024

Duke	G G Allen 3	258	NC	2024
City of Lakeland	McIntosh 3	342	FL	2024
Colorado Springs	Martin Drake 2	131	CO	2024
Intermountain	Intermountain 1	900	UT	2025
Intermountain	Intermountain 2	900	UT	2025
Alliant	Prairie Creek 1	4	IA	2025
Alliant	Prairie Creek 3	26	IA	2025
Lansing Board of Water	Erickson 1	155	MI	2025
Xcel	Sherburne 1	680	MN	2025
Xcel	Comanche 2	470	CO	2025
Berkshire -NV Energy	North Valmy 2	268	NV	2025
TransAlta	Centralia 2	670	WA	2025
Tri-State G & T	Craig 1	428	CO	2025
Pinnacle West - APS	Cholla 1	116	AZ	2025
Pinnacle West - APS	Cholla 3	271	AZ	2025
AEP	Northeastern 3	460	OK	2026
Duke	Gibson 1	630	IN	2026
Talen	Colstrip 3	740	MT	2027
Talen	Colstrip 4	740	MT	2027
Duke	Cayuga 1	500	IN	2028
Duke	Cayuga 2	495	IN	2028
Entergy	White Bluff 1	817	AR	2028
Entergy	White Bluff 2	819	AR	2028
Scana	McMeekin 1	125	SC	2028
Scana	McMeekin 2	125	SC	2028
AEP	Rockport 1	1300	IN	2028
NiSource - NIPSCO	Michigan City 12	469	IN	2028
Idacorp	Jim Bridger 2	527	WY	2028
Emera	Big Bend 3	395	FL	2028
Emera	Big Bend 4	437	FL	2028
Xcel	Allen King 1	511	MN	2028
Entergy	Independence 1	815	AR	2030
Entergy	Independence 2	842	AR	2030
AEP	Cardinal 1	615	OH	2030
DTE	Belle River 1	635	MI	2030
DTE	Belle River 2	635	MI	2030
Pinnacle West - APS	Four Corners 4	770	NM	2031
Pinnacle West - APS	Four Corners 5	770	NM	2031
Idacorp	Jim Bridger 1	531	WY	2032
Ameren	Sioux 1	483	MO	2033
Ameren	Sioux 2	483	MO	2033
Xcel	Sherburne 3	876	MN	2034
Duke	Gibson 2	630	IN	2034
Duke	Gibson 3	630	IN	2034
Duke	Gibson 4	622	IN	2034
Duke	Gibson 5	620	IN	2034
Xcel	Harrington 1	339	TX	2036
Ameren	Labadie 2 units	1186	MO	2036
Berkshire-Pacificorp	Huntington 1	459	UT	2036
Berkshire-Pacificorp	Huntington 2	450	UT	2036
Xcel	Tolk 1	532	TX	2037
Xcel	Tolk 2	532	TX	2037
Xcel	Harrington 2	339	TX	2038
Xcel	Harrington 3	339	TX	2040
DTE	Monroe 1	758	MI	2040
DTE	Monroe 2	773	MI	2040

DTE	Monroe 3	773	MI	2040
DTE	Monroe 4	762	MI	2040
CMS	Campbell 1	260	MI	2040
CMS	Campbell 2	348	MI	2040
CMS	Campbell 3	838	MI	2040
Berkshire-Pacificorp	Hunter 1	471	UT	2042
Berkshire-Pacificorp	Hunter 2	430	UT	2042
Berkshire-Pacificorp	Hunter 3	460	UT	2042
Duke	Edwardsport	595	IN	2045

Attachment 3

Press Releases

42% of global coal power plants run at a loss, finds world-first study

30 November 2018

New wind and solar will be cheaper than 96% of existing coal power by 2030

LONDON, November 30 – Two-fifths of the world's coal power stations are already running at a loss, finds Carbon Tracker in a unique study released today which challenges the need for new coal generation and shows that it makes economic sense to close plants in line with the Paris Climate Agreement.

The financial think tank has carried out the first global analysis of the profitability of 6,685 coal plants worldwide, representing 95% (1900GW) of all operating capacity and 90% (220GW) of capacity under construction, and has published the results in a new coal power economics portal. The portal can be viewed here once embargo lifts: www.carbontracker.org/reports/coal-portal/

policymakers and civil society develop economically rational plans to close coal plants and to understand the financial risk if they continue to operate. The UN's Intergovernmental Panel on Climate Change says at least 59% of coal power worldwide must be retired by 2030 to limit global warming to 1.5°C and many countries have set phase-out dates.

Powering down coal: Navigating the economic and financial risks in the last years of coal power and the portal are the result of a two-year modelling exercise. Carbon Tracker finds that:

42% of global coal capacity is already unprofitable because of high fuel costs; by 2040 that could reach 72% as existing carbon pricing and air pollution regulations drive up costs while the price of onshore wind and solar power continues to fall; any future regulation would make coal power still more unprofitable;

it costs more to run 35% of coal power plants than to build new renewable generation; by 2030 building new renewables will be cheaper than continuing to operate 96% of today's existing and planned coal plants.

China could save $389 billion by closing plants in line with the Paris Climate Agreement instead of pursuing business as usual plans; the EU could save $89 billion; the US could save $78 billion; and Russia could save $20 billion.

report, said:

> *"The narrative is quickly changing from how much do we invest in new coal capacity to how do we shut down existing capacity in a way that minimises losses. This analysis provides a blueprint for policymakers, investors and civil society."*

The report warns that utilities and their shareholders are exposed to stranded asset risk in liberalised markets, such as much of Europe and parts of the US, where power generators are subject to competition. Coal plants will be forced to shut unless they can secure government subsidies or a delay or reduction in environmental regulations.

However, it is the state which ultimately underwrites investment risk in regulated markets, where coal is sheltered from competition. In countries such as China, India, Japan and parts of the US governments typically approve the cost of generation and pass it on to consumers. Backing coal in the long-term will threaten economic competitiveness and public finances, because politicians will be forced to choose between subsidising coal power or increasing power prices for consumers.

Consumers and taxpayers are keeping coal profitable in [many] regulated markets by picking up the bill to support uneconomic coal plants. A phase-out could save them billions, but would hit coal owners' profits. If plants are closed in line with the Paris Agreement the industry could lose $92 billion in South as usual supported by the state.

Carbon Tracker says governments should phase out coal in an orderly manner and develop plans to close the least economic plants first. When it is cheaper to build new renewables and gas than to build new coal power, they should ban investments in new coal power. This point has already been reached in Europe, the US, India and parts of Latin America.

When it is cheaper to build new renewables and gas cost less than to continue running existing coal plants, they should implement a coal phase out. This appears imminent in Germany the US and other nations, where solar PV and onshore wind has undercut coal in power auctions in 2018.

Sebastian Ljungwaldh, Carbon Tracker energy analyst and co-author, said:

> *"Our analysis shows a least-cost power system without coal should be seen as an economic inevitability rather than a clean and green nicety."*

Country Operating and under construction capacity (GW) Capacity-weighted average gross profitability ($/MWh) Year new renewables outcompete new coal Percentage of total coal capacity with a higher running cost than new renewables (%) Stranded asset risk under below 2°C scenario ($/bln) 2018 2030 2018 2030

	construction capacity (GW)	profitability ($/ MWh)		outcompete new coal	higher running cost than new renewables (%)		below 2°C scenario ($/ bln)
		2018	2030		2018	2030	
Australia	25	20	16	Today	37%	72%	15
China	1,037	-3	-8	Today	32%	100%	-389
EU	155	-10	-32	Today	20%	100%	-89
India	257	13	12	Today	62%	100%	76
Indonesia	41	20	25	2021	0%	73%	35
Japan	51	5	8	2025	0%	100%	20
Philippines	11	9	18	2021	0%	48%	13
Russia	49	-12	-11	2020	0%	10%	-20
South Africa	48	23	21	Today	13%	89%	51
South Korea	43	15	22	2024	0%	99%	92
Turkey	18	2	4	2022	0%	100%	0
Ukraine	21	-5	-22	2020	0%	100%	-7
US	261	-4	-6	Today	70%	100%	-78
Vietnam	24	1	8	2020	0%	80%	12
Total	2043	2	-3	n/a	35%	96%	-267

Please see the full report for commentary on individual countries and a more detailed table which also lists the three companies most exposed in each country.

Carbon Tracker developed a revolutionary new method to assess the profitability of coal plants in countries like China with big fossil fuel power industries but inadequate information about plant activity. It used satellite images and advanced machine learning to estimate the activity of each plant, a technique and EU.

Laurence Watson, Carbon Tracker data scientist and co-author, said: "Our coal portal offers a powerful response to those governments and asset owners who are unwilling or unable to disclose timely and accurate data."

Methodology

Carbon Tracker assessed the profitability of each coal plant based on its operating costs, taking into account fuel, maintenance costs, investment needed to meet environmental standards, and carbon pricing where relevant. These costs only include existing and ratified carbon pricing and air pollution policies.

Its modelling uses the International Energy Agency's "Beyond 2°C Scenario" (B2DS), which phases out all coal power in the EU by 2030, in the US by 2035, and worldwide by 2040, and gives a 50% chance of limiting global warming to 1.75°C.

It compared the long-run operating cost of each coal plant with the levelised cost of onshore wind and utility-scale solar PV, based on long-term price trends and B2DS forecasts for the growth of these technologies.

It compared coal owners' business as usual plans with the B2DS. By assessing the operating cost of each plant and assuming the least economic will close first, it is able to establish a rational closure programme and identify which are most exposed in a B2DS scenario.

Stefano Ambrogi, sambrogi@carbontracker.org, +44 7557 916940

COMPANY OVERVIEW

Carbon Tracker

Carbon Tracker is an independent financial think tank that carries out in-depth analysis on the impact of the energy transition on capital markets and the potential investment in high-cost, carbon-intensive fossil fuels.

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Attachment 4

TOPICAL

Westmoreland Coal Co., with mines in Montana, files for bankruptcy

SAM WILSON swilson@billingsgazette.com Oct 9, 2018

In May 2008 a dragline crane operates at Westmoreland Coal Company's Absaloka mine northeast of Hardin on the Crow Indian Reservation.

Billings Gazette file photo

Westmoreland Coal Co., the Colorado-based owner of three coal mines in Montana, filed for bankruptcy protection in federal court Tuesday.

Westmoreland owns the massive Rosebud Mine, which supplies coal to Colstrip's power plant, as well as the Absaloka Mine, a major source of revenue and well-paying jobs for the Crow Tribe. It owns a third, smaller mine in Savage, near the North Dakota border.

The company announced Tuesday in a press release that it has reached a restructuring support agreement with a majority of its lenders. An affiliated partnership, Westmoreland Resource Partners, also filed for Chapter 11 bankruptcy on Tuesday.

The company's bankruptcy filing claims more than $1.4 billion in debt and total assets of $770 million, as of Aug. 31. Among the top creditors listed in the filing is the Bureau of Indian Affairs, which is owed $1.8 million, and former Westmoreland CEO Kevin Paprzycki, who stepped down in late 2017 and is owed more than $1.1 million.

“After months of thoughtful and productive conversations with our creditors, we have developed a plan that allows Westmoreland to operate as usual while positioning Westmoreland for long-term success,” Westmoreland's interim CEO, Michael Hutchinson, stated in a press release.

The Westmoreland coal mines supply the Colstrip power plants.
LARRY MAYER, Gazette Staff

The company announced earlier this year in its annual financial report that it was considering filing for bankruptcy.

“We may seek protection from our creditors under Chapter 11 of the United States Bankruptcy Code, or an involuntary petition for bankruptcy may be filed against us,” Westmoreland stated in its annual report, which was filed late in April. “Either of which could have a material adverse impact on our business, financial condition, results of operations and cash flows and could place our shareholders at significant risk of losing all of their investment in our shares.”

It's unclear what, if any, impact the bankruptcy will have on the sprawling Rosebud Mine outside the town of Colstrip. Westmoreland’s press release stated that its “financing is sufficient to continue operating its mines in the normal course of business” and that it “anticipates no staff reductions” as a result of the filing.

The company is pursuing federal and state permits to expand the life of the mine. The state permit application is asking for a 15,000-acre expansion that would allow the company to extract an additional 104 million tons of coal through 2047.

The company's most recent annual report also noted that the company did not have coal sale contracts beyond 2019 at the time. Westmoreland officials have, however, indicated they've been working to renegotiate contracts with the Colstrip power plant.

A spokeswoman for Westmoreland declined to comment specifically on the company's Montana operations, but said the bankruptcy would have no immediate effect on the company's mining plans.

"We're continuing with our stated plans from before, and we have the capital secured," Kristin Cole said Tuesday afternoon.

DEQ spokeswoman Kristy Ponozzo did not return phone messages Tuesday.

Environmental groups were quick to seize on the news, warning that a bankruptcy could leave the state on the hook for cleanup costs at the mines. New mines in Montana are required to post bonds covering the estimated cleanup costs prior to operating, but Montana Environmental Information Center Deputy Director Anne Hedges accused the DEQ of historically underestimating those costs.

“We hope that the state holds sufficient funds for each of Westmoreland’s three Montana mines that declared bankruptcy today,” Hedges said in an email Tuesday.

Crow Chairman Alvin "A.J" Not Afraid said last week the tribe had reached a five-year deal to continue the company's mining operations on the reservation.

"Today we met with the mining company, Westmoreland," Not Afraid said in a video address released by his office Oct. 5. "We also found out that the mine is secured for another five years."

He said that would ensure the viability of tribal programs including per-capita royalties disbursed to tribal members and monthly elder assistance payments. His address did not include any details of the new five-year contract.

The Absaloka Mine, a more than 10,000-acre subsurface mine near Hardin, has leased reserves from the Crow Tribe since 1974, according to the company's website. The mine's production capacity is 7.5 million tons of coal per year, the website states.

Westmoreland threatened to shutter the tribe's mine in 2016, when it asked Crow leaders to agree to cut its share of coal proceeds at the mine. The tribe agreed to cut its tribal severance tax by 85 cents a ton through the end of 2016 and then by $1.10 a ton from January 2017 to December 2018.

A 40-cent-per-ton cut to tribal gross proceeds was also granted to keep the mine afloat.

Coal production has been declining nationwide in recent years, as utilities have moved to cheaper natural gas and respond to customer demands for cleaner renewable energy. Montana’s share of coal production reached its lowest point in a decade in 2016, but has since increased moderately.

The bankruptcy announcement is far from a death knell for Westmoreland’s mines in Montana, particularly because it isn’t clear where the company’s largest liabilities stem from, said Patrick Barkey, an economist and the director of the University of Montana’s Bureau of Business and Economic Research.

The Rosebud Mine’s combination of high-quality coal and more mechanized production than other mines could help keep it competitive despite the question marks surrounding the neighboring Colstrip plant’s lifespan. Its owners have stated they plan to close two of the four units at the plant by 2022, and the remaining two could shut down as early as 2027.

“There’s different paths (in bankruptcy) ranging from reorganization to liquidation,” Barkey said. “As it stands, the Rosebud Mine, that’s an asset that you would think would be preserved in any case.”

But the economic impacts of closing the mine could be devastating for the community and the state, he said.

“If it can no longer operate, that’s a mammoth event,” Barkey said. “It has so many consequences downstream. But I think that’s really jumping off the ledge a little prematurely.”

Westmoreland also owns mines in five U.S. states and in Canada. The company’s press release Tuesday stated that its Canadian operations will be excluded from the bankruptcy proceedings.

The news had sliced the company's share price in half within an hour of markets opening Thursday, with shares closing at 7 cents, down by 42 percent, at the end of trading Tuesday. As recently as February, Westmoreland's stock had been selling for 55 cents a share.

MORE INFORMATION

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- Trump administration considers using US military bases to ship coal, gas to Asia
- Colstrip operator sues former owner PPL to cover worker pensions, cleanup obligations
- Gianforte, Rosendale running on the Crow agenda, tribal chairman says during endorsement
- Montana expected to allow coal mine expansion, despite company's bankruptcy

- Bankruptcy auction set for Rosebud Mine, sole supplier of coal to Colstrip
- Feds object to bankruptcy plan proposed by owner of 3 Montana coal mines
- 13 of Colstrip co-owner PacifiCorp's 22 coal power plants are uneconomical
- Coal's decline a sticky problem for Eastern Montana sugar

Sam Wilson
Morning Reporter

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TOPICAL

Bankruptcy auction set for Rosebud Mine, sole supplier of coal to Colstrip

By TOM LUTEY tlutey@billingsgazette.com Nov 17, 2018

The Western Energy Company runs four huge draglines at its Rosebud Mine operation.

MICHAEL GALLACHER, Missoulian

The lone source of coal for the Colstrip power plant has been scheduled for bankruptcy auction in late January.

Rosebud Mine will be auctioned Jan. 22, if necessary, to help pay the debts of Westmoreland Coal Co., which owns the mine. The United States Bankruptcy Court Southern District of Texas on Thursday set terms for the auction, which the Colorado-based coal company had requested in October.

Westmoreland did not respond to interview requests Friday by Lee Montana Newspapers. The company filed for bankruptcy Oct. 8, indicating that it had more than $1.4 billion in debt and assets of $770 million.

The future of the mine has sparked concern from environmentalists and Colstrip power plant owners.

Montana’s state government is in the process of approving a 10-square mile expansion of Rosebud Mine, not knowing who the actual developer might be after a sale. This week, Billings-based Northern Plains Resource Council asked the state Department of Environmental Quality to stop the permitting process at least until the developer is identified. Northern Plains earlier in the week also identified more than 50 springs it said would be destroyed by the mine expansion.

"First and foremost, the state must take a hard look at the financial stability of any buyer,” said Mark Fix, past chair of Northern Plains and Tongue River rancher. “They must also require appropriate bonding to cover responsible reclamation and ensure that existing collective bargaining agreements are honored. In short, southeastern Montana's workers and landscapes shouldn't be traded away to benefit the industry's bottom line."

The auction comes as the four-unit Colstrip power plant’s contract for Rosebud Mine coal winds down. The current agreement guarantees coal at least through 2019. Four utilities with 70 percent ownership in Colstrip Units 3 and 4 have expressed concern about not having coal if a buyer of Westmoreland’s assets opts to mine coal at Rosebud, or not mine enough to feed Units 3 and 4.

The utilities are Puget Sound Energy and Avista Corp., of Washington; and Oregon utilities PacifiCorp and Portland General Electric. The four petitioned the court collectively as Northwest Colstrip Owners, or NWCO.

“Should the Rosebud Mine shut down, or materially reduce its output during the debtor’s cases, NWCO’s ability to operate the Colstrip plants would be jeopardized, which in turn would impact the ability of NWCO to generate electricity for its customers,” the utilities said in an objection to the sale.

News of the last several weeks have been troubling both for the mine and the power plant.

Colstrip operator and partial owner Talen Energy said in an October lawsuit that it will be financially challenging to honor its environmental cleanup obligations at the power plant, as well as its commitment to employee benefits. The company indicated that its predecessor, PPL, hadn't handed down enough funding to cover those costs. Talen is suing PPL, which said there's no merit to Talen's claims.

The Rosebud Mine expansion was given preliminary approval by the state of Montana just three days before Westmoreland filed for bankruptcy. The Department of Environmental Quality said earlier this week that it would have been prejudicial to reject the mine expansion because of the bankruptcy. The mine employs about 300 people.

The cleanup bond for the expansion was set for $13.7 million, a price that struck the Montana Environmental Information Center as too low, increasing the likelihood that state taxpayers would someday be required to pay the difference. DEQ countered that the bond was for only the first five years of development at the expansion site.

Ten days after the bankruptcy and 13 days after getting preliminary approval to expand Rosebud, Westmoreland asked the court for permission to sell the mine, as well as San Juan mine in New Mexico. Both Rosebud and San Juan serve nearby power plants.

In its sale request, Westmoreland also identified its mining interests in Canada as part of the core assets it hoped to auction through a stalking horse sale, which is a process that allows a minimum bid amount to be set ahead of open sale.

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Westmoreland Coal Co., with mines in Montana, files for bankruptcy

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- Montana mine expansion advances amid owner's bankruptcy
- Miles City BLM heads back to the drawing board on coal plan
- Former Colstrip owner PPL sues Talen Energy over cleanup and pension costs
- Feds object to bankruptcy plan proposed by owner of 3 Montana coal mines
- $5M to help Colstrip transition away from coal in jeopardy as utility merger crumbles
- 13 of Colstrip co-owner PacifiCorp's 22 coal power plants are uneconomical

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Tom Lutey
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TOPICAL

No bids to buy mines in Montana, Wyoming from bankrupt coal company

By TOM LUTEY tlutey@billingsgazette.com Jan 24, 2019

There were no qualified buyers for Westmoreland Coal Co. mines this week, leaving the assets to creditors pending February court hearing.

The sale, which included the Rosebud Mine, the lone coal source for the Colstrip power plant, was intended to solicit purchase offers for Westmoreland's mines, while creditors waited in the wings with a minimum "stalking horse" bid.

Colorado-base Westmoreland identified more than 40 parties last summer that it considered potential buyers, but no purchase offers resulted. The company filed for bankruptcy last October.

No one came forward with an acceptable offer and now creditors are positioned to take both the core assets, like Rosebud, and several non-core assets like the Absaloka mine near Crow Agency.

But the transfer to creditors is not a done deal. Westmoreland needs to convince the U.S. Bankruptcy Court, Southern District of Texas on Feb. 4 to discard the coal company’s roughly $329 million in unsecured pension and benefits obligation owed mostly to the members of United Mine Workers.

Creditors aren't interested in assuming the pension burden. UMW represents the miners at Westmoreland's mine in Kemmerer, Wyoming. There have been no objections to the pension and benefits plans attached to Westmoreland's Montana mines, although that debt is also unsecured.

If the court won’t allow Westmorland to cut ties to the Mine Workers’ pension and benefits debt, then the sale isn’t likely, said Kristin Cole, a Westmoreland spokesperson.

“If that’s not approved on Feb. 4, then there will be a larger reassessment,” Cole said.

Mines in the deal currently include the Absaloka, Rosebud and Savage mines in Montana, along with the coal company’s mines in Wyoming and New Mexico. The Montana mines employ 423 active union employees. An unidentified holding company has offered to buy Buckingham coal mine in Ohio and 15 other Midwestern properties.

Utilities who own the Colstrip power plant have told the court they're concerned about Westmoreland selling Rosebud mine to a buyer who won't be obligated to continue delivering coal to the power plant.

The company filed for bankruptcy Oct. 8, indicating that it had more than $1.4 billion in debt and assets of $770 million.

Montana’s state government is in the process of approving a 10-square mile expansion of Rosebud Mine, not knowing who the actual developer may be after a sale.

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- Rosebud Mine, post bankruptcy, is stable until year's end
- Hundreds of Colstrip mining jobs at stake as power plant owner seeks new coal supplier

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Tom Lutey
Agriculture and Politics Reporter

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TOPICAL

Westmoreland moves to end coal contract with Colstrip

By TOM LUTEY tlutey@billingsgazette.com Jan 29, 2019

The Western Energy Company runs four huge draglines at its Rosebud Mine operation.

MICHAEL GALLACHER, Missoulian

Plans are in the works to end the supply contract between Colstrip power plant and the coal mine that's kept it firing for more than 40 years.

Ending the contract could result in the power plant shutting down, utility owners said, either because the power plant lost its only coal source, or because a new agreement with higher coal prices made Colstrip uneconomical.

Owners of the four-unit southeast Montana power plant filed objections Friday in U.S. Bankruptcy Court, where debt-plagued Westmoreland Coal Co. is trying to pass Rosebud Mine to creditors. The mine is practically across the street from the power plant.

The power plant owners Puget Sound Energy, Avista Corp., NorthWestern Energy, PacifiCorp, Portland General Electric and Talen Energy had balked at an earlier supply offer from Westmoreland. Now they're being told to take the deal or else.

“Westmoreland’s most recent offer to the Colstrip owners would very likely make operation of Colstrip Units 3 and 4 uneconomic for not only Talen Montana but all of the fellow Colstrip owners,” said Taryne Williams, of Talen Energy, a power plant co-owner, who also keeps Colstrip running. Units 3 and 4 are the power plant’s workhorse units with the longest life expectancy.

“Additionally, while at the present time, there has been no decision to shut down Units 1 and 2 prior to the previously announced closure date of July 1, 2022, we continue to experience financial challenges related to keeping the units open,” Williams aid.

There are already concerns about Colstrip power plant's operating costs and mine bankruptcy in Washington State, where 1.8 million customers receive Colstrip power. Regulators have voiced concerns about the risks feeding Colstrip power plant from a single mine.

Colstrip power plant is exclusively fed Rosebud coal — it's designed for it, according to NorthWestern Energy. Montana's largest monopoly utility, NorthWestern told the court that it would take up to three years of planning and permitting to begin feeding Colstrip with coal from another mine. During that time, the power plant would be shut down.

"If the Court allows (Westmoreland) to reject the Coal Supply Agreement, the Colstrip Complex will cease operation, and the Units will shut down and cease generating electricity in the middle of the Montana winter," NorthWestern told the bankruptcy court. "The Colstrip Co-Owners will not be able to replace the coal supply right away, and the Units will close."

The balance of electricity in the Pacific Northwest will be at risk, NorthWestern said.

"The Rosebud Mine is the only viable source of fuel for the Colstrip units," said Grant Ringel, of Puget Sound Energy. "There are existing permit conditions that require local coal to be burned in those units."

Puget evenly splits ownership of Units 1 and 2 with Talen and has 25 percent ownership of Units 3 and 4, making the Seattle-area utility Colstrip's largest stakeholder. Asked if higher coal prices could push Units 1 and 2 into earlier retirement, Ringel said it would be challenging.

"The Colstrip units are under strong economic pressure from other sources of electric generation, especially natural gas. Anything that raises costs for Colstrip further weakens their competitiveness," Ringel said.

Talen is the most vulnerable of the utility owners to a rise in coal prices. The Pennsylvania-based utility sells its power on the open market, where cheap electricity generated by natural gas or renewable energy are already eroding coal's competitiveness. A decade ago, coal-power accounted for 40 percent of U.S. electricity, but today that number has fallen into the 28 percent according to the U.S. Energy Information Administration. In 2018, U.S. coal consumption fell to its lowest point in 39 years, EIA reports.

“Talen Montana has made hard-won progress to improve the financial condition of Units 1 and 2. However, if Westmoreland rejects our current contract or increases our cost, the financial issues associated with the operation of Units 1 and 2 will likely get worse,” Williams said.

Talen aside, the other five Colstrip owners are regulated utilities with captive customers who pay higher-than-market prices, though they would need approval by state regulators to pass on higher coal costs to customers. Some regulators have already expressed concern about the price of Colstrip power.

It’s unlikely Rosebud Mine coal would go anywhere other than Colstrip power plant, said Seth Feaster, data analyst for the Institute for Energy Economics and Financial Analysis. The most likely non-Colstrip buyers for Rosebud Mine coal are probably in the Asian Pacific, where Powder River Basin companies like Cloud Peak and Aubre Energy already ship coal more affordably than Rosebud would.

The mine’s more probable play is leveraging a higher price from the Colstrip power plant. The challenge is raising coal prices without driving utilities toward gas or renewable energy, Feaster said.

“Coal companies depend on the power industry, but the power industry really doesn’t depend as much on coal,” Feaster said. “The coal companies are in a really bad spot because the moment they raise prices, the power companies are going to switch to something else. But if they don’t raise prices, their financial health is in peril.”

Westmoreland filed for bankruptcy in October. The Colorado-based company, with three mines and 423 union employees in Montana, claimed more than $1.4 billion in debt and total assets of $770 million as of Aug. 31, 2018.

The company attempted to solicit bids from qualified buyers earlier this month, but received no offers other than the minimum bid from creditors pre-set to make sure Westmoreland’s debts were paid.

No buyer came forward with an acceptable offer, and now creditors are positioned to take both the core assets, like Rosebud, and several non-core assets, like the Absaloka mine near Crow Agency.

The supply contract to Colstrip power plant isn’t the only agreement Westmoreland and its creditors seek to nullify.

Westmoreland needs to convince the U.S. Bankruptcy Court in the Southern District of Texas on Monday to discard the coal company’s roughly $329 million in unsecured pension and benefits obligations owed mostly to the members of United Mine Workers. Creditors aren’t willing to acquire the mining company’s Wyoming assets with the pensions in tow.

There have been no objections to the pension and benefits plans attached to Westmoreland's Montana mines, although that debt is also unsecured. The Montana mines—Absaloka, Rosebud and Savage—are organized under the United Operating Engineers Local 400, which isn't represented in the bankruptcy.

Age, consumer concerns about climate change, and competition from natural gas and renewable energy are working against Colstrip power plant.

Four of the power plant’s six utility owners are poised to move away from coal power within eight to 10 years. In Washington State, the Legislature and governor are considering a ban on coal power by 2025.

MORE INFORMATION

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- Montana claims against Westmoreland Coal total $5 million
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https://billingsgazette.com/news/state-and-regional/colstrip-moves-to-cut-ties-with-rosebud-mine-as-westmoreland/article_b81d66da-bb23-571a-8dd8-abd603c5782b.html

TOPICAL

2019 LEGISLATIVE SESSION

Colstrip moves to cut ties with Rosebud Mine as Westmoreland falters

By TOM LUTEY tlutey@billingsgazette.com Feb 16, 2019

Ankney

Once unthinkable, Colstrip power plant and Rosebud Mine soon could be legally separated as utilities and lawmakers conspire on a future without Westmoreland Coal Co.

In the Senate Natural Resources Committee on Friday, Sen. Duane Ankney, R-Colstrip, and two power plant shareholders revealed plans to replace Rosebud Mine coal with fuel from an unidentified source, though most likely a coal mine in Wyoming or southeast Montana.

The state Department of Environmental Quality is busy permitting a coal unloading facility so the power plant can begin unloading coal train cars. And there's a bill to provide state loans to the power plant's six large utility owners to pay for it.

Westmoreland Coal Co. is going through bankruptcy, meaning that Rosebud Mine could be under new ownership by spring. The company and its creditors have indicated they will not keep the mine's supply contract with Colstrip power plant, which has Colstrip's utility owners scrambling for different coal. Although it was suggested Friday that the bills and permitting were just a ruse to force Rosebud Mine's future owners to negotiate.

Friday, Ankney tried to persuade lawmakers to separate the power plant from the mine. Since 1975, the power plant and the mine have been legally connected like conjoined twins. Montana law says the power plant has to burn Rosebud coal.

Specifically, Colstrip Units 3 and 4, the youngest and biggest generators in the four-unit complex, are obligated to burn Rosebud coal, explained Mark Taylor of Talen Energy.

"Units 3 and 4 at Colstrip are required to use Rosebud Mine coal, and given that some of the uncertainties associated with Colstrip's fuel source, we felt it incumbent upon us to initiate the process to explore alternatives out there in the marketplace," Taylor said.

During their testimony in Westmoreland's bankruptcy, the power plant's owners, Talen, NorthWestern Energy, Puget Sound Energy, Avista Corp., Portland General Electric and PacifiCorp, insisted that higher Rosebud coal prices could be cause for shutting down the power plant. NorthWestern argues that getting the power plant approved for coal from another mine could take a couple of years, during which Colstrip would be idle and perhaps never reopen.

The current coal contract between the mine and power plant expires in 2019. For more than a year negotiations for a new price have continued, with no agreement reached.

Already there are plans to close Units 1 and 2 within four years to settle an air pollution lawsuit. Washington state, where Puget, Avista and PacifiCorp do business, is considering banning coal power by 2025. In Oregon PacifiCorp is legally blocked from selling coal power after 2030, and Portland General Electric must do the same by 2035. Concerns about climate change are driving those deadlines.

Two of Colstrip power plant’s owners, Puget and Avista, plan to be financially ready to shutter Colstrip eight years from now, in 2027.

But the future of Rosebud Mine is the more immediate concern.

“We’ve all read in the papers what’s going on with Westmoreland and I think to secure an alternate fuel source if need be,” Ankney said explaining the reason for the bill. Cutting ties with the power plant would also mean letting Rosebud’s only customer shop around. The mine employs about 300 people. Ankney said he didn’t take the move lightly.

“I spent 32 years in that mine. The last thing I’d like to see is for them to have to go somewhere else to get the coal,” Ankney said. “What’s worse than that is if they can’t get any coal and the power plant has to close. That wouldn’t serve anybody in this body one bit because there’s a little bit of coal dust on every dollar we spend up here.”

The senator said Wyoming coal would be an unlikely replacement because of rail cost. Colstrip has a big appetite. It’s the second largest coal-fired power plant in the West and consumes 10 million to 13 million tons of coal a year. Based on U.S. Energy Information Administration mine data, there’s only one Montana coal producer big enough to meet that kind of demand, Cloud Peak Energy’s Spring Creek Mine, which is about 70 miles away. Rosebud and Colstrip power plant are neighbors.

But distance wouldn’t be the only change. Cloud Peak’s mines are non-union. Rosebud’s miners belong to the International Union of Operating Engineers.

There would be air pollution challenges. Not all coal burns the same. Coal from a mine other than Rosebud could mean changes to pollution controls at the power plant to comply with clean air permitting.

For supporters of the plan to cut Rosebud Mine loose, Anne Hedges of the Montana Environmental Information Center cautioned that all the bills and permitting so far might not be a ruse. In 1997, Montana lawmakers voted to deregulate its utilities, only to find out later that Montana Power Company, a standard bearer for stability, planned to sell off its dams and power plants, including its share in Colstrip.

“I worry about the implications of this bill. Maybe this is just a leveraging tool in the bankruptcy proceedings and the owners are trying to get a new contract with the Rosebud Mine. That is possible,” Hedges said. “It is quite possible this is just using legislation, which I think is inappropriate, to leverage an individual contract between two parties. That is possible. However, when we passed deregulation, nobody thought that Montana Power was going to sell all the generating assets either. What you are doing is allowing them to get coal elsewhere. Right now by law they're not allowed to do so. I think that’s a bad deal.”

MORE INFORMATION

Guest opinion: Washington, Oregon should support Montana coal industry

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- Avista accelerates preparations for Colstrip exit
- Troubled Wyoming coal producer trims salaried positions
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- MDU to shutter Eastern Montana coal power plant in 2020
- Virginia businessman's sole bid wins Kemmerer mine, omits retiree benefits as expected
- Guest opinion: Looking at all strategies to keep Colstrip, Rosebud mining operating
- GOP lawmakers rally behind 'save Colstrip' bill
- Republican 'Save Colstrip' bill still in play
- Rosebud Mine sale approved by bankruptcy court
- Rosebud Mine, post bankruptcy, is stable until year's end
- Coal ash pollution cleanup could create 200 Colstrip jobs for a decade, conservationists say

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Tom Lutey
Agriculture and Politics Reporter

Politics and agriculture reporter for The Billings Gazette.

TOPICAL

Rosebud Mine sale approved by bankruptcy court

By TOM LUTEY tlutey@billingsgazette.com Mar 4, 2019

Rosebud Mine will have new owners under court-approved sales by Westmoreland Coal Co.

In terms approved in bankruptcy court Friday, the mine will transfer to Westmoreland's first lien creditors and continue operating.

Under the agreement, the southeast Montana mine will honor the final months of its contract with Colstrip power plant. The Colorado-based coal company and its creditors had attempted to end its coal-supply agreement with the power plant.

Westmoreland mines in New Mexico and Canada were also part of the approved sale.

Rosebud Mine is Westmoreland's biggest producer of thermal coal.

The announcement comes as Westmoreland renegotiates its Absaloka Mine payments to the Crow Tribe downward.

Westmoreland's Savage Mine in Eastern Montana is also losing its largest customer, the Lewis and Clark Generating Station near Sidney.

Westmoreland listed $1.4 billion in debt shortly before filing for bankruptcy last fall.

One Wyoming town is looking to get into the coal business at a time when many are leaving

- MDU to shutter Eastern Montana coal power plant in 2020
- Colstrip moves to cut ties with Rosebud Mine as Westmoreland falters
- Colstrip legislator plans DC trip to save power plant
- Westmoreland moves to end coal contract with Colstrip
- Montana GOP again tries to save Colstrip with revised bill
- Report: Powder River Basin faces increasing risk from coal decline
- 'Save Colstrip' bill could cost each NorthWestern customer at least $721
- Rosebud Mine, post bankruptcy, is stable until year's end

Tom Lutey
Agriculture and Politics Reporter

Politics and agriculture reporter for The Billings Gazette.

https://billingsgazette.com/news/state-and-regional/rosebud-mine-post-bankruptcy-is-stable-until-year-s-end/article_5f1aa2c6-f650-54cb-931e-e08d30e89b9f.html

TOPICAL

Rosebud Mine, post bankruptcy, is stable until year's end

By TOM LUTEY tlutey@billingsgazette.com Mar 21, 2019

Rosebud Mine, the lone coal supplier for Colstrip Power Plant, appears to be on steadier ground, at least for now, as Westmoreland Coal Co. exits bankruptcy.

One month ago, the mine's supply contract with the power plant seemed in doubt as Westmoreland and its first lien creditors attempted to cancel the deal. The Colorado-based mining company argued in bankruptcy court that continuing the contract would make Rosebud less appealing to a future owner.

This month, Westmoreland emerges from bankruptcy and Rosebud has a new owner, Westmoreland Mining LLC, a company created by Westmoreland's first lien creditors. On the ground, management under the new owner remains the same. The creditors behind the Westmoreland Mining LLC remain unidentified.

Here's what's certain about Rosebud's outlook for the remainder of 2019:

The mine will continue delivering coal to Colstrip Power Plant under the terms of its existing contract through the end of the year, which is when the supply terms were expecte to end before Westmoreland asked for an early exit in bankruptcy filings.

One utility with a stake in Colstrip, NorthWestern Energy, indicated in court filings that the power plant would shutter this spring if the coal contract was ended early. It can take months, if not years, of permitting to burn coal from another source. Montana's Legislature crafted a bill to decouple the power plant and mine in order to help the power plant switch to another source.

Miners represented by the International Union of Operating Engineers, local 400, will operate at Rosebud under their current labor contract through year's end. The collective bargaining agreement was set to expire this spring.

Montana's Department of Environmental Quality continues to work on a new permit to expand Rosebud Mine. The mine continues to be a viable business, said Kristi Ponozzo, of DEQ. As long as the cleanup bond is maintained and the permit is passed on to a viable business entity, the state will continue to work on extending the life of the coal mine with a 10-square-mile expansion.

Conservationists had warned the state in October about permitting the mine for unknown buyers. The identity of the buyers remains unknown, although the leadership for Western Mining LLC comes from existing coal companies

MORE INFORMATION

Rosebud Mine sale approved by bankruptcy court

- Colstrip moves to cut ties with Rosebud Mine as Westmoreland falters
- Westmoreland moves to end coal contract with Colstrip
- No bids to buy mines in Montana, Wyoming from bankrupt coal company
- Interior boss order aims to protect US public land access
- 'Save Colstrip' bill heads out of committee for Senate floor
- NorthWestern customers would be on hook for $75M Colstrip purchase
- Colstrip gets its day on Capitol Hill
- Coal ash pollution cleanup could create 200 Colstrip jobs for a decade, conservationists say
- Montana regulators approve expansion of coal mine serving Colstrip

Tom Lutey
Agriculture and Politics Reporter

Politics and agriculture reporter for The Billings Gazette.

https://billingsgazette.com/news/state-and-regional/hundreds-of-colstrip-mining-jobs-at-stake-as-power-plant/article_5665808c-4580-5891-b474-136b7a1293a7.html

TOPICAL

Hundreds of Colstrip mining jobs at stake as power plant owner seeks new coal supplier

By TOM LUTEY tlutey@billingsgazette.com May 23, 2019

The Colstrip power plant, including units 1 and 2, is shown in January. Plant owner Talen Energy recently announced that units 1 and 2 will be shut down sometime in 2019.

ADAM FONDREN, Billings Gazette file photo

Westmoreland Mining LLC is asking the state of Montana to think twice before allowing Colstrip Power Plant to buy coal from somewhere else.

The company's Rosebud Mine is within walking distance of the power plant, which it has fueled for more than 40 years. Nearly 400 union miners work at Rosebud.

Colstrip Power Plant's coal contract with Westmoreland is running out in December and power plant operator Talen Energy is now taking steps toward a different mine. Some observers suggest Talen is merely bluffing for a better deal from Westmoreland.

"Talen Montana is serious about ensuring that the Colstrip plant remains economically viable for as long as possible. Therefore, it is critical that we not be held only to one supplier," said Taryne Williams, Talen Energy spokeswoman. "Whether or not the Colstrip plant continues to take coal from the Rosebud Mine after the end of this year is heavily dependent on whether Westmoreland decides to submit an economically competitive offer rather than persisting in its efforts to impose punitive commercial terms on Talen Montana and the Colstrip co-owners by virtue of its monopoly."

Talen is jumping through all the necessary government hoops to get approval for coal from a different mine, which has Westmoreland concerned.

"The resulting economic impacts on the city of Colstrip and the state are tremendous," argued Rosario Doriott Dominguez, attorney for Westmoreland Mining. Requesting relief from Montana's Board of Environmental Review, Dominguez said Westmoreland “alone employs approximately 390 employees in Colstrip, pays over $40 million in local payroll annually, and spends over $60 million annually for goods and services in Montana.”

The mine and power plant together employ a majority of the households of the Colstrip community.

Westmoreland Mining LLC is a privately held company owned and operated by former first lien creditors of Westmoreland Coal Co., which went bankrupt in March.

Wednesday, the Board of Environmental Review handed the case over to a hearings examiner. Talen will have a chance to respond to Westmoreland’s insistence that the policies that created the power plant also bind the power plant to Rosebud mine.

In the past year, Talen has asked Montana’s Department of Environmental Quality to approve the burning of coal from a different mine, most likely a mine in Wyoming or the Spring Creek and Decker mines of Southeast Montana. The Colstrip operator has also sought permitting for a coal unloading facility for emptying coal shipped to the power plant by rail.

In addition, the power plant has sought help from Republican U.S. Sen. Steven Daines in extending a tax credit for “refined coal,” meaning coal that must be dried or chemically treated to temper its air pollution. The tax credit is a Bush-era subsidy that last year would have been worth $7.10 a ton — no small amount for a power plant the burns 10 to 13 million tons a year. Rosebud Mine coal hasn't needed refining to comply with federal air pollution laws, but coal from another mine might.

There's also the issue of the union jobs. Rosebud's miners are unionized. Cloud Peak Energy mines, several of which have been eyed as possible coal sources for Colstrip Power plant, aren't.

Miners balk at management retention bonuses as Westmoreland pensions go unsecured

- Montana expected to allow coal mine expansion, despite company's bankruptcy
- No bids to buy mines in Montana, Wyoming from bankrupt coal company
- Final attempt at 'save Colstrip' legislation begins
- NorthWestern customers would be on hook for $75M Colstrip purchase
- Washington state lawmakers eyeing earlier closure of Colstrip
- Home solar advocates push against proposed charge in Montana
- Federal judge approves sale of Wyoming coal mine
- Colstrip Units 1 and 2 will close in 2019
- Gazette opinion: Challenges, opportunities for Colstrip

Tom Lutey
Agriculture and Politics Reporter

Politics and agriculture reporter for The Billings Gazette.

https://billingsgazette.com/news/state-and-regional/colstrip-owner-s-losses-mount-as-hunt-for-cheaper-coal/article_e7d668dc-e849-5257-a1d0-9f219bcde9de.html

TOPICAL

Colstrip owner's losses mount as hunt for cheaper coal continues

By TOM LUTEY tlutey@billingsgazette.com Aug 2, 2019

With two of its four units shutting down this year, Colstrip Power Plant is still struggling to find cheap coal and retain employees, plant operator Talen Energy told lawmakers this week.

Talen Montana President Dale Lebsack said his company continues to lose money on Colstrip Units 1 and 2. In June, the company abruptly announced it would close 1 and 2 this December, three years ahead of schedule. The announcement to shutter the units came after four months of Colstrip talks at the state Legislature, during which there was no mention of the units closing earlier than 2022. Lebsack said Talen has been transparent about Colstrip's struggles.

The Colstrip power plant, including units 1 and 2, is shown in January. Plant owner Talen Energy recently announced that units 1 and 2 will be shut down sometime in 2019.

ADAM FONDREN, Billings Gazette file photo

"We've been honest and upfront about our challenges over the course of the last few years. We've communicated repeatedly that we're losing quite a bit of money on units 1 and 2," Lebsack told the Legislature's Montana Energy and Telecommunications

Interim Committee. The meeting occurred July 29. “And as operator, we’ve been working tirelessly to try to remedy that situation. Unfortunately, despite our best efforts, we were unsuccessful in making units 1 and 2 economically viable.”

The power plant’s six owners, Talen, NorthWestern Energy. Puget Sound Energy, Portland General Electric, Avista Corp and PacifiCorp had agreed in 2016 to close the units no later than 2022 in order to settle an air pollution lawsuit. All 6 owners signed the agreement to retire Units 1 and 2. It was done to protect Units 3 and 4 from further litigation, although only Talen and Puget have ownership shares in 1 and 2. But market competition from cheap natural gas and renewable energy sources wore on the units’ profitability.

The number of workers leaving the power plant has increased due to uncertainty, Lebsack said. The company is trying to avoid significant layoffs related to the closure of Units 1 and 2. Additionally, Units 3 and 4 face a 2025 coal power ban in Washington, where Puget Sound Energy and Avista Corp. are based and PacifCorp does business. Oregon coal power bans begin in 2030. Between the two Pacific Northwest states there are 3.1 million Colstrip customers going offline.

“Our hardworking employees have continued to do a great job safely and reliably operating the plant, despite the uncertainty that surrounds Colstrip,” Lebsack said. “However, this uncertainty has contributed to an increase in attrition. As we’ve seen employees retire early, or leave for other jobs, at a much higher rate than in the past.”

Talen has offered retention and benefits packages to encourage workers to stay, Lebsack told lawmakers. The operator has worked with the International Brotherhood of Electrical Workers Local 1638 to extend the collective bargaining agreement for three years. Union workers recently voted to approve the agreement by 70%.

Roughly a third of the power plant's 330 workers are tied to Units 1 and 2, Lebsack said. Talen plans keep as many of those workers as possible on payroll decommissioning the units after shutdown, or working Units 3 and 4. With the number of workers leaving voluntarily increasing, it's unclear how many workers will lose jobs as a result of the two units closing in December.

"Because of these factors, we don't yet have hard and fast estimates regarding the number of impacted employees," Lebsack said. "We expect to continue to work through this situation over the next 18 to 24 months with the focus of recognizing the value of our employees during this time of uncertainty."

The plan is the put Units 1 and 2 into "a cold, dark, dry safe condition" and leave them standing until the entire power plant is ready to be demolished, most likely years from now.

The immediate challenges facing Units 3 and 4 are securing cheap coal and keeping workers from leaving, Lebsack said. The power plant's legacy coal source is Rosebud Mine, which is within walking distance of the power plant. The current coal contract for Rosebud expires at year's end, and whether a new deal can be struck without a price increase remains to be seen. Rosebud's previous owner, Westmoreland Coal Co., went bankrupt earlier this year. The mine is now owned by a group of creditors doing business as Westmoreland Mining LLC.

Coal is the power plant's biggest expense and finding the cheapest supply is crucial for Talen. Last year, Talen began the regulatory paperwork to use coal from a source other than Rosebud Mine, if necessary. That work continues, Lebsack said.

"From our perspective, our primary focus right now as it relates to Units 3 and 4 is to keep the units running and to keep them economically viable. I mean, we're focused on things like, you know, making sure that we have a workforce, when attrition, you know, climbed over 10% at Colstrip last year."

Video of Talen meeting with Montana lawmakers
Aug 2, 2019

Colstrip ash pond plans still unsettled, regulators say

- Guest opinion: Cleanup jobs in Colstrip needed now more than ever
- Colstrip Units 1 and 2 will close in 2019
- NorthWestern seeks huge transmission rate increase, boosting bills for its biggest customers
- 'Save Colstrip' bill easily passes Montana House
- From the editor: Ankney's big on bluster and completely fact-free
- Commissioners pause tax break vote on $500M wind farm
- Colstrip residents voice frustration at long wait for ash pond cleanup, concerns over cost
- $2M grant for Colstrip coal worker retraining sits unused after two years
- Wyoming's largest utility to retire majority of coal-fired power plant units by 2030
- PacifiCorp plans early exit from Colstrip

Tom Lutey
Agriculture and Politics Reporter

Politics and agriculture reporter for The Billings (

Attachment 5

TALEN ENERGY

Charles S. Baker • General Manager • Talen Montana, LLC
303 N. Broadway Suite 400 • Billings, MT 59101
(406) 237-6900 • charles.baker@talenenergy.com

May 23, 2016

VIA CERTIFIED MAIL

Puget Sound Energy, Inc.
Attn: Kimberly Harris, President and Chief Executive Officer
10885 N.E. 4th Street, Suite 1200
Bellevue, WA 98004-5591

Portland General Electric Company
Attn: James Piro, President and Chief Executive Officer
121 SW Salmon Street
Portland, OR 97204

NorthWestern Corporation
Attn: Robert C. Rowe, President and Chief Executive Officer
3010 W. 69th Street
Sioux Falls, SD 57108

PacifiCorp
Attn: Gregory E. Abel, Chairman and Chief Executive Officer
825 NE Multnomah Street
Portland, OR 97232

Avista Corporation
Attn: Scott Morris, President and Chief Executive Officer
P.O. Box 3727
1411 East Mission Avenue
Spokane, WA 99220-3727

Re: **Notice of Resignation as Operator – Colstrip Units 3&4 Ownership and Operation Agreement**

Ladies and Gentlemen:

Reference is hereby made to that certain Colstrip Units 3&4 Ownership and Operation Agreement dated as of May 6, 1981, by and among NorthWestern Corporation, Puget Sound Energy, Inc., Avista Corporation, Portland General Electric Company, PacifiCorp, and Talen Montana, LLC ("**Talen Montana**"), as amended (the "**Ownership and Operation Agreement**"). Capitalized terms used but not defined herein have the meanings given to them in the Ownership and Operation Agreement.

In accordance with the provisions of Section 3(c) of the Ownership and Operation Agreement, Talen Montana, in its capacity as Operator, hereby notifies the Project Users of Talen Montana's resignation as Operator.

In accordance with the provisions of Section 3(c) of the Ownership and Operation Agreement, Talen Montana's resignation as Operator shall be effective two years from the date of this letter. We would like to work with the Project User's to expedite the transition to a new Operator.

Very truly yours,

TALEN MONTANA, LLC

By: ______________________

Name: Charles S. Baker

Title: General Manager

Attachment 6

TALEN ENERGY

Dale Lebsack • President • Talen Montana, LLC
835 Hamilton St., Suite 150 • Allentown, PA 18101
(610) 601-0360 • dale.lebsack@talenenergy.com

June 19, 2017

VIA CERTIFIED MAIL

Puget Sound Energy, Inc.
Attn: Kimberly Harris, President and Chief Executive Officer
10885 N.E. 4th Street, Suite 1200
Bellevue, WA 98004-5591

Portland General Electric Company
Attn: James Piro, President and Chief Executive Officer
121 SW Salmon Street
Portland, OR 97204

NorthWestern Corporation
Attn: Robert C. Rowe, President and Chief Executive Officer
3010 W. 69th Street
Sioux Falls, SD 57108

PacifiCorp
Attn: Gregory E. Abel, Chairman and Chief Executive Officer
825 NE Multnomah Street
Portland, OR 97232

Avista Corporation
Attn: Scott Morris, President and Chief Executive Officer
P.O. Box 3727
1411 East Mission Avenue
Spokane, WA 99220-3727

Re: **Withdrawal of Resignation as Operator – Colstrip Units 3&4 Ownership and Operation Agreement**

Ladies and Gentlemen:

Reference is hereby made to that certain Colstrip Units 3&4 Ownership and Operation Agreement dated as of May 6, 1981, by and among NorthWestern Corporation, Puget Sound Energy, Inc., Avista Corporation, Portland General Electric Company, PacifiCorp, and Talen Montana, LLC ("Talen Montana"), as amended (the "Ownership and Operation Agreement"). Capitalized terms used but not defined herein have the meanings given to them in the Ownership and Operation Agreement.

By letter dated May 23, 2016, Talen Montana provided notice of its intent to resign as Operator effective on May 23, 2018 in accordance with Section 3(c) of the Ownership and Operation Agreement. For the reasons summarized below, Talen Montana notifies the other Owners that it is hereby withdrawing its notice of its intent to resign as Operator and that it intends to remain as Operator.

After carefully evaluating the advantages and disadvantages of transitioning to a third-party Operator, Talen Montana has concluded that remaining as Operator is the best option for the Colstrip Steam Electric Station (the "Station") and the owners for the following primary reasons:

1. Talen Montana expects to operate the Station at a lower cost than a third-party operator, in part because Talen Montana does not charge a management fee or otherwise profit from operating the Station;
2. remaining as Operator eliminates the substantial costs and diversion of the owners' internal resources necessary to transition to a third-party operator;
3. remaining as Operator avoids the potential regulatory and commercial risks in assigning and transferring the various environmental and other permits and contracts to the third-party operator;
4. certain duties performed by Talen Montana and its affiliates, including management of the pension for Station employees, cannot be easily transitioned to a third-party operator;
5. as a part owner of the Station, Talen Montana is incentivized more than a third-party operator to identify and implement operational changes, otherwise improve Station performance and plan for the long-term future of the Station; and
6. Talen Montana has no intention of resigning as operator of Units 1&2, resulting in inefficiencies because of separate operators for Units 1&2 and Units 3&4;

On balance, the potential costs and risks of a third-party operator, including the transition to a third-party operator, outweigh any potential benefits to the Station or the owners. Additionally, as a gesture of good faith and to remedy the financial impacts resulting from the notice of intent to resign, Talen Montana is prepared to reimburse the other owners for their reasonable out-of-pocket costs incurred to date related to the effort to transition to a new operator, including the fees paid to the Owners' joint legal counsel, up to $225,000 in the aggregate.

Talen Montana will be sending the owners a separate letter outlining its long-term plan for enhancing the Station's operating paradigm. We look forward to discussing our vision for the Station at the June 26 meeting in Seattle.

Very truly yours,

TALEN MONTANA, LLC

By: Dale Lebsack

Name: Dale Lebsack

Title: President

cc: Colstrip Units 3&4 Project Committee (via email)
Colstrip Operator Transition Legal Group (via email)

Attachment 7

Colstrip Steam Electric Station Units 1 and 2 to Retire

Units will permanently retire effective December 31; Units 3 and 4 will remain in operation

COLSTRIP, Mont., June 11, 2019 /PRNewswire/ -- Talen Montana, the operator of the Colstrip Steam Electric Station ("Colstrip"), announced that, effective December 31, the owners of Colstrip Units 1 and 2 (Talen Montana and Puget Sound Energy) will permanently retire the units, which have a total 614 megawatt capacity rating. Colstrip's other two units, 3 and 4, will remain in operation. Talen Montana is a 50 percent owner (307 megawatts) of Colstrip Units 1 and 2. Puget Sound Energy owns the other 50 percent share of Units 1 and 2.

"The decision to retire Colstrip Units 1 and 2 comes after extensive review and exhaustive efforts over the last few years to address the financial challenges that these units face," said Dale Lebsack, Talen Montana President. Lebsack continued, "The plant team has done a great job of responding to the challenges faced by Units 1 and 2, but we have been unsuccessful in making the units economically viable. Fuel constitutes the bulk of our operating cost, and our repeated efforts to negotiate lower fuel prices with Westmoreland Rosebud Mining, the plant's sole and only historically permitted fuel supplier, have been rebuffed. Rather than working with us to keep Units 1 and 2 open, Westmoreland is proposing to increase the units' fuel cost going forward."

Talen Montana will work closely with all stakeholders to ensure the retirement process is orderly and minimizes the effect on employees, community members and other key stakeholders. Talen Montana will look to redeploy affected Colstrip employees to work on Unit 1 and 2 retirement activities or the operation and maintenance of Units 3 and 4.

Talen Montana, in its role as Colstrip operator, continues to work with the Montana Department of Environmental Quality ("MDEQ") to address groundwater impacts at the Colstrip site as required by the 2012 Administrative Order on Consent and is complying with all other applicable laws and regulations related to site remediation, including EPA's Coal Combustion Residual Rule. The Colstrip Units 1 and 2 owners intend to fulfill those existing commitments to the State of Montana after Colstrip Units 1 and 2 are retired. As required by Montana's Coal-Fired Generating Unit Remediation Act enacted in 2017, the Colstrip Units 1 and 2 owners will submit a remediation plan to MDEQ no later than three months after permanently retiring the units which will detail their plan to remediate Colstrip Units 1 and 2.

Going forward, as operator of the Colstrip plant, Talen Montana's primary focus will be to ensure that Colstrip Units 3 and 4 remain an economically viable source of safe, reliable power to Montana and the Northwest U.S.

About Talen Montana

Talen Montana operates the Colstrip power plant, a four-unit, 2,094 megawatt coal-fired generation facility in Colstrip, Montana. Talen Montana owns 50 percent of Units 1 and 2 and owns a 30 percent interest in Unit 3 of the plant. The plant employs approximately 320 people in the town of Colstrip in Rosebud County, Montana.

Media Contact:
Taryne Williams
Taryne.Williams@TalenEnergy.com
610-601-0327

SOURCE Talen Montana

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https://talenenergy.investorroom.com/2019-06-11-Colstrip-Steam-Electric-Station-Units-1-and-2-to-Retire

Attachment 8

https://billingsgazette.com/news/state-and-regional/montana/colstrip-operator-sues-former-owner-ppl-to-cover-worker-pensions/article_f18124a0-df07-5bd3-b842-866756f0d92c.html

Colstrip operator sues former owner PPL to cover worker pensions, cleanup obligations

By TOM LUTEY tlutey@billingsgazette.com

Oct 29, 2018

Colstrip operator Talen Montana says it has been left holding the bag for pension and benefits obligations, as well as environmental cleanup costs that its predecessor, PPL Corp., should have covered.

Talen said in a press release that PPL wrongfully took $733 million from its Montana holdings that should have stayed on the books to cover commitments to Colstrip workers and environmental cleanup costs.

Pennsylvania-based PPL claimed the $733 million as profit from its Montana holdings, which were spun off Talen in 2015. Talen said in its lawsuit the money should have stayed in Montana to cover Colstrip commitments.

PPL responded to news of the Talen lawsuit, saying that it had done nothing wrong.

"We believe that we acted appropriately with regard to the sale of PPL Montana's hydroelectric generating assets, and that the subsequent distribution of proceeds was in compliance with applicable laws. As such, we will defend ourselves vigorously against these actions," said Ryan Hill, a PPL spokesman, in an email. "The Talen Energy spinoff occurred over three years ago in June 2015, and PPL Montana was part of the collection of assets that was spun out at that time. We are reviewing the matter and are not in a position to comment further at this time."

Talen said it has enough money to pay for its current obligations. It is also legally obligated to cover commitments from the 16 years PPL operated the power plant. When it acquired PPL's Montana holdings in 2015 as Talen Montana, the company said it would have no problem meeting PPL's commitments.

Although Talen initially said Monday that PPL had left "TM without adequate funds to pay its obligations on its own," it later clarified that it would cover its obligations to Colstrip workers and its environmental cleanup costs regardless of whether its lawsuit against PPL is successful.

"Over the last two years, we have worked tirelessly to improve the difficult financial condition of the Colstrip power plant that we inherited from PPL," said Talen Montana President, Dale Lebsack in a press release. "We are asking PPL to fulfill its obligations to the Colstrip plant, the state of Montana, and to the Colstrip plant employees and retirees."

Talen said it is also turning to PPL to cover environmental cleanup costs from PPL years, which it contends PPL didn't fully disclose. Those costs include $198 million to clean up toxic coal ash at Colstrip, plus an additional $500 million in cleanup costs to satisfy state requirements.

"No reasonable cash flow projections showed PPL Montana with adequate future income, or assets to pay its liabilities," Talen said of the cleanup costs.

Talen Energy is a company PPL used to spin off its energy holdings in 2015. In Montana, Talen took over PPL's interests in the Colstrip power plant, which PPL had attempted to sell but couldn't, while the parent company's other Montana assets, namely 11 hydroelectric dams, sold to NorthWestern Energy.

PPL received more than $900 million for its dams. The money was "dividended" upward from PPL Montana to its parent company PPL Corp., Talen said.

Talen owns half of Colstrip Units 1 and 2, as well as 15 percent of Units 3 and 4. The power plant has 320 employees.

In two Montana lawsuits filed Monday, Talen laid out a scenario in which PPL bought 11 dams and two coal-fired power plants from the now defunct Montana Power Company right before regional power prices started to spike. It was 1999. The California energy crisis was a year way and PPL had just bought Montana Power's generating assets for $769 million.

During the next few years, power prices in Montana increased as much as 50 percent, leading to $325 million in profits for PPL, according to Talen.

But things started to sour for PPL in 2012. Pollution regulations tightened up. Power from natural gas and renewable energy sources started selling more cheaply than coal power. Public outcry for cleaner energy increased in Washington and Oregon, two states where Colstrip power serves more than a million customers.

By 2015, PPL was getting out, both by selling its dams to NorthWestern and by spinning off its remaining business to Talen, a company PPL co-owned with Riverstone Holdings until mid-2016 when Riverstone purchased the Talen shares it didn't already own.

https://billingsgazette.com/news/state-and-regional/montana/former-colstrip-owner-ppl-sues-talen-energy-over-cleanup-and/article_ec0d3bbd-ed07-5ad6-8faf-a96184addfac.html

Former Colstrip owner PPL sues Talen Energy over cleanup and pension costs

By TOM LUTEY tlutey@billingsgazette.com

Dec 1, 2018

Former Colstrip power plant co-owner and operator PPL is suing Talen Energy over claims that PPL was derelict in funding environmental cleanup and pension costs at the facility.

In a Delaware District Court, PPL asserted that any shortage in cash for environmental cleanup or employee benefits was because of the mismanagement by Talen.

In October, Talen sued its predecessor, claiming PPL took $733 million from its Montana holdings that should have stayed with the Colstrip operation to cover worker benefits and environmental cleanup commitments.

Talen said Friday it would press forward with its lawsuit against PPL.

"We have not yet seen the complaint, but I can say that we intend to push forward with our Montana lawsuits and that Talen will vigorously defend itself against PPL’s allegations," said Taryne Williams, Talen spokeswoman.

In its lawsuit, PPL said Talen was spun off with $4 billion equity value, enough to cover costs related to PPL's operation of the power plant. If Talen doesn't have the money now, it's because the company shuffled its Colstrip revenue upstream to shareholders, PPL alleged.

“Our complaint demonstrates what we have said from the beginning, which is that Talen’s claims against PPL are entirely without merit,” said Joanne H. Raphael, PPL senior vice president, in a press release. “As set forth in our complaint, these allegations are instead an attempt to blame PPL for the consequences of Riverstone's calculated, self-serving business decisions.” Riverstone Holdings is Talen's parent company.

PPL said its spinoff to Talen went according to plan and that Talen's October lawsuit violates the terms of that 2015 separation agreement. Both companies originated in Pennsylvania.

No longer a player in Montana's energy market, PPL was once the state's largest energy producer, generating power for roughly half of Montana's retail energy consumers, plus electricity for the state's oil refineries and large industries. The company owned a substantial share in Colstrip, plus 11 Montana hydroelectric dams.

The company cut ties with the Montana market in 2015 when it spun off its Colstrip holdings to Talen. PPL sold its dams to NorthWestern Energy for $769 million in 2014.

In suing PPL, Talen accused the company of pocketing profits from its dam sales instead of building a nest egg for its Colstrip obligations.

PPL said Friday in its lawsuit that proceeds from its dam sale were never on the table for Colstrip, which is something Talen agreed to.

PPL accused Talen of paying a $500 million special cash dividend to Riverstone Holdings in late 2017. PPL is asking the court to declare its 2015 separation agreement valid and shield it from Talen's Colstrip demands.

Attachment 9

2019 Operating Budget - Unit 3&4
Changes to 8.31.18 Submittal

2019

[redacted]

Items of Note:

[redacted]

2020

[redacted]

2021

[redacted]

2024

[redacted]

2025

[redacted]

REDACTED
VERSION

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

	2019 Projection	2020 Projection	2021 Projection	2022 Projection	2023 Projection
Net Generation	[redacted]				
EUF Forced					
EUF Maintenance					
EUF Annual Outage					
Capacity Factor - Annual Generation					
O&M Costs (Base)					
High Calcium Lime					
Startup Fuel, Diesel					
Pollution Control Taxes					
Mercury Control Chemicals					
Water Treatment Chemicals					
O&M Special Maintenance					
O&M Costs (Overhaul)					
O&M Costs (Total)					
O&M Management Reserve					
O&M Total w/Reserve					
Cost/MWHR (non-fuel)w/o Reserve					
Coal (tons)					
Coal Unit Cost ($/Ton)					
Coal Cost ($)					
Cost/MWHR(fuel)					
Total Cost/MWHR					
Capital Cost - Other					
Capital Cost - Environmental					
Capital Cost - Regulatory					
Capital Cost - Grand Total					

Annual Outage	2019	2020	2021	2022	2023
Unit 3	[redacted]				
Unit 4					

REDACTED VERSION

REDACTED
VERSION

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

Assumptions:

General		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]
8		[redacted]
9		[redacted]
10		[redacted]
11		[redacted]
12		[redacted]
13		[redacted]
14		[redacted]
15		[redacted]
14		[redacted]
Special Maintenance		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]
8		[redacted]
9		[redacted]

REDACTED
VERSION

Rev. 2
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Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

10		[redacted]
11		[redacted]
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14		[redacted]
15		[redacted]
16		[redacted]
17		[redacted]
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31		[redacted]
32		[redacted]
33		[redacted]
34		[redacted]
35		[redacted]
36		[redacted]
37		[redacted]

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

38		[redacted]
39		[redacted]
40		[redacted]
41		[redacted]
42		[redacted]
43		[redacted]
44		[redacted]
45		[redacted]
Commodities		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]

REDACTED
VERSION

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

8		[redacted]
9		[redacted]
10		[redacted]
11		[redacted]
12		[redacted]
Taxes		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]

REDACTED
VERSION

COLSTRIP UNITS 3 & 4
OPERATIONS CAPITAL LIABILITY ITEMS
2019- 2028
(000 - OMITTED)
ESTIMATES REPRESENT 2018 DOLLARS ESCALATED

Indicates a change from 8/31/18 submittal of Operating Budget
Phone System moved to 2018 subsequent to 8/31/18 submittal of Operating Budget

Project ID	Prio	**	Facility	%	CRC	AREA	Category	DESCRIPTION	2019	O.H. 4 2020	O.H. 3 2021	2022	2023	O.H. 4 2024	O.H. 3 2025	2026	2027	O.H. 4 2028
[redacted]	[redacted]		[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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REDACTED VERSION

[redacted]

REDACTED
VERSION

[redacted]

REDACTED
VERSION

[redacted]

REDACTED
VERSION

[redacted]

REDACTED
VERSION

[redacted]

2018 Business Plan Outage Schedule	O.H. 4	O.H. 3		O.H. 4	O.H. 3		O.H. 4	O.H. 3		O.H. 4
2018 Business Plan Rev. 1	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Grand Total Over/(Under) Business Plan	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

NOTE:
Capital totals do not include potential projects required to address pending regulations where the scope of work and costs are undefined.

**	**Denotes Pollution Control**
B OH	**Denotes Base Overhaul items**
OH	**Denotes Overhaul required**
** OH	**Denotes Pollution Control and Overhaul required**
** LR	**Denotes Pollution Control & Load Reduction required**
DIS	Denotes Discretionary
ENV	Denotes Environmental
REG	Denotes Regulatory
OTR	Denotes Other
TECH	Denotes Technical

REDACTED VERSION

Attachment 10

2019 Operating Budget - Unit 3&4
Changes to 8.31.18 Submittal

2019

[redacted] [redacted]

Items of Note:

[redacted] [redacted]

2020

[redacted] [redacted]

2021

[redacted] [redacted]

2024

[redacted] [redacted]

2025

[redacted] [redacted]

REDACTED VERSION

REDACTED VERSION

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

	2019 Projection	2020 Projection	2021 Projection	2022 Projection	2023 Projection
Net Generation	[redacted]				
EUF Forced					
EUF Maintenance					
EUF Annual Outage					
Capacity Factor - Annual Generation					
O&M Costs (Base)					
High Calcium Lime					
Startup Fuel, Diesel					
Pollution Control Taxes					
Mercury Control Chemicals					
Water Treatment Chemicals					
O&M Special Maintenance					
O&M Costs (Overhaul)					
O&M Costs (Total)					
O&M Management Reserve					
O&M Total w/Reserve					
Cost/MWHR (non-fuel)w/o Reserve					
Coal (tons)					
Coal Unit Cost ($/Ton)					
Coal Cost ($)					
Cost/MWHR(fuel)					
Total Cost/MWHR					
Capital Cost - Other					
Capital Cost - Environmental					
Capital Cost - Regulatory					
Capital Cost - Grand Total					

Annual Outage	2019	2020	2021	2022	2023
Unit 3	[redacted]				
Unit 4					

REDACTED
VERSION

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

Assumptions:

General		
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2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]
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9		[redacted]
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11		[redacted]
12		[redacted]
13		[redacted]
14		[redacted]
15		[redacted]
14		[redacted]
Special Maintenance		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]
8		[redacted]
9		[redacted]

Rev. 2
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Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

10		[redacted]
11		[redacted]
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13		[redacted]
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15		[redacted]
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31		[redacted]
32		[redacted]
33		[redacted]
34		[redacted]
35		[redacted]
36		[redacted]
37		[redacted]

REDACTED
VERSION

REDACTED
VERSION

Rev. 2
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Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

38		[redacted]
39		[redacted]
40		[redacted]
41		[redacted]
42		[redacted]
43		[redacted]
44		[redacted]
45		[redacted]
Commodities		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]
6		[redacted]
7		[redacted]

Rev. 2
Dated: 11/12/18

Units 3 & 4
Business Plan 2019 - 2023

Indicates a change from 8/31/18 submittal of Operating Budget

8		[redacted]
9		[redacted]
10		[redacted]
11		[redacted]
12		[redacted]
Taxes		
1		[redacted]
2		[redacted]
3		[redacted]
4		[redacted]
5		[redacted]

REDACTED VERSION

COLSTRIP UNITS 3 & 4
OPERATIONS CAPITAL LIABILITY ITEMS
2019- 2028
(000 - OMITTED)
ESTIMATES REPRESENT 2018 DOLLARS ESCALATED

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Project ID	Prio	**	Facility	%	CRC	AREA	Category	DESCRIPTION	2019	O.H. 4 2020	O.H. 3 2021	2022	2023	O.H. 4 2024	O.H. 3 2025	2026	2027	O.H. 4 2028
[redacted]	[redacted]		[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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REDACTED VERSION

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2018 Business Plan Outage Schedule	O.H. 4	O.H. 3		O.H. 4	O.H. 3		O.H. 4	O.H. 3		O.H. 4
2018 Business Plan Rev. 1	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Grand Total Over/(Under) Business Plan	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

NOTE:
Capital totals do not include potential projects required to address pending regulations where the scope of work and costs are undefined.

**	**Denotes Pollution Control**
B OH	**Denotes Base Overhaul items**
OH	**Denotes Overhaul required**
** OH	**Denotes Pollution Control and Overhaul required**
** LR	**Denotes Pollution Control & Load Reduction required**

DIS	Denotes Discretionary
ENV	Denotes Environmental
REG	Denotes Regulatory
OTR	Denotes Other
TECH	Denotes Technical

REDACTED VERSION

Attachment 11

2017 Montana Legislative Session Report

Please see below for bills impacting Colstrip that did NOT pass in Montana's 2017 legislative session.

Bill	Sponsor	Summary
SB 338	Sen. Duane Ankney (R)	Punitive legislation that required PSE and other plant owners to pay for community and social costs such as: • Loss of value of commercial and residential real estate • Outstanding liability associated with city and county issued bonds • Costs necessary for a workforce transition • Specified cost shifts within a community. Established a process to determine the amount of social costs owners must pay that was stacked against the owners from the outset.
SB 38	Sen. Duane Ankney (R)	Requires the owners of Colstrip Units 1&2 to pay a "coal county impact fee" when Units 1 and 2 are retired. Revenue from the increase would fund programs to assist communities impacted the closure of coal-fired generation.
HB 60	Rep. Jim Keane (D)	Doubles the Wholesale Electric Transactions Tax. Revenue from the increase would fund programs to assist communities impacted the closure of coal-fired generation.
SB 37	Sen. Duane Ankney (R)	Requires companies to file a remediation plan with the MT DEQ, and gives the agency authority to accept or modify the plan.
HB 21	Rep. Jim Keane (D)	Appropriates funds to establish a benefits and retirement task force.
HB 624	Rep. Janet Ellis (D)	Establishes a coal transition working group that must develop a transition plan for a community affected by the retirement of a coal-fired generating unit. • Only applies to Colstrip Units 1&2 • Owners would have to pay a fine if they didn't participate in the group • Owners effectively have veto authority over any transition plan Requires owners of Units 1 and 2 to pay a bond for "the faithful remediation of the coal-fired generating unit."

Attachment 12

2019 Montana Legislative Session Report

Please see below for bills impacting Colstrip that did NOT pass in Montana's 2019 legislative session.

Bill #	Abbrev. Title	Short Description	Sponsor
HB203	Montana Energy Security Act	Establishes a MT Public Power Commission to assess existing coal-fired generation facilities and determine those for which acquisition by the state of MT would be in the public interest; if in the public interest, the commission shall purchase the coal-generation facility at fair market value and take over the operation.	Rep. Garcia (R)
HB193	Carbon Tax	This bill revises regulation and taxes of large emission sources in Montana (anything greater than 25,000 metric tons/year) at $10/metric ton; carbon fee funds distributed for certain purposes. Excludes Talen and NorthWestern.	Rep. Dunwell (D)
SB 331	Establish the Montana energy security act	NorthWestern Colstrip bill: -Allows for cost recovery in rates if Colstrip is retired before expected life -Allows for acquisition cost-recovery, including transfer price of $1	Sen. Richmond – R
SB 189	Carbon Tax	This bill revises regulation and taxes of large emission sources in Montana (anything greater than 25,000 metric tons/year) at $10/metric ton; carbon fee funds distributed as a tax credit. Excludes Talen and NorthWestern.	Sen. Barrett - D
SB 336	Require coal-fired generating unit to provide a bond	DEQ to request that an owner of a coal-fired generating unit submit a bond or other financial assurance conditioned upon the faithful remediation of coal-fired generating unit.	Rep. Janet Ellis – D
SB 190	Carbon Reporting and Targets	Establishes statewide carbon reduction goals (100% by 2050) and each stationary source must meet the reduction. DEQ to adopt rules to establish a fee; fees to be deposited in state special revenue fund.	Sen. Phillips - D

Attachment 13

CERTIFICATION OF ENROLLMENT

ENGROSSED SECOND SUBSTITUTE SENATE BILL 5116

Chapter 288, Laws of 2019

66th Legislature
2019 Regular Session

CLEAN ENERGY--ELECTRIC UTILITIES--VARIOUS PROVISIONS

EFFECTIVE DATE: May 7, 2019

Passed by the Senate April 22, 2019
Yeas 29 Nays 20

CYRUS HABIB

President of the Senate

Passed by the House April 11, 2019
Yeas 56 Nays 42

FRANK CHOPP

Speaker of the House of Representatives

Approved May 7, 2019 3:32 PM

JAY INSLEE

Governor of the State of Washington

CERTIFICATE

I, Brad Hendrickson, Secretary of the Senate of the State of Washington, do hereby certify that the attached is **ENGROSSED SECOND SUBSTITUTE SENATE BILL 5116** as passed by the Senate and the House of Representatives on the dates hereon set forth.

BRAD HENDRICKSON

Secretary

FILED

May 13, 2019

Secretary of State
State of Washington

ENGROSSED SECOND SUBSTITUTE SENATE BILL 5116

AS AMENDED BY THE HOUSE

Passed Legislature - 2019 Regular Session

State of Washington 66th Legislature 2019 Regular Session

By Senate Ways & Means (originally sponsored by Senators Carlyle, Palumbo, McCoy, Pedersen, Wellman, Das, Rolfes, Frockt, Wilson, C., Kuderer, Nguyen, Keiser, Liias, Hunt, Saldaña, Darneille, and Billig; by request of Governor Inslee)

READ FIRST TIME 02/21/19.

AN ACT Relating to supporting Washington's clean energy economy and transitioning to a clean, affordable, and reliable energy future; amending RCW 19.280.030, 80.84.010, 82.08.962, 82.12.962, 80.04.250, 43.21F.090, 19.285.030, and 19.285.040; adding new sections to chapter 80.28 RCW; adding a new chapter to Title 19 RCW; creating new sections; prescribing penalties; providing expiration dates; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. **Sec. 1.** (1) The legislature finds that Washington must address the impacts of climate change by leading the transition to a clean energy economy. One way in which Washington must lead this transition is by transforming its energy supply, modernizing its electricity system, and ensuring that the benefits of this transition are broadly shared throughout the state.

(2) With our wealth of carbon-free hydropower, Washington has some of the cleanest electricity in the United States. But electricity remains a large source of emissions in our state. We are at a critical juncture for transforming our electricity system. It is the policy of the state to eliminate coal-fired electricity, transition the state's electricity supply to one hundred percent carbon-neutral by 2030, and one hundred percent carbon-free by 2045.

In implementing this chapter, the state must prioritize the maximization of family wage job creation, seek to ensure that all customers are benefiting from the transition to a clean energy economy, and provide safeguards to ensure that the achievement of this policy does not impair the reliability of the electricity system or impose unreasonable costs on utility customers.

(3) The transition to one hundred percent clean energy is underway, but must happen faster than our current policies can deliver. Absent significant and swift reductions in greenhouse gas emissions, climate change poses immediate significant threats to our economy, health, safety, and national security. The prices of clean energy technologies continue to fall, and are, in many cases, competitive or even cheaper than conventional energy sources.

(4) The legislature finds that Washington can accomplish the goals of this act while: Promoting energy independence; creating high-quality jobs in the clean energy sector; maximizing the value of hydropower, our principal renewable resource; continuing to encourage and provide incentives for clean alternative energy sources, including providing electricity for the transportation sector; maintaining safe and reliable electricity to all customers at stable and affordable rates; and protecting clean air and water in the Pacific Northwest. Clean energy creates more jobs per unit of energy produced than fossil fuel sources, so this transition will contribute to job growth in Washington while addressing our climate crisis head on. Our abundance of renewable energy and our strong clean technology sector make Washington well positioned to be at the forefront of the transition to one hundred percent clean electricity.

(5) The legislature declares that utilities in the state have an important role to play in this transition, and must be fully empowered, through regulatory tools and incentives, to achieve the goals of this policy. In combination with new technology and emerging opportunities for customers, this policy will spur transformational change in the utility industry. Given these changes, the legislature recognizes and finds that the utilities and transportation commission's statutory grant of authority for rate making includes consideration and implementation of performance and incentive-based regulation, multiyear rate plans, and other flexible regulatory mechanisms where appropriate to achieve fair, just, reasonable, and sufficient rates and its public interest objectives.

(6) The legislature recognizes and finds that the public interest includes, but is not limited to: The equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health, economic, and environmental benefits and the reduction of costs and risks; and energy security and resiliency. It is the intent of the legislature that in achieving this policy for Washington, there should not be an increase in environmental health impacts to highly impacted communities.

(7) It is the intent of the legislature to provide flexible tools to address the variability of hydropower for compliance under this act.

NEW SECTION. **Sec. 2.** The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Allocation of electricity" means, for the purposes of setting electricity rates, the costs and benefits associated with the resources used to provide electricity to an electric utility's retail electricity consumers that are located in this state.

(2) "Alternative compliance payment" means the payment established in section 9(2) of this act.

(3) "Attorney general" means the Washington state office of the attorney general.

(4) "Auditor" means: (a) The Washington state auditor's office or its designee for utilities under its jurisdiction under this chapter that are consumer-owned utilities; or (b) an independent auditor selected by a utility that is not under the jurisdiction of the state auditor and is not an investor-owned utility.

(5)(a) "Biomass energy" includes: (i) Organic by-products of pulping and the wood manufacturing process; (ii) animal manure; (iii) solid organic fuels from wood; (iv) forest or field residues; (v) untreated wooden demolition or construction debris; (vi) food waste and food processing residuals; (vii) liquors derived from algae; (viii) dedicated energy crops; and (ix) yard waste.

(b) "Biomass energy" does not include: (i) Wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; (ii) wood from old growth forests; or (iii) municipal solid waste.

(6) "Carbon dioxide equivalent" has the same meaning as defined in RCW 70.235.010.

(7)(a) "Coal-fired resource" means a facility that uses coal-fired generating units, or that uses units fired in whole or in part by coal as feedstock, to generate electricity.

(b)(i) "Coal-fired resource" does not include an electric generating facility that is included as part of a limited duration wholesale power purchase, not to exceed one month, made by an electric utility for delivery to retail electric customers that are located in this state for which the source of the power is not known at the time of entry into the transaction to procure the electricity.

(ii) "Coal-fired resource" does not include an electric generating facility that is subject to an obligation to meet the standards contained in RCW 80.80.040(3)(c).

(8) "Commission" means the Washington utilities and transportation commission.

(9) "Conservation and efficiency resources" means any reduction in electric power consumption that results from increases in the efficiency of energy use, production, transmission, or distribution.

(10) "Consumer-owned utility" means a municipal electric utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, or a mutual corporation or association formed under chapter 24.06 RCW, that is engaged in the business of distributing electricity to more than one retail electric customer in the state.

(11) "Demand response" means changes in electric usage by demand-side resources from their normal consumption patterns in response to changes in the price of electricity, or to incentive payments designed to induce lower electricity use, at times of high wholesale market prices or when system reliability is jeopardized. "Demand response" may include measures to increase or decrease electricity production on the customer's side of the meter in response to incentive payments.

(12) "Department" means the department of commerce.

(13) "Distributed energy resource" means a nonemitting electric generation or renewable resource or program that reduces electric demand, manages the level or timing of electricity consumption, or provides storage, electric energy, capacity, or ancillary services to an electric utility and that is located on the distribution system,

any subsystem of the distribution system, or behind the customer meter, including conservation and energy efficiency.

(14) "Electric utility" or "utility" means a consumer-owned utility or an investor-owned utility.

(15) "Energy assistance" means a program undertaken by a utility to reduce the household energy burden of its customers.

(a) Energy assistance includes, but is not limited to, weatherization, conservation and efficiency services, and monetary assistance, such as a grant program or discounts for lower income households, intended to lower a household's energy burden.

(b) Energy assistance may include direct customer ownership in distributed energy resources or other strategies if such strategies achieve a reduction in energy burden for the customer above other available conservation and demand-side measures.

(16) "Energy assistance need" means the amount of assistance necessary to achieve a level of household energy burden established by the department or commission.

(17) "Energy burden" means the share of annual household income used to pay annual home energy bills.

(18)(a) "Energy transformation project" means a project or program that: Provides energy-related goods or services, other than the generation of electricity; results in a reduction of fossil fuel consumption and in a reduction of the emission of greenhouse gases attributable to that consumption; and provides benefits to the customers of an electric utility.

(b) "Energy transformation project" may include but is not limited to:

(i) Home weatherization or other energy efficiency measures, including market transformation for energy efficiency products, in excess of: The target established under RCW 19.285.040(1), if applicable; other state obligations; or other obligations in effect on the effective date of this section;

(ii) Support for electrification of the transportation sector including, but not limited to:

(A) Equipment on an electric utility's transmission and distribution system to accommodate electric vehicle connections, as well as smart grid systems that enable electronic interaction between the electric utility and charging systems, and facilitate the utilization of vehicle batteries for system needs;

(B) Incentives for the sale or purchase of electric vehicles, both battery and fuel cell powered, as authorized under state or federal law;

(C) Incentives for the installation of charging equipment for electric vehicles;

(D) Incentives for the electrification of vehicle fleets utilizing a battery or fuel cell for electric supply;

(E) Incentives to install and operate equipment to produce or distribute renewable hydrogen; and

(F) Incentives for renewable hydrogen fueling stations;

(iii) Investment in distributed energy resources and grid modernization to facilitate distributed energy resources and improved grid resilience;

(iv) Investments in equipment for renewable natural gas processing, conditioning, and production, or equipment or infrastructure used solely for the purpose of delivering renewable natural gas for consumption or distribution;

(v) Contributions to self-directed investments in the following measures to serve the sites of large industrial gas and electrical customers: (A) Conservation; (B) new renewable resources; (C) behind-the-meter technology that facilitates demand response cooperation to reduce peak loads; (D) infrastructure to support electrification of transportation needs, including battery and fuel cell electrification; or (E) renewable natural gas processing, conditioning, or production; and

(vi) Projects and programs that achieve energy efficiency and emission reductions in the agricultural sector, including bioenergy and renewable natural gas projects.

(19) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such a material.

(20) "Governing body" means: The council of a city or town; the commissioners of an irrigation district, municipal electric utility, or public utility district; or the board of directors of an electric cooperative or mutual association that has the authority to set and approve rates.

(21) "Greenhouse gas" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or gases designated by the department of ecology by rule under RCW 70.235.010.

(22) "Greenhouse gas content calculation" means a calculation expressed in carbon dioxide equivalent and made by the department of ecology, in consultation with the department, for the purposes of determining the emissions from the complete combustion or oxidation of fossil fuels and the greenhouse gas emissions in electricity for use in calculating the greenhouse gas emissions content in electricity.

(23) "Highly impacted community" means a community designated by the department of health based on cumulative impact analyses in section 24 of this act or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151.

(24) "Investor-owned utility" means a company owned by investors that meets the definition of "corporation" in RCW 80.04.010 and is engaged in distributing electricity to more than one retail electric customer in the state.

(25) "Low-income" means household incomes as defined by the department or commission, provided that the definition may not exceed the higher of eighty percent of area median household income or two hundred percent of the federal poverty level, adjusted for household size.

(26)(a) "Market customer" means a nonresidential retail electric customer of an electric utility that: (i) Purchases electricity from an entity or entities other than the utility with which it is directly interconnected; or (ii) generates electricity to meet one hundred percent of its own needs.

(b) An "affected market customer" is a customer of an investor-owned utility who becomes a market customer after the effective date of this section.

(27)(a) "Natural gas" means naturally occurring mixtures of hydrocarbon gases and vapors consisting principally of methane, whether in gaseous or liquid form, including methane clathrate.

(b) "Natural gas" does not include renewable natural gas or the portion of renewable natural gas when blended into other fuels.

(28)(a) "Nonemitting electric generation" means electricity from a generating facility or a resource that provides electric energy, capacity, or ancillary services to an electric utility and that does not emit greenhouse gases as a by-product of energy generation.

(b) "Nonemitting electric generation" does not include renewable resources.

(29)(a) "Nonpower attributes" means all environmentally related characteristics, exclusive of energy, capacity reliability, and other electrical power service attributes, that are associated with the generation of electricity, including but not limited to the facility's fuel type, geographic location, vintage, qualification as a renewable resource, and avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases.

(b) "Nonpower attributes" does not include any aspects, claims, characteristics, and benefits associated with the on-site capture and destruction of methane or other greenhouse gases at a facility through a digester system, landfill gas collection system, or other mechanism, which may be separately marketable as greenhouse gas emission reduction credits, offsets, or similar tradable commodities. However, these separate avoided emissions may not result in or otherwise have the effect of attributing greenhouse gas emissions to the electricity.

(30) "Qualified transmission line" means an overhead transmission line that is: (a) Designed to carry a voltage in excess of one hundred thousand volts; (b) owned in whole or in part by an investor-owned utility; and (c) primarily or exclusively used by such an investor-owned utility as of the effective date of this section to transmit electricity generated by a coal-fired resource.

(31) "Renewable energy credit" means a tradable certificate of proof of one megawatt-hour of a renewable resource. The certificate includes all of the nonpower attributes associated with that one megawatt-hour of electricity and the certificate is verified by a renewable energy credit tracking system selected by the department.

(32) "Renewable hydrogen" means hydrogen produced using renewable resources both as the source for the hydrogen and the source for the energy input into the production process.

(33) "Renewable natural gas" means a gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters.

(34) "Renewable resource" means: (a) Water; (b) wind; (c) solar energy; (d) geothermal energy; (e) renewable natural gas; (f) renewable hydrogen; (g) wave, ocean, or tidal power; (h) biodiesel fuel that is not derived from crops raised on land cleared from old growth or first growth forests; or (i) biomass energy.

(35)(a) "Retail electric customer" means a person or entity that purchases electricity from any electric utility for ultimate consumption and not for resale.

(b) "Retail electric customer" does not include, in the case of any electric utility, any person or entity that purchases electricity exclusively from carbon-free and eligible renewable resources, as defined in RCW 19.285.030 as of January 1, 2019, pursuant to a special contract with an investor-owned utility approved by an order of the commission prior to the effective date of this section.

(36) "Retail electric load" means the amount of megawatt-hours of electricity delivered in a given calendar year by an electric utility to its Washington retail electric customers. "Retail electric load" does not include:

(a) Megawatt-hours delivered from qualifying facilities under the federal public utility regulatory policies act of 1978, P.L. 95-617, in operation prior to the effective date of this section, provided that no entity other than the electric utility can make a claim on delivery of the megawatt-hours from those resources; or

(b) Megawatt-hours delivered to an electric utility's system from a renewable resource through a voluntary renewable energy purchase by a retail electric customer of the utility in which the renewable energy credits associated with the megawatt-hours delivered are retired on behalf of the retail electric customer.

(37) "Thermal renewable energy credit" means, with respect to a facility that generates electricity using biomass energy that also generates thermal energy for a secondary purpose, a renewable energy credit that is equivalent to three million four hundred twelve thousand British thermal units of energy used for such secondary purpose.

(38) "Unbundled renewable energy credit" means a renewable energy credit that is sold, delivered, or purchased separately from electricity. All thermal renewable energy credits are considered unbundled renewable energy credits.

(39) "Unspecified electricity" means an electricity source for which the fuel attribute is unknown or has been separated from the energy delivered to retail electric customers.

(40) "Vulnerable populations" means communities that experience a disproportionate cumulative risk from environmental burdens due to:

(a) Adverse socioeconomic factors, including unemployment, high housing and transportation costs relative to income, access to food and health care, and linguistic isolation; and

(b) Sensitivity factors, such as low birth weight and higher rates of hospitalization.

NEW SECTION. **Sec. 3.** (1)(a) On or before December 31, 2025, each electric utility must eliminate coal-fired resources from its allocation of electricity. This does not include costs associated with decommissioning and remediation of these facilities.

(b) The commission shall allow in electric rates all decommissioning and remediation costs prudently incurred by an investor-owned utility for a coal-fired resource.

(2) The commission must accelerate depreciation schedules for any coal-fired resource to a date no later than December 31, 2025. The commission may accelerate the depreciation schedule for any qualified transmission line owned by an investor-owned utility when the commission finds the qualified transmission line is no longer used and useful and there is no reasonable likelihood that the qualified transmission line will be utilized in the future. The adjusted depreciation schedule must require such a qualified transmission line to be fully depreciated on or before December 31, 2025.

(3) The commission must allow in rates, directly or indirectly, amounts on an investor-owned utility's books of account that the commission finds represent prudently incurred undepreciated investment in a fossil fuel generating resource that has been retired from service when:

(a) The retirement is due to ordinary wear and tear, casualties, acts of God, acts of governmental authority, inability to procure or use fuel, termination or expiration of any ownership, or a operation agreement affecting such a fossil fuel generating resource; or

(b) The commission finds that the retirement is in the public interest.

(4) An electric utility that fails to comply with the requirements of subsection (1) of this section must pay the administrative penalty established under section 9(1) of this act, except as otherwise provided in this chapter.

NEW SECTION. **Sec. 4.** (1) It is the policy of the state that all retail sales of electricity to Washington retail electric customers be greenhouse gas neutral by January 1, 2030.

(a) For the four-year compliance period beginning January 1, 2030, and for each multiyear compliance period thereafter through December 31, 2044, an electric utility must demonstrate its compliance with this standard using a combination of nonemitting electric generation and electricity from renewable resources, or alternative compliance options, as provided in this section. To achieve compliance with this standard, an electric utility must: (i) Pursue all cost-effective, reliable, and feasible conservation and efficiency resources to reduce or manage retail electric load, using the methodology established in RCW 19.285.040, if applicable; and (ii) use electricity from renewable resources and nonemitting electric generation in an amount equal to one hundred percent of the utility's retail electric loads over each multiyear compliance period. An electric utility must achieve compliance with this standard for the following compliance periods: January 1, 2030, through December 31, 2033; January 1, 2034, through December 31, 2037; January 1, 2038, through December 31, 2041; and January 1, 2042, through December 31, 2044.

(b) Through December 31, 2044, an electric utility may satisfy up to twenty percent of its compliance obligation under (a) of this subsection with an alternative compliance option consistent with this section. An alternative compliance option may include any combination of the following:

(i) Making an alternative compliance payment under section 9(2) of this act;

(ii) Using unbundled renewable energy credits, provided that there is no double counting of any nonpower attributes associated with renewable energy credits within Washington or programs in other jurisdictions, as follows:

(A) Unbundled renewable energy credits produced from eligible renewable resources, as defined under RCW 19.285.030, which may be used by the electric utility for compliance with RCW 19.285.040 and this section as provided under RCW 19.285.040(2)(e); and

(B) Unbundled renewable energy credits, other than those included in (b)(ii)(A) of this subsection, that represent electricity generated within the compliance period;

(iii) Investing in energy transformation projects, including additional conservation and efficiency resources beyond what is otherwise required under this section, provided the projects meet the requirements of subsection (2) of this section and are not credited as resources used to meet the standard under (a) of this subsection; or

(iv) Using electricity from an energy recovery facility using municipal solid waste as the principal fuel source, where the facility was constructed prior to 1992, and the facility is operated in compliance with federal laws and regulations and meets state air quality standards. An electric utility may only use electricity from such an energy recovery facility if the department and the department of ecology determine that electricity generation at the facility provides a net reduction in greenhouse gas emissions compared to any other available waste management best practice. The determination must be based on a life-cycle analysis comparing the energy recovery facility to other technologies available in the jurisdiction in which the facility is located for the waste management best practices of waste reduction, recycling, composting, and minimizing the use of a landfill.

(c) Electricity from renewable resources used to meet the standard under (a) of this subsection must be verified by the retirement of renewable energy credits. Renewable energy credits must be tracked and retired in the tracking system selected by the department.

(d) Hydroelectric generation used by an electric utility in meeting the standard under (a) of this subsection may not include new diversions, new impoundments, new bypass reaches, or expansion of existing reservoirs constructed after the effective date of this section unless the diversions, bypass reaches, or reservoir expansions are necessary for the operation of a pumped storage facility that: (i) Does not conflict with existing state or federal fish recovery plans; and (ii) complies with all local, state, and federal laws and regulations.

(e) Nothing in (d) of this subsection precludes an electric utility that owns and operates hydroelectric generating facilities, or the owner of a hydroelectric generating facility whose energy output is marketed by the Bonneville power administration, from making efficiency or other improvements to its hydroelectric generating facilities existing as of the effective date of this section or from installing hydroelectric generation in pipes, culverts, irrigation canals, and other manmade waterways, as long as those changes do not create conflicts with existing state or federal fish recovery plans and comply with all local, state, and federal laws and regulations.

(f) Nonemitting electric generation used to meet the standard under (a) of this subsection must be generated during the compliance period and must be verified by documentation that the electric utility owns the nonpower attributes of the electricity generated by the nonemitting electric generation resource.

(g) Nothing in this section prohibits an electric utility from purchasing or exchanging power from the Bonneville power administration.

(2) Investments in energy transformation projects used to satisfy an alternative compliance option provided under subsection (1)(b) of this section must use criteria developed by the department of ecology, in consultation with the department and the commission. For the purpose of crediting an energy transformation project toward the standard in subsection (1)(a) of this section, the department of ecology must establish a conversion factor of emissions reductions resulting from energy transformation projects to megawatt-hours of electricity from nonemitting electric generation that is consistent with the emission factors for unspecified electricity, or for energy transformation projects in the transportation sector, consistent with default emissions or conversion factors established by other jurisdictions for clean alternative fuels. Emissions reductions from energy transformation projects must be:

(a) Real, specific, identifiable, and quantifiable;

(b) Permanent: The department of ecology must look to other jurisdictions in setting this standard and make a reasonable determination on length of time;

(c) Enforceable by the state of Washington;

(d) Verifiable;

(e) Not required by another statute, rule, or other legal requirement; and

(f) Not reasonably assumed to occur absent investment, or if an investment has already been made, not reasonably assumed to occur absent additional funding in the near future.

(3) Energy transformation projects must be associated with the consumption of energy in Washington and must not create a new use of fossil fuels that results in a net increase of fossil fuel usage.

(4) The compliance eligibility of energy transformation projects may be scaled or prorated by an approved protocol in order to distinguish effects related to reductions in electricity usage from reductions in fossil fuel usage.

(5) Any compliance obligation fulfilled through an investment in an energy transformation project is eligible for use only: (a) By the electric utility that makes the investment; (b) if the investment is made by the Bonneville power administration, by electric utilities that are preference customers of the Bonneville power administration; or (c) if the investment is made by a joint operating agency organized under chapter 43.52 RCW, by a member of the joint operating agency. An electric utility making an investment in partnership with another electric utility or entity may claim credit proportional to its share invested in the total project cost.

(6)(a) In meeting the standard under subsection (1) of this section, an electric utility must, consistent with the requirements of RCW 19.285.040, if applicable, pursue all cost-effective, reliable, and feasible conservation and efficiency resources, and demand response. In making new investments, an electric utility must, to the maximum extent feasible:

(i) Achieve targets at the lowest reasonable cost, considering risk;

(ii) Consider acquisition of existing renewable resources; and

(iii) In the acquisition of new resources constructed after the effective date of this section, rely on renewable resources and energy storage, insofar as doing so is consistent with (a)(i) of this subsection.

(b) Electric utilities subject to RCW 19.285.040 must demonstrate pursuit of all conservation and efficiency resources through compliance with the requirements in RCW 19.285.040.

(7) An electric utility that fails to meet the requirements of this section must pay the administrative penalty established under section 9(1) of this act, except as otherwise provided in this chapter.

(8) In complying with this section, an electric utility must, consistent with the requirements of RCW 19.280.030 and section 24 of this act, ensure that all customers are benefiting from the

transition to clean energy: Through the equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of costs and risks; and energy security and resiliency.

(9) Affected market customers must comply with the standard established under subsection (1) of this section.

(10) A market customer that purchases electricity exclusively from carbon-free resources and eligible renewable resources, as defined in RCW 19.285.030 as of January 1, 2019, pursuant to a special contract with an investor-owned utility approved, prior to the effective date of this section, by order of the commission is subject to the requirements of such an order and not to the standard established in this section. For purposes of interpreting any such special contract, chapter 19.285 RCW, as in effect on January 1, 2019, is not, either directly or indirectly, amended or supplemented.

(11) To reduce costs for utility customers or avoid exceeding the cost impact limit in section 6(3)(a) of this act, a multistate electric utility with fewer than two hundred fifty thousand customers in Washington may apply the total amount of megawatt-hours of coal-fired resources eliminated from the utility's allocation of electricity before December 31, 2025, as an equivalent amount of megawatt-hours of nonemitting electric generation or electricity from renewable resources required to comply with subsection (1)(a) of this section. The utility must demonstrate that for every megawatt-hour of early action compliance credit there is a real, permanent reduction in greenhouse gas emissions in the western interconnection directly associated with that credit. A multistate electric utility must request to use early action compliance credit in its clean energy implementation plan that is submitted under section 6 of this act. The multistate electric utility must specify in its clean energy implementation plan the compliance years to which the early action compliance credit will apply, but in no event may the multistate electric utility use the early action compliance credits beyond 2035. The commission must establish conditions for use of early action compliance credits, including a determination of whether action constitutes early action, before the multistate electric utility's use of early action compliance credits in a clean energy implementation plan.

NEW SECTION. **Sec. 5.** (1) It is the policy of the state that nonemitting electric generation and electricity from renewable resources supply one hundred percent of all sales of electricity to Washington retail electric customers by January 1, 2045. By January 1, 2045, and each year thereafter, each electric utility must demonstrate its compliance with this standard using a combination of nonemitting electric generation and electricity from renewable resources.

(2) Each electric utility must incorporate subsection (1) of this section into all relevant planning and resource acquisition practices including, but not limited to: Resource planning under chapter 19.280 RCW; the construction or acquisition of property, including electric generating facilities; and the provision of electricity service to retail electric customers.

(3) In planning to meet projected demand consistent with the requirements of subsection (2) of this section and RCW 19.285.040, if applicable, an electric utility must pursue all cost-effective, reliable, and feasible conservation and efficiency resources, and demand response. In making new investments, an electric utility must, to the maximum extent feasible:

(a) Achieve targets at the lowest reasonable cost, considering risk;

(b) Consider acquisition of existing renewable resources; and

(c) In the acquisition of new resources constructed after the effective date of this section, rely on renewable resources and energy storage, insofar as doing so is consistent with (a) of this subsection.

(4) The commission, department, energy facility site evaluation council, department of ecology, and all other state agencies must incorporate this section into all relevant planning and utilize all programs authorized by statute to achieve subsection (1) of this section.

(5)(a) Hydroelectric generation used by an electric utility to satisfy the requirements of this section may not include new diversions, new impoundments, new bypass reaches, or expansion of existing reservoirs constructed after the effective date of this section unless the diversions, bypass reaches, or reservoir expansions are necessary for the operation of a pumped storage facility that: (i) Does not conflict with existing state or federal fish recovery plans; and (ii) complies with all local, state, and federal laws and regulations.

(b) Nothing in (a) of this subsection precludes an electric utility that owns and operates hydroelectric generating facilities, or the owner of a hydroelectric generating facility whose energy output is marketed by the Bonneville power administration, from making efficiency or other improvements to its hydroelectric generating facilities existing as of the effective date of this section or from installing hydroelectric generation in pipes, culverts, irrigation canals, and other manmade waterways as long as those changes do not create conflicts with existing state or federal fish recovery plans and comply with all local, state, and federal laws and regulations.

(6) Nothing in this section prohibits an electric utility from purchasing or exchanging power from the Bonneville power administration.

(7) Affected market customers must comply with the obligations of this section.

(8) Any market customer that purchases electricity exclusively from carbon-free resources and eligible renewable resources, as defined in RCW 19.285.030 as of January 1, 2019, pursuant to a special contract with an investor-owned utility approved, prior to the effective date of this section, by order of the commission is subject to the requirements of such an order and not to the standards established in this section. For the purposes of interpreting such a special contract, chapter 19.285 RCW, as in effect on January 1, 2019, is not, either directly or indirectly, amended or supplemented.

NEW SECTION. **Sec. 6.** (1)(a) By January 1, 2022, and every four years thereafter, each investor-owned utility must develop and submit to the commission:

(i) A four-year clean energy implementation plan for the standards established under sections 4(1) and 5(1) of this act that proposes specific targets for energy efficiency, demand response, and renewable energy; and

(ii) Proposed interim targets for meeting the standard under section 4(1) of this act during the years prior to 2030 and between 2030 and 2045.

(b) An investor-owned utility's clean energy implementation plan must:

(i) Be informed by the investor-owned utility's clean energy action plan developed under RCW 19.280.030;

(ii) Be consistent with subsection (3) of this section; and

(iii) Identify specific actions to be taken by the investor-owned utility over the next four years, consistent with the utility's long-range integrated resource plan and resource adequacy requirements, that demonstrate progress toward meeting the standards under sections 4(1) and 5(1) of this act and the interim targets proposed under (a)(i) of this subsection. The specific actions identified must be informed by the investor-owned utility's historic performance under median water conditions and resource capability and by the investor-owned utility's participation in centralized markets. In identifying specific actions in its clean energy implementation plan, the investor-owned utility may also take into consideration any significant and unplanned loss or addition of load it experiences.

(c) The commission, after a hearing, must by order approve, reject, or approve with conditions an investor-owned utility's clean energy implementation plan and interim targets. The commission may, in its order, recommend or require more stringent targets than those proposed by the investor-owned utility. The commission may periodically adjust or expedite timelines if it can be demonstrated that the targets or timelines can be achieved in a manner consistent with the following:

(i) Maintaining and protecting the safety, reliable operation, and balancing of the electric system;

(ii) Planning to meet the standards at the lowest reasonable cost, considering risk;

(iii) Ensuring that all customers are benefiting from the transition to clean energy: Through the equitable distribution of energy and nonenergy benefits and the reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of costs and risks; and energy security and resiliency; and

(iv) Ensuring that no customer or class of customers is unreasonably harmed by any resulting increases in the cost of utility-supplied electricity as may be necessary to comply with the standards.

(2)(a) By January 1, 2022, and every four years thereafter, each consumer-owned utility must develop and submit to the department a four-year clean energy implementation plan for the standards established under sections 4(1) and 5(1) of this act that:

(i) Proposes interim targets for meeting the standard under section 4(1) of this act during the years prior to 2030 and between 2030 and 2045, as well as specific targets for energy efficiency, demand response, and renewable energy;

(ii) Is informed by the consumer-owned utility's clean energy action plan developed under RCW 19.280.030(1) or other ten-year plan developed under RCW 19.280.030(5);

(iii) Is consistent with subsection (4) of this section; and

(iv) Identifies specific actions to be taken by the consumer-owned utility over the next four years, consistent with the utility's long-range resource plan and resource adequacy requirements, that demonstrate progress towards meeting the standards under sections 4(1) and 5(1) of this act and the interim targets proposed under (a)(i) of this subsection. The specific actions identified must be informed by the consumer-owned utility's historic performance under median water conditions and resource capability and by the consumer-owned utility's participation in centralized markets. In identifying specific actions in its clean energy implementation plan, the consumer-owned utility may also take into consideration any significant and unplanned loss or addition of load it experiences.

(b) The governing body of the consumer-owned utility must, after a public meeting, adopt the consumer-owned utility's clean energy implementation plan. The clean energy implementation plan must be submitted to the department and made available to the public. The governing body may adopt more stringent targets than those proposed by the consumer-owned utility and periodically adjust or expedite timelines if it can be demonstrated that such targets or timelines can be achieved in a manner consistent with the following:

(i) Maintaining and protecting the safety, reliable operation, and balancing of the electric system;

(ii) Planning to meet the standards at the lowest reasonable cost, considering risk;

(iii) Ensuring that all customers are benefiting from the transition to clean energy: Through the equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of costs and risks; and energy security and resiliency; and

(iv) Ensuring that no customer or class of customers is unreasonably harmed by any resulting increases in the cost of utility-supplied electricity as may be necessary to comply with the standards.

(3)(a) An investor-owned utility must be considered to be in compliance with the standards under sections 4(1) and 5(1) of this act if, over the four-year compliance period, the average annual incremental cost of meeting the standards or the interim targets established under subsection (1) of this section equals a two percent increase of the investor-owned utility's weather-adjusted sales revenue to customers for electric operations above the previous year, as reported by the investor-owned utility in its most recent commission basis report. All costs included in the determination of cost impact must be directly attributable to actions necessary to comply with the requirements of sections 4 and 5 of this act.

(b) If an investor-owned utility relies on (a) of this subsection as a basis for compliance with the standard under section 4(1) of this act, then it must demonstrate that it has maximized investments in renewable resources and nonemitting electric generation prior to using alternative compliance options allowed under section 4(1)(b) of this act.

(4)(a) A consumer-owned utility must be considered to be in compliance with the standards under sections 4(1) and 5(1) of this act if, over the four-year compliance period, the average annual incremental cost of meeting the standards or the interim targets established under subsection (2) of this section meets or exceeds a two percent increase of the consumer-owned utility's retail revenue requirement above the previous year. All costs included in the determination of cost impact must be directly attributable to actions necessary to comply with the requirements of sections 4 and 5 of this act.

(b) If a consumer-owned utility relies on (a) of this subsection as a basis for compliance with the standard under section 4(1) of this act, and it has not met eighty percent of its annual retail electric load using electricity from renewable resources and nonemitting electric generation, then it must demonstrate that it has maximized investments in renewable resources and nonemitting electric generation prior to using alternative compliance options allowed under section 4(1)(b) of this act.

(5) The commission, for investor-owned utilities, and the department, for consumer-owned utilities, must adopt rules establishing the methodology for calculating the incremental cost of compliance under this section, as compared to the cost of an alternative lowest reasonable cost portfolio of investments that are reasonably available.

NEW SECTION. **Sec. 7.** (1) Each electric utility must provide to the department, in the case of a consumer-owned utility, or to the commission, in the case of an investor-owned utility, its greenhouse gas content calculation in conformance with this section. A utility's greenhouse gas content calculation must be based on the fuel sources that it reports and discloses in compliance with chapter 19.29A RCW. An investor-owned utility must also report the information required in this subsection to the department.

(2) For unspecified electricity, the utility must use an emissions rate determined, and periodically updated, by the department of ecology by rule. The department of ecology must adopt an emissions rate for unspecified electricity consistent with the emissions rate established for other markets in the western interconnection. If the department of ecology has not adopted an emissions rate for unspecified electricity, the emissions rate that applies for the purposes of this chapter is 0.437 metric tons of carbon dioxide per megawatt-hour of electricity.

(3) For the purposes of this act, the fuel mix calculated for the Bonneville power administration may exclude any purchases of electric generation that are not associated with load in the state of Washington.

NEW SECTION. **Sec. 8.** By January 1, 2024, and at least every four years thereafter and in compliance with RCW 43.01.036, the department must submit a report to the legislature. The report must include the following:

(1) A review of the standards described in sections 3 through 5 of this act focused on technologies, forecasts, and existing transmission, and an evaluation of safety, environmental and public safety protection, affordability, and system reliability.

(2)(a) An evaluation, produced in consultation with the commission, electric utilities, transmission operators in Washington, the reliability coordinator for electric utilities, any regional planning organization serving electric utilities, public interest and environmental organizations, and the regional entity for the western interconnection identifying the potential benefits, impacts, and risks on system reliability associated with achieving the standards described in sections 4 and 5 of this act. The evaluation must assess whether electric utilities have sufficient electric generation resources to meet forecasted retail electric load in addition to adequate transmission capability to implement sections 3 through 5 of this act without: (i) Violating mandatory and enforceable reliability standards of the North American electric reliability corporation; (ii) violating prudent utility practice for assuring resource adequacy; or (iii) compromising the power quality or integrity of the electricity system. Subject to funding appropriated for this purpose, the department must consult with a national laboratory with expertise in grid reliability, security, and resilience.

(b) The evaluation should assess the anticipated financial costs and benefits of investments necessary to correct those deficiencies at the lowest reasonable costs as identified by electric utilities, transmission operators in Washington, the regional entity for the western interconnection, or any regional planning organization serving electric utilities. The assessment of these investments in the report is not deemed to be approval of such investments for rate recovery by any authorizing entity.

(3) An evaluation identifying the nature of any anticipated financial costs and benefits to electric utilities, including customer rate impacts and benefits including, but not limited to:

(a) Greenhouse gas emissions of electric utilities;

(b) The allocation of risk between customers and electric utilities;

(c) The allocation of financial costs among electric utilities in the state and whether retail electric customers are equitably bearing the financial costs of implementing sections 3 through 5 of this act;

(d) The timing of cost recovery for electricity generated by nonemitting electric generation or renewable resources;

(e) The resource procurement process of electric utilities; and

(f) The barriers to, and benefits of, implementing sections 4 and 5 of this act.

(4) An evaluation of new or emerging technologies that could be considered to be a renewable resource.

(5) An assessment of the impacts of sections 3 through 5 of this act on middle-income families, small businesses, and manufacturers in Washington.

NEW SECTION. **Sec. 9.** (1)(a) An electric utility or an affected market customer that fails to meet the standards established under sections 3(1) and 4(1) of this act must pay an administrative penalty to the state of Washington in the amount of one hundred dollars, times the following multipliers, for each megawatt-hour of electric generation used to meet load that is not electricity from a renewable resource or nonemitting electric generation:

(i) 1.5 for coal-fired resources;

(ii) 0.84 for gas-fired peaking power plants; and

(iii) 0.60 for gas-fired combined-cycle power plants.

(b) Beginning in 2027, this penalty must be adjusted on a biennial basis according to the rate of change of the inflation indicator, gross domestic product implicit price deflator, as published by the bureau of economic analysis of the United States department of commerce or its successor. Beginning in 2040, the commission may by rule increase this penalty for investor-owned utilities if the commission determines that doing so will accelerate utilities' compliance with the standards established under this chapter and that doing so is in the public interest.

(2) Consistent with the requirements of section 4(1)(b) of this act, a utility may opt to make a payment in the amount of the administrative penalty as an alternative compliance payment, without incurring a penalty for noncompliance.

(3)(a) Upon its own motion or at the request of an investor-owned utility, and after a hearing, the commission may issue an order relieving the utility of its administrative penalty obligation under subsection (1) of this section if it finds that:

(i) After taking all reasonable measures, the investor-owned utility's compliance with this chapter is likely to result in conflicts with or compromises to its obligation to comply with the mandatory and enforceable reliability standards of the North American electric reliability corporation, violate prudent utility practice for assuring resource adequacy, or compromise the power quality or integrity of its system; or

(ii) The investor-owned utility is unable to comply with the standards established in section 3(1) or 4(1) of this act due to reasons beyond the reasonable control of the investor-owned utility, as set forth in subsection (6) of this section.

(b) If the commission issues an order pursuant to (a) of this subsection that relieves an investor-owned utility of its administrative penalty obligation under subsection (1) of this section, the commission may issue an order:

(i) Temporarily exempting the investor-owned utility from the requirements of section 4(1) of this act for an amount of time sufficient to allow the investor-owned utility to achieve full compliance with the standard;

(ii) Directing the investor-owned utility to file a progress report to the commission on achieving full compliance with the standard within six months after issuing the order, or within an amount of time determined to be reasonable by the commission; and

(iii) Directing the investor-owned utility to take specific actions to achieve full compliance with the requirements of this chapter.

(c) An investor-owned utility may request an extension of a temporary exemption granted under this section. An investor-owned utility that requests an extension must request an update to the order issued by the commission under (b) of this subsection.

(4) Subsection (3) of this section does not permanently relieve an investor-owned utility of its obligation to comply with the requirements of this chapter.

(5)(a) The governing body of a consumer-owned utility may authorize a temporary exemption from the standard established under section 4(1) of this act, for an amount of time sufficient to allow the consumer-owned utility to achieve full compliance with the standard, if the governing body finds that:

(i) The consumer-owned utility's compliance with the standard is likely to: Result in conflicts with or compromises to its obligation to comply with the mandatory and enforceable reliability standards of the North American electric reliability corporation; violate prudent utility practice for assuring resource adequacy; or compromise the power quality or integrity of its system; or

(ii) The consumer-owned utility is unable to comply with the standard due to reasons beyond the reasonable control of the utility, as set forth in subsection (6) of this section; and

(iii) The consumer-owned utility has provided to the department a plan demonstrating how it plans to achieve full compliance with the standard, consistent with the findings of the report submitted to the legislature under section 8 of this act.

(b) Upon request by the governing body of a consumer-owned utility, a consumer-owned utility must be relieved of its administrative penalty obligation under subsection (1) of this section if the auditor issues a finding that:

(i) The governing body of the consumer-owned utility has properly issued a temporary exemption under (a) of this subsection for a period of time not to exceed six months; and

(ii) The governing body of the consumer-owned utility has submitted to the department a plan to take specific actions to achieve full compliance with the standard, consistent with the findings of the report submitted to the legislature under section 8 of this act.

(c) Upon issuance of a finding by the auditor, the consumer-owned utility must submit a progress report to the department on achieving full compliance with the standard within the term authorized in the temporary exemption.

(d) A consumer-owned utility may request an extension of a temporary exemption granted under this subsection, subject to the same requirements as provided in (a) through (c) of this subsection.

(e) The attorney general may bring a civil action in the name of the state for any appropriate civil remedy including, but not limited to, injunctive relief, penalties, costs, and attorneys' fees, to enforce compliance with this chapter:

(i) Upon the failure of the governing body of a consumer-owned utility to comply with the conditions of a temporary exemption found by the auditor to be properly adopted or extended; or

(ii) Upon failure of the governing body of a consumer-owned utility to comply with a finding by the auditor that a temporary exemption is not properly granted.

(f) This subsection does not permanently relieve a consumer-owned utility of its obligation to comply with the requirements of this chapter.

(6) To the extent an event or circumstance cannot be reasonably foreseen and ameliorated, such events or circumstances beyond the reasonable control of an electric utility may include but are not limited to:

(a) Weather-related damage;

(b) Natural disasters;

(c) Mechanical or resource failure;

(d) Failure of a third party to meet contractual obligations to the electric utility;

(e) Actions of governmental authorities that adversely affect the generation, transmission, or distribution of nonemitting electric generation or renewable resources owned or under contract to an electric utility, including condemnation actions by municipal electric utilities, public utility districts, or irrigation districts that adversely affect an investor-owned utility's ability to meet the standard established in sections 3(1) and 4(1) of this act;

(f) Inability to acquire sufficient transmission to transmit electricity from nonemitting electric generation or renewable resources to load; and

(g) Substantial limitations, restrictions, or prohibitions on nonemitting electric generation or renewable resources.

(7) An electric utility must notify its retail electric customers in published form within three months of paying the administrative penalty established under subsection (1) of this section. An electric utility is not required to notify its retail electric customers when making a payment in the amount of the administrative penalty as an alternative compliance payment consistent with the requirements of section 4(1)(b) of this act.

(8) Moneys collected under this section must be deposited into the low-income weatherization and structural rehabilitation assistance account created in RCW 70.164.030.

(9) For an investor-owned utility, the commission must determine compliance with the requirements of this chapter.

(10) For consumer-owned utilities, the auditor is responsible for auditing compliance with this chapter and rules adopted under this chapter that apply to those utilities and the attorney general is responsible for enforcing that compliance.

(11) If the report submitted under section 8 of this act demonstrates adverse system reliability impacts from the implementation of sections 4 and 5 of this act, the governor, consistent with the emergency powers under RCW 43.21G.040, may suspend or delay implementation of this chapter, or exempt an electric utility from paying the administrative penalty under this section, until system reliability impacts can be addressed. Adverse system reliability impacts may include, but are not limited to, the inability of electric utilities or transmission operators to meet

reliability standards mandated by federal or state law and required by prudent utility practices.

(12) Notwithstanding RCW 54.16.020, the fair market value compensation for an asset that is condemned by a municipal electric utility, public utility district, or irrigation district and that is either demonstrated in an electric utility's clean energy action plan or clean energy implementation plan to be used or acquired after the effective date of this section to meet the requirements of sections 4 and 5 of this act, or an asset that generates electricity from renewable resources or nonemitting electric generation, must include but not be limited to a replacement value approach. Additionally, the electric utility may seek, and the court may award, damages attributable to the severance, separation, replacement, or relocation of utility assets. The trier of fact may also consider other damages, as well as offsetting benefits, that it finds just and equitable.

(13) An entity that establishes or extends service to the premises of a customer who is being served by an electric utility or was served by an electric utility prior to the effective date of this section must serve those premises in a manner that complies with the requirements of this act and with chapter 19.285 RCW, if applicable. An electric utility or other entity that fails to comply with the requirements of this subsection must pay the administrative penalty under subsection (1) of this section for each megawatt-hour of electric generation used to serve load that does not meet the terms of this subsection.

NEW SECTION. **Sec. 10.** (1) It is the intent of this chapter that the commission and department adopt rules to streamline the implementation of this act with chapter 19.285 RCW to simplify compliance and avoid duplicative processes. It is the intent of the legislature that the commission and the department coordinate in developing rules related to process, timelines, and documentation that are necessary for the implementation of this chapter.

(2) The commission may adopt rules to ensure the proper implementation and enforcement of this chapter as it applies to investor-owned utilities.

(3) The department may adopt rules to ensure the proper implementation and enforcement of this chapter as it applies to consumer-owned utilities. Nothing in this subsection may be construed

to restrict the rate-making authority of the governing body of a consumer-owned utility as otherwise provided by law.

(4) The department must adopt rules establishing reporting requirements for electric utilities to demonstrate compliance with this chapter. The requirements must, to the extent practicable, be consistent with the disclosures required under chapter 19.29A RCW.

(5) An investor-owned utility must also report all information required in subsection (4) of this section to the commission.

(6) An electric utility must also make reports required in this section available to its retail electric customers.

(7) The department of ecology must adopt rules, in consultation with the commission and the department of commerce, to establish requirements for energy transformation project investments including, but not limited to, verification procedures, reporting standards, and other logistical issues as necessary.

(8) The department must adopt rules providing for the measuring and tracking of thermal renewable energy credits that may be used for compliance under section 4 of this act.

(9) Pursuant to the administrative procedure act, chapter 34.05 RCW, rules needed for the implementation of this chapter must be adopted by January 1, 2021, unless specified otherwise elsewhere in this chapter. These rules may be revised as needed to carry out the intent and purposes of this chapter.

<u>NEW SECTION.</u> **Sec. 11.** The requirements of sections 3 through 9 of this act do not replace or modify the requirements established under chapter 19.285 RCW. All utility activities to comply with the requirements established under chapter 19.285 RCW also qualify for compliance with the requirements contained in this chapter, insofar as those activities meet the requirements of this act.

<u>NEW SECTION.</u> **Sec. 12.** (1) It is the intent of the legislature to demonstrate progress toward making energy assistance funds available to low-income households consistent with the policies identified in this section.

(2) An electric utility must make programs and funding available for energy assistance to low-income households by July 31, 2021. Each utility must demonstrate progress in providing energy assistance pursuant to the assessment and plans in subsection (4) of this

section. To the extent practicable, priority must be given to low-income households with a higher energy burden.

(3) Beginning July 31, 2020, the department must collect and aggregate data estimating the energy burden and energy assistance need and reported energy assistance for each electric utility, in order to improve agency and utility efforts to serve low-income households with energy assistance. The department must update the aggregated data on a biennial basis, make it publicly accessible on its internet web site and, to the extent practicable, include geographic attributes.

(a) The aggregated data published by the department must include, but is not limited to:

(i) The estimated number and demographic characteristics of households served by energy assistance for each utility and the dollar value of the assistance;

(ii) The estimated level of energy burden and energy assistance need among customers served, accounting for household income and other drivers of energy burden;

(iii) Housing characteristics including housing type, home vintage, and fuel types; and

(iv) Energy efficiency potential.

(b) Each utility must disclose information to the department for use under this subsection, including:

(i) The amount and type of energy assistance and the number and type of households, if applicable, served for programs administered by the utility;

(ii) The amount of money passed through to third parties that administer energy assistance programs; and

(iii) Subject to availability, any other information related to the utility's low-income assistance programs that is requested by the department.

(c) The information required by (b) of this subsection must be from the electric utility's most recent completed budget period and in a form, timeline, and manner as prescribed by the department.

(4)(a) In addition to the requirements under subsection (3) of this section, each electric utility must submit biennially to the department an assessment of:

(i) The programs and mechanisms used by the utility to reduce energy burden and the effectiveness of those programs and mechanisms in both short-term and sustained energy burden reductions;

(ii) The outreach strategies used to encourage participation of eligible households, including consultation with community-based organizations and Indian tribes as appropriate, and comprehensive enrollment campaigns that are linguistically and culturally appropriate to the customers they serve in vulnerable populations; and

(iii) A cumulative assessment of previous funding levels for energy assistance compared to the funding levels needed to meet: (A) Sixty percent of the current energy assistance need, or increasing energy assistance by fifteen percent over the amount provided in 2018, whichever is greater, by 2030; and (B) ninety percent of the current energy assistance need by 2050.

(b) The assessment required in (a) of this subsection must include a plan to improve the effectiveness of the assessed mechanisms and strategies toward meeting the energy assistance need.

(5) A consumer-owned utility may enter into an agreement with a public university, community-based organization, or joint operating agency organized under chapter 43.52 RCW to aggregate the disclosures required in this section and submit the assessment required in subsections (3) and (4) of this section.

(6)(a) The department must submit a biennial report to the legislature that:

(i) Aggregates information into a statewide summary of energy assistance programs, energy burden, and energy assistance need;

(ii) Identifies and quantifies current expenditures on low-income energy assistance; and

(iii) Evaluates the effectiveness of additional optimal mechanisms for energy assistance including, but not limited to, customer rates, a low-income specific discount, system benefits charges, and public and private funds.

(b) The department must also assess mechanisms to prioritize energy assistance towards low-income households with a higher energy burden.

(7) Nothing in this section may be construed to restrict the rate-making authority of the commission or the governing body of a consumer-owned utility as otherwise provided by law.

NEW SECTION. **Sec. 13.** (1) The department and the commission must convene a stakeholder work group to examine the:

(a) Efficient and consistent integration of this act and transactions with carbon and electricity markets outside the state; and

(b) Compatibility of the requirements under this act relative to a linked cap-and-trade program.

(2) To assist in its examination of the issues identified in this section, as well as any other issues pertinent to its review, the work group must, at a minimum, consist of electric utilities, gas companies, the Bonneville power administration, public interest and environmental organizations, and other agencies.

(3) The department and the commission must adopt rules by June 30, 2022, defining requirements, including appropriate specification, verification, and reporting requirements, for the following: (a) Retail electric load met with market purchases and the western energy imbalance market or other centralized market administered by a market operator for the purposes of sections 3 through 5 of this act; and (b) to address the prohibition on double counting of nonpower attributes under section 4(1) of this act that could occur under other programs. With respect to purchases from the western energy imbalance market or other centralized market, the department and the commission must consult with the market operator and market participants to consider options that support the objectives of this chapter and the efficient dispatch of the generation resources dispatched by those markets.

Sec. 14. RCW 19.280.030 and 2015 3rd sp.s. c 19 s 9 are each amended to read as follows:

Each electric utility must develop a plan consistent with this section.

(1) Utilities with more than twenty-five thousand customers that are not full requirements customers ((~~shall~~)) must develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years thereafter. An updated integrated resource plan must be developed at least every four years subsequent to the 2008 integrated resource plan. The integrated resource plan, at a minimum, must include:

(a) A range of forecasts, for at least the next ten years or longer, of projected customer demand which takes into account econometric data and customer usage;

(b) An assessment of commercially available conservation and efficiency resources, as informed, as applicable, by the assessment for conservation potential under RCW 19.285.040 for the planning horizon consistent with (a) of this subsection. Such assessment may include, as appropriate, opportunities for development of combined heat and power as an energy and capacity resource, demand response and load management programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources;

(c) An assessment of commercially available, utility scale renewable and nonrenewable generating technologies including a comparison of the benefits and risks of purchasing power or building new resources;

(d) A comparative evaluation of renewable and nonrenewable generating resources, including transmission and distribution delivery costs, and conservation and efficiency resources using "lowest reasonable cost" as a criterion;

(e) An assessment of methods, commercially available technologies, or facilities for integrating renewable resources, including but not limited to battery storage and pumped storage, and addressing overgeneration events, if applicable to the utility's resource portfolio;

(f) An assessment and ten-year forecast of the availability of regional generation and transmission capacity on which the utility may rely to provide and deliver electricity to its customers;

(g) A determination of resource adequacy metrics for the resource plan consistent with the forecasts;

(h) A forecast of distributed energy resources that may be installed by the utility's customers and an assessment of their effect on the utility's load and operations;

(i) An identification of an appropriate resource adequacy requirement and measurement metric consistent with prudent utility practice in implementing sections 3 through 5 of this act;

(j) The integration of the demand forecasts ((~~and~~)), resource evaluations, and resource adequacy requirement into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and projected needs, including mitigating overgeneration events and implementing sections 3 through 5 of this act, at the lowest reasonable cost and risk to the utility and its ((~~ratepayers~~))

customers, while maintaining and protecting the safety, reliable operation, and balancing of its electric system; ((~~and~~

~~(g)~~)) (k) An assessment, informed by the cumulative impact analysis conducted under section 24 of this act, of: Energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits, costs, and risks; and energy security and risk; and

(l) A ((~~short-term plan identifying~~)) ten-year clean energy action plan for implementing sections 3 through 5 of this act at the lowest reasonable cost, and at an acceptable resource adequacy standard, that identifies the specific actions to be taken by the utility consistent with the long-range integrated resource plan.

(2) For an investor-owned utility, the clean energy action plan must: (a) Identify and be informed by the utility's ten-year cost-effective conservation potential assessment as determined under RCW 19.285.040, if applicable; (b) establish a resource adequacy requirement; (c) identify the potential cost-effective demand response and load management programs that may be acquired; (d) identify renewable resources, nonemitting electric generation, and distributed energy resources that may be acquired and evaluate how each identified resource may be expected to contribute to meeting the utility's resource adequacy requirement; (e) identify any need to develop new, or expand or upgrade existing, bulk transmission and distribution facilities; and (f) identify the nature and possible extent to which the utility may need to rely on alternative compliance options under section 4(1)(b) of this act, if appropriate.

(3)(a) An electric utility shall consider the social cost of greenhouse gas emissions, as determined by the commission for investor-owned utilities pursuant to section 15 of this act and the department for consumer-owned utilities, when developing integrated resource plans and clean energy action plans. An electric utility must incorporate the social cost of greenhouse gas emissions as a cost adder when:

(i) Evaluating and selecting conservation policies, programs, and targets;

(ii) Developing integrated resource plans and clean energy action plans; and

(iii) Evaluating and selecting intermediate term and long-term resource options.

(b) For the purposes of this subsection (3): (i) Gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters must be considered a nonemitting resource; and (ii) qualified biomass energy must be considered a nonemitting resource.

(4) To facilitate broad, equitable, and efficient implementation of this act, a consumer-owned energy utility may enter into an agreement with a joint operating agency organized under chapter 43.52 RCW or other nonprofit organization to develop and implement a joint clean energy action plan in collaboration with other utilities.

(5) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that:

(a) Estimates loads for the next five and ten years;

(b) Enumerates the resources that will be maintained and/or acquired to serve those loads; ((~~and~~))

(c) Explains why the resources in (b) of this subsection were chosen and, if the resources chosen are not: (i) Renewable resources; (ii) methods, commercially available technologies, or facilities for integrating renewable resources, including addressing any overgeneration event; or (iii) conservation and efficiency resources, why such a decision was made; and

(d) By December 31, 2020, and in every resource plan thereafter, identifies how the utility plans over a ten-year period to implement sections 4 and 5 of this act.

((~~(3)~~)) (6) Assessments for demand side resources included in an integrated resource plan may include combined heat and power systems as one of the measures in a conservation supply curve. The value of recoverable waste heat resulting from combined heat and power must be reflected in analyses of cost-effectiveness under this subsection.

((~~(4)~~)) (7) An electric utility that is required to develop a resource plan under this section must complete its initial plan by September 1, 2008.

((~~(5) Resource~~)) (8) Plans developed under this section must be updated on a regular basis, on intervals approved by the commission or the department, or at a minimum on intervals of two years.

((~~(6)~~)) (9) Plans shall not be a basis to bring legal action against electric utilities.

((~~(7)~~)) (10)(a) To maximize transparency, the commission, for investor-owned utilities, or the governing body, for consumer-owned utilities, may require an electric utility to make the utility's data input files available in a native format. Each electric utility shall publish its final plan either as part of an annual report or as a separate document available to the public. The report may be in an electronic form.

(b) Nothing in this subsection limits the protection of records containing commercial information under RCW 80.04.095.

(11) By December 31, 2021, the department and the commission must adopt rules establishing the requirements for incorporating the cumulative impact analysis developed under section 24 of this act into the criteria for developing clean energy action plans under this section.

NEW SECTION. **Sec. 15.** A new section is added to chapter 80.28 RCW to read as follows:

For the purposes of this act, the cost of greenhouse gas emissions resulting from the generation of electricity, including the effect of emissions, is equal to the cost per metric ton of carbon dioxide equivalent emissions, using the two and one-half percent discount rate, listed in table 2, technical support document: Technical update of the social cost of carbon for regulatory impact analysis under Executive Order No. 12866, published by the interagency working group on social cost of greenhouse gases of the United States government, August 2016. The commission must adjust the costs established in this section to reflect the effect of inflation.

Sec. 16. RCW 80.84.010 and 2016 c 220 s 1 are each amended to read as follows:

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Eligible coal plant" means a coal-fired electric generation facility that: (a) ((~~Had two or fewer generating units as of January 1, 1980, and four generating units as of January 1, 2016; (b)~~)) Is owned in whole or in part by more than one electrical company as of January 1, 2016; and ((~~(c)~~)) (b) provides, as a portion of the load served by the coal-fired electric generation facility, electricity paid for in rates by customers in the state of Washington.

(2) "Eligible coal unit" means any generating unit of an eligible coal plant.

NEW SECTION. **Sec. 17.** This section is the tax preference performance statement for the tax preferences contained in sections 18 and 19, chapter . . ., Laws of 2019 (sections 18 and 19 of this act). This performance statement is only intended to be used for subsequent evaluation of the tax preference. It is not intended to create a private right of action by any party or be used to determine eligibility for preferential tax treatment.

(1) The legislature categorizes this tax preference as one intended to induce certain designated behavior by taxpayers, as indicated in RCW 82.32.808(2)(a).

(2) It is the legislature's specific public policy objective to reduce the amount of carbon dioxide emissions in Washington. It is the legislature's intent to extend the expiration date of and expand the existing sales and use tax exemption for machinery and equipment used directly in generating certain types of alternative energy, in order to reduce the price charged to customers for that machinery and equipment, thereby inducing some customers to buy machinery and equipment for alternative energy when they might not otherwise, thereby displacing electricity from fossil-fueled generating resources, thereby reducing the amount of carbon dioxide emissions in Washington. It is also the intent of the legislature to maximize cost savings associated with clean energy construction for Washington electric customers by encouraging development of these resources in time for projects to benefit from both this incentive and expiring federal incentives.

(3) It is also the legislature's specific public policy objective to provide an incentive for more of the projects that meet the objectives of subsection (2) of this section to be constructed with high labor standards, including family level wages and providing benefits including health care and pensions, as well as maximizing access to economic benefits from such projects for local workers and diverse businesses.

(4) The joint legislative audit and review committee is not required to perform a tax preference review under chapter 43.136 RCW for the tax preferences contained in sections 18 and 19, chapter . . ., Laws of 2019 (sections 18 and 19 of this act) and it

is the intent of the legislature to allow the tax preferences to expire upon their scheduled expiration dates.

Sec. 18. RCW 82.08.962 and 2018 c 164 s 5 are each amended to read as follows:

(1)(a) ((~~Except as provided in RCW 82.08.963, purchasers who have paid~~)) Subject to the requirements of this section, the tax imposed by RCW 82.08.020 ((~~on~~)) does not apply to sales of machinery and equipment used directly in generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources, or technology that converts otherwise lost energy from exhaust, as the principal source of power, or to sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, ((~~are eligible for an exemption as provided in this section,~~)) but only if the purchaser develops with such machinery, equipment, and labor a facility capable of generating not less than one thousand watts AC of electricity. Except as otherwise provided in this section, the purchaser must pay the state and local sales tax on such sales and apply to the department for a remittance of the tax paid.

(b) Beginning on July 1, 2011, through ((~~January 1, 2020~~)) December 31, 2019, the amount of the exemption under this subsection (1)(b) is equal to seventy-five percent of the state and local sales tax paid. The purchaser is eligible for an exemption under this subsection (1)(b) in the form of a remittance.

(c) Beginning January 1, 2020, through December 31, 2029, the purchaser is entitled to an exemption, in the form of a remittance, under this subsection (1)(c) in an amount equal to:

(i) Fifty percent of the state and local sales tax paid, if:

(A) The exempt purchase is for machinery and equipment or labor and services rendered in respect to installing such machinery and equipment in (a) of this subsection, excluding qualified purchases under subsection (c)(i)(B) of this subsection, and the department of labor and industries certifies that the project includes: Procurement from and contracts with women, minority, or veteran-owned businesses; procurement from and contracts with entities that have a history of complying with federal and state wage and hour laws and regulations; apprenticeship utilization; and preferred entry for workers living in the area where the project is being constructed. In the event that a project is built without one or more of these standards, and a project developer or its designated principal contractor demonstrates that it has made all good faith efforts to meet the standards but was unable to comply due to lack of availability of qualified businesses or local hires, the department of labor and industries may certify that the developer complied with that standard; or

(B) The exempt purchase is for machinery and equipment that is used directly in the generation of electricity by a solar energy system capable of generating more than one hundred kilowatts AC but no more than five hundred kilowatts AC of electricity, and labor and services rendered in respect to installing such machinery and equipment, and the department of labor and industries certifies that the project has met the requirements of (c)(i)(A) of this subsection, and the purchaser provides the following documentation to the department as part of the application for a remittance:

(I) A copy of the contractor's certificate of registration in compliance with chapter 18.27 RCW;

(II) The contractor's current state unified business identifier number;

(III) A copy of the contractor's proof of industrial insurance coverage for the contractor's employees working in Washington as required in Title 51 RCW; employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and

(IV) Documentation of the contractor's history of compliance with federal and state wage and hour laws and regulations, consistent with (e)(ii)(D) of this subsection;

(ii) Seventy-five percent of the state and local sales tax paid, if the department of labor and industries certifies that the project complies with (c)(i)(A) and (B) of this subsection and compensates workers at prevailing wage rates determined by local collective bargaining as determined by the department of labor and industries. This subsection (1)(c)(ii) does not apply with respect to solar energy systems described in (c)(i)(B) of this subsection; or

(iii) One hundred percent of the state and local sales tax paid, if the department of labor and industries certifies that the project is developed under a community workforce agreement or project labor agreement. This subsection (1)(c)(iii) does not apply with respect to solar energy systems described in (c)(i)(B) of this subsection.

(d) In order to qualify for the remittance under (c) of this subsection, installation of the qualifying machinery and equipment must commence no earlier than January 1, 2020, and be completed by December 31, 2029.

(e) Beginning July 1, 2019, and through December 31, 2029, the purchaser is entitled to an exemption under this subsection (1)(e) in an amount equal to one hundred percent of the state and local sales tax due on:

(i) Machinery and equipment that is used directly in the generation of electricity by a solar energy system that is capable of generating no more than one hundred kilowatts AC of electricity; or

(ii) Labor and services rendered in respect to installing machinery and equipment exempt under (e)(i) of this subsection, and the seller meets the following requirements at the time of the sale for which the exemption is claimed:

(A) Has obtained a certificate of registration in compliance with chapter 18.27 RCW;

(B) Has obtained a current state unified business identifier number;

(C) Possesses proof of industrial insurance coverage for the contractor's employees working in Washington as required in Title 51 RCW; employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and

(D) Has had no findings of violation of federal or state wage and hour laws and regulations in a final and binding order by an administrative agency or court of competent jurisdiction in the past twenty-four months.

(f) Purchasers claiming an exemption under (e) of this subsection must provide the seller with an exemption certificate in a form and manner prescribed by the department.

(g) In order to qualify for the exemption under (e)(ii) of this subsection, installation of the qualifying machinery and equipment must commence no earlier than July 1, 2019, and be completed by December 31, 2029.

(2)(a) The department of labor and industries must adopt emergency and permanent rules to:

(i) Define and set minimum requirements for all labor standards identified in subsection (1)(c) of this section; and

(ii) Set requirements for all good faith efforts under subsection (1)(c)(i) and (ii) of this section, as well as documentation requirements and a certification process. Requirements for all good faith efforts must be designed to maximize the likelihood that the project is completed with said standards and could include: Proactive outreach to firms that are women, minority, and veteran-owned businesses; advertising in local community publications and publications appropriate to identified firms; participating in community job fairs, conferences, and trade shows; and other measures. The certification process and timeline must be designed to prevent undue delay to project development.

(b) Emergency rules must be adopted by December 1, 2019, and take effect January 1, 2020.

(3) For purposes of this section and RCW 82.12.962, the following definitions apply:

(a) "Biomass energy" includes: (i) By-products of pulping and wood manufacturing process; (ii) animal waste; (iii) solid organic fuels from wood; (iv) forest or field residues; (v) wooden demolition or construction debris; (vi) food waste; (vii) liquors derived from algae and other sources; (viii) dedicated energy crops; (ix) biosolids; and (x) yard waste. "Biomass energy" does not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; wood from old growth forests; or municipal solid waste.

(b) "Fuel cell" means an electrochemical reaction that generates electricity by combining atoms of hydrogen and oxygen in the presence of a catalyst.

(c)(i) "Machinery and equipment" means fixtures, devices, and support facilities that are integral and necessary to the generation of electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources, or technology that converts otherwise lost energy from exhaust.

(ii) "Machinery and equipment" does not include: (A) Hand-powered tools; (B) property with a useful life of less than one year; (C) repair parts required to restore machinery and equipment to normal working order; (D) replacement parts that do not increase productivity, improve efficiency, or extend the useful life of machinery and equipment; (E) buildings; or (F) building fixtures that are not integral and necessary to the generation of electricity that are permanently affixed to and become a physical part of a building.

((~~(3)~~)) (d) "Project labor agreement" and "community workforce agreement" means a prehire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and is an agreement described in 29 U.S.C. Sec. 158(f).

(4)(a) Machinery and equipment is "used directly" in generating electricity by wind energy, solar energy, biomass energy, tidal or wave energy, geothermal resources, or technology that converts otherwise lost energy from exhaust if it provides any part of the process that captures the energy of the wind, sun, biomass energy, tidal or wave energy, geothermal resources, or technology that converts otherwise lost energy from exhaust, converts that energy to electricity, and stores, transforms, or transmits that electricity for entry into or operation in parallel with electric transmission and distribution systems.

(b) Machinery and equipment is "used directly" in generating electricity by fuel cells if it provides any part of the process that captures the energy of the fuel, converts that energy to electricity, and stores, transforms, or transmits that electricity for entry into or operation in parallel with electric transmission and distribution systems.

((~~(4)~~)) (5)(a)(i) A purchaser claiming an exemption in the form of a remittance under subsection (1)(b) or (c) of this section must pay the tax imposed by RCW 82.08.020 and all applicable local sales taxes imposed under the authority of chapters 82.14 and 81.104 RCW. The purchaser may then apply to the department for remittance in a form and manner prescribed by the department. A purchaser may not apply for a remittance under this section more frequently than once per quarter. The purchaser must specify the amount of exempted tax claimed and the qualifying purchases for which the exemption is claimed. The purchaser must retain, in adequate detail, records to enable the department to determine whether the purchaser is entitled to an exemption under this section, including: Invoices; proof of tax paid; and documents describing the machinery and equipment.

(ii) The application for remittance must include a copy of the certificate issued for the project by the department of labor and industries as prescribed by rule under subsection (2) of this section.

(b) The department must determine eligibility under this section based on the information provided by the purchaser, which is subject to audit verification by the department. The department must on a quarterly basis remit exempted amounts to qualifying purchasers who submitted applications during the previous quarter.

((~~(5) The exemption provided by this section expires September 30, 2017, as it applies to: (a)~~)) <u>(6)(a) Except as otherwise provided in (c) of this subsection, from October 1, 2017, through December 31, 2019, the exemption provided by this section does not apply to: (i)</u> Machinery and equipment that is used directly in the generation of electricity using solar energy and capable of generating no more than five hundred kilowatts <u>AC</u> of electricity; or ((~~(b)~~)) <u>(ii)</u> sales of or charges made for labor and services rendered in respect to installing such machinery and equipment.

<u>(b) The exemption provided by this section is reinstated for machinery and equipment for solar energy systems capable of generating more than one hundred kilowatts AC but no more than five hundred kilowatts AC of electricity, or sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, if installation of the machinery and equipment commences on or after January 1, 2020.</u>

<u>(c) The exemption provided by this section is reinstated for machinery and equipment for solar energy systems capable of generating no more than one hundred kilowatts AC of electricity, or sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, if installation of the machinery and equipment commences on or after July 1, 2019.</u>

((~~(6)~~)) <u>(7)</u> This section expires January 1, ((~~2020~~)) <u>2030</u>.

Sec. 19. RCW 82.12.962 and 2018 c 164 s 7 are each amended to read as follows:

(1)(a) ((~~Except as provided in RCW 82.12.963, consumers who have paid~~)) <u>Subject to the requirements of this section,</u> the tax imposed by RCW 82.12.020 ((~~on~~)) <u>does not apply to</u> machinery and equipment used directly in generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources, or technology that converts otherwise lost energy from exhaust, or to ((~~sales of or charges made for~~)) labor and services rendered in respect to installing such machinery and equipment, ((~~are eligible for an exemption as provided in this section,~~)) but only if the purchaser develops with such machinery, equipment, and labor a facility capable of generating not less than one thousand watts <u>AC</u> of electricity. <u>Except as otherwise provided in this section, the consumer must pay the state and local use tax on the use of such</u>

machinery and equipment and labor and services, and apply to the department for a remittance of the tax paid.

(b) Beginning on July 1, 2011, through ((~~January 1, 2020~~)) December 31, 2019, the amount of the exemption under this subsection (1) is equal to seventy-five percent of the state and local ((~~sales~~)) use tax paid. The consumer is eligible for an exemption under this subsection (1)(b) in the form of a remittance.

((~~(2)~~)) (c) Beginning January 1, 2020, through December 31, 2029, the purchaser is entitled to an exemption, in the form of a remittance, under this subsection (1)(c) in an amount equal to:

(i) Fifty percent of the state and local use tax paid, if:

(A) The exempt purchase is for machinery and equipment or labor and services rendered in respect to installing such machinery and equipment in (a) of this subsection, excluding qualified purchases under (c)(i)(B) of this subsection, and the department of labor and industries certifies that the project includes: Procurement from and contracts with women, minority, or veteran-owned businesses; procurement from and contracts with entities that have a history of complying with federal and state wage and hour laws and regulations; apprenticeship utilization; and preferred entry for workers living in the area where the project is being constructed. In the event that a project is built without one or more of these standards, and a project developer or its designated principal contractor demonstrates that it has made all good faith efforts to meet the standards but was unable to comply due to lack of availability of qualified businesses or local hires, the department of labor and industries may certify that the developer complied with that standard; or

(B) The exempt purchase is for machinery and equipment that is used directly in the generation of electricity by a solar energy system capable of generating more than one hundred kilowatts AC but no more than five hundred kilowatts AC of electricity, or labor and services rendered in respect to installing such machinery and equipment, and the department of labor and industries certifies that the project has met the requirements of (c)(i)(A) of this subsection, and the purchaser has provided the following documentation to the department as part of the application for a remittance:

(I) A copy of the contractor's certificate of registration in compliance with chapter 18.27 RCW;

(II) The contractor's current state unified business identifier number;

(III) A copy of the contractor's proof of industrial insurance coverage for the contractor's employees working in Washington as required in Title 51 RCW; employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and

(IV) Documentation of the contractor's history of compliance with federal and state wage and hour laws and regulations, consistent with (e)(ii)(D) of this subsection;

(ii) Seventy-five percent of the state and local use tax paid, if the department of labor and industries certifies that the project complies with (c)(i)(A) of this subsection and compensates workers at prevailing wage rates determined by local collective bargaining as determined by the department of labor and industries. This subsection (1)(c)(ii) does not apply with respect to solar energy systems described in (c)(i)(B) of this subsection; or

(iii) One hundred percent of the state and local use tax paid, if the department of labor and industries certifies that the project is developed under a community workforce agreement or project labor agreement. This subsection (1)(c)(iii) does not apply with respect to solar energy systems described in (c)(i)(B) of this subsection.

(d) In order to qualify for the remittance under (c) of this subsection, installation of the qualifying machinery and equipment must commence no earlier than January 1, 2020, and be completed by December 31, 2029.

(e) Beginning July 1, 2019, and through December 31, 2029, the consumer is entitled to an exemption under this subsection (1)(e) in an amount equal to one hundred percent of the state and local use tax due on:

(i) Machinery and equipment that is used directly in the generation of electricity by a solar energy system that is capable of generating no more than one hundred kilowatts AC of electricity; or

(ii) Labor and services rendered in respect to installing machinery and equipment exempt under (e)(i) of this subsection, and the seller meets the following requirements at the time of the purchase for which the exemption is claimed:

(A) Has obtained a certificate of registration in compliance with chapter 18.27 RCW;

(B) Has obtained a current state unified business identifier number;

(C) Possesses proof of industrial insurance coverage for the contractor's employees working in Washington as required in Title 51 RCW; employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and

(D) Has had no findings of violations of federal or state wage and hour laws and regulations in a final and binding order by an administrative agency or court of competent jurisdiction in the past twenty-four months.

(f) In order to qualify for the exemption under (e)(ii) of this subsection, installation of the qualifying machinery and equipment must commence no earlier than July 1, 2019, and be completed by December 31, 2029.

(2) The department of labor and industries must initiate an emergency rule making on the effective date of this section to be completed by December 1, 2019, to:

(a) Define and set minimum requirements for all labor standards identified in subsection (1)(c) of this section; and

(b) Set requirements for all good faith efforts under subsection (1)(c)(i) and (ii) of this section, as well as documentation requirements and a certification process. Requirements for all good faith efforts must be designed to maximize the likelihood that the project is completed with said standards and could include: Proactive outreach to firms that are women, minority, and veteran-owned businesses; advertising in local community publications and publications appropriate to identified firms; participating in community job fairs, conferences, and trade shows; and other measures. The certification process and timeline must be designed to prevent undue delay to project development.

(3)(a)(i) A person claiming an exemption in the form of a remittance under subsection (1)(b) and (c) of this section must pay the tax imposed by RCW 82.12.020 and all applicable local use taxes imposed under the authority of chapters 82.14 and 81.104 RCW. The consumer may then apply to the department for remittance in a form and manner prescribed by the department. A consumer may not apply for a remittance under this section more frequently than once per quarter. The consumer must specify the amount of exempted tax claimed and the qualifying purchases or acquisitions for which the exemption is claimed. The consumer must retain, in adequate detail, records to enable the department to determine whether the consumer is entitled to an exemption under this section, including: Invoices; proof of tax paid; and documents describing the machinery and equipment.

(ii) The application for remittance must include a copy of the certificate issued for the project by the department of labor and industries under subsection (1) of this section.

(b) The department must determine eligibility for remittances under this section based on the information provided by the consumer, which is subject to audit verification by the department. The department must on a quarterly basis remit exempted amounts to qualifying consumers who submitted applications during the previous quarter.

((~~(3)~~)) (4) Purchases exempt under RCW 82.08.962 are also exempt from the tax imposed under RCW 82.12.020.

((~~(4)~~)) (5) The definitions in RCW 82.08.962 apply to this section.

((~~(5)~~)) (6) The exemption provided in subsection (1) of this section does not apply:

(a) To machinery and equipment used directly in the generation of electricity using solar energy and capable of generating no more than five hundred kilowatts AC of electricity, or to sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, when first use within this state of such machinery and equipment, or labor and services, occurs after September 30, 2017, and before January 1, 2020, except as otherwise provided in subsection (7) of this section; and

(b) To any other machinery and equipment described in subsection (1)(a) of this section, or to sales of or charges made for labor and services rendered in respect to installing such machinery or equipment, when first use within this state of such machinery and equipment, or labor and services, occurs after December 31, ((~~2019~~)) 2029.

((~~(6)~~)) (7)(a) The exemption provided by this section is reinstated for machinery and equipment for solar energy systems capable of generating more than one hundred kilowatts AC but no more than five hundred kilowatts AC of electricity, or sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, if first use within the state of the machinery and equipment commences on or after January 1, 2020.

(b) The exemption provided by this section is reinstated for machinery and equipment for solar energy systems capable of generating no more than one hundred kilowatts AC of electricity, or sales of or charges made for labor and services rendered in respect to installing such machinery and equipment, if first use within the state of the machinery and equipment commences on or after July 1, 2019.

(8) This section expires January 1, ((~~2020~~)) 2030.

Sec. 20. RCW 80.04.250 and 2011 c 214 s 9 are each amended to read as follows:

(1) The provisions of this section are necessary to ensure that the commission has sufficient flexible authority to determine the value of utility property for rate making purposes and to implement the requirements and full intent of this act.

(2) The commission has power upon complaint or upon its own motion to ascertain and determine the fair value for rate making purposes of the property of any public service company used and useful for service in this state by or during the rate effective period and shall exercise such power whenever it deems such valuation or determination necessary or proper under any of the provisions of this title. ((~~In determining what property is used and useful for providing electric, gas, wastewater company services, or water service, the commission may include the reasonable costs of construction work in progress to the extent that the commission finds that inclusion is in the public interest.~~

~~(2)~~)) The valuation may include consideration of any property of the public service company acquired or constructed by or during the rate effective period, including the reasonable costs of construction work in progress, to the extent that the commission finds that such an inclusion is in the public interest and will yield fair, just, reasonable, and sufficient rates.

(3) The commission may provide changes to rates under this section for up to forty-eight months after the rate effective date using any standard, formula, method, or theory of valuation reasonably calculated to arrive at fair, just, reasonable, and sufficient rates. The commission must establish an appropriate process to identify, review, and approve public service company property that becomes used and useful for service in this state after the rate effective date.

(4) The commission has the power to make revaluations of the property of any public service company from time to time.

((~~(3)~~)) (5) The commission shall, before any hearing is had, notify the complainants and the public service company concerned of the time and place of such hearing by giving at least thirty days' written notice thereof, specifying that at the time and place designated a hearing will be held for the purpose of ascertaining the value of the company's property, used and useful as aforesaid, which notice must be sufficient to authorize the commission to inquire into and pass upon the matters designated in this section.

(6) Nothing in this section limits the commission's authority to consider and implement performance and incentive-based regulation, multiyear rate plans, and other flexible regulatory mechanisms.

NEW SECTION. **Sec. 21.** A new section is added to chapter 80.28 RCW to read as follows:

(1) An electrical company may account for and defer for later consideration by the commission costs incurred in connection with major projects in the electrical company's clean energy action plan pursuant to RCW 19.280.030(1)(l), or selected in the electrical company's solicitation of bids for delivering electric capacity, energy, capacity and energy, or conservation. The deferral in this subsection begins with the date on which the resource begins commercial operation or the effective date of the power purchase agreement and continues for a period not to exceed thirty-six months. However, if during such a period the electrical company files a general rate case or other proceeding for the recovery of such costs, deferral ends on the effective date of the final decision by the commission in such a proceeding. Creation of such a deferral account does not by itself determine the actual costs of the resource or power purchase agreement, whether recovery of any or all of these costs is appropriate, or other issues to be decided by the commission in a general rate case or other proceeding.

(2) The costs that an electrical company may account for and defer for later consideration by the commission pursuant to subsection (1) of this section include all operating and maintenance costs, depreciation, taxes, cost of capital associated with the applicable resource or the execution of a power purchase agreement. Such costs of capital include:

(a) The electrical company's authorized return on equity for any resource acquired or developed by the electrical company; or

(b) For the duration of a power purchase agreement, a rate of return of no less than the authorized cost of debt and no greater than the authorized rate of return of the electrical company, which would be multiplied by the operating expense incurred by the electrical company under the power purchase agreement.

Sec. 22. RCW 43.21F.090 and 1996 c 186 s 106 are each amended to read as follows:

(1) The department shall review the state energy strategy ((~~as developed under section 1, chapter 201, Laws of 1991, periodically with the guidance of an advisory committee. For each review, an advisory committee shall be established with a membership resembling as closely as possible the original energy strategy advisory committee specified under section 1, chapter 201, Laws of 1991.~~)) by December 31, 2020, and at least once every eight years thereafter, subject to funding provided for this purpose, for the purpose of aligning the state energy strategy with the requirements of RCW 43.21F.088 and chapters 19.285 and 19.--- RCW (the new chapter created in section 27 of this act), and the emission reduction targets recommended by the department of ecology under RCW 70.235.040. The department must establish an energy strategy advisory committee for each review to provide guidance to the department in conducting the review. The membership of the energy strategy advisory committee must consist of the following:

(a) One person recommended by investor-owned electric utilities;

(b) One person recommended by investor-owned natural gas utilities;

(c) One person employed by or recommended by a natural gas pipeline serving the state;

(d) One person recommended by suppliers of petroleum products;

(e) One person recommended by municipally owned electric utilities;

(f) One person recommended by public utility districts;

(g) One person recommended by rural electrical cooperatives;

(h) One person recommended by industrial energy users;

(i) One person recommended by commercial energy users;

(j) One person recommended by agricultural energy users;

(k) One person recommended by the association of Washington cities;

(l) One person recommended by the Washington association of counties;

(m) One person recommended by Washington Indian tribes;

(n) One person recommended by businesses in the clean energy industry;

(o) One person recommended by labor unions;

(p) Two persons recommended by civic organizations, one of which must be a representative of a civic organization that represents vulnerable populations;

(q) Two persons recommended by environmental organizations;

(r) One person representing independent power producers;

(s) The chair of the energy facility site evaluation council or the chair's designee;

(t) One of the representatives of the state of Washington to the Pacific Northwest electric power and conservation planning council selected by the governor;

(u) The chair of the utilities and transportation commission or the chair's designee;

(v) One member from each of the two largest caucuses of the house of representatives selected by the speaker of the house of representatives; and

(w) One member from each of the two largest caucuses of the senate selected by the president of the senate.

(2) The chair of the advisory committee must be appointed by the governor from citizen members. The director may establish technical advisory groups as necessary to assist in the development of the strategy. The director shall provide for extensive public involvement throughout the development of the strategy.

(3) Upon completion of a public hearing regarding the advisory committee's advice and recommendations for revisions to the energy strategy, a written report shall be conveyed by the department to the governor and the appropriate legislative committees. ((~~Any~~)) The energy strategy advisory committee established under this section ((~~shall~~)) must be dissolved within three months after their written report is conveyed.

NEW SECTION. **Sec. 23.** (1) By January 1, 2020, the department of commerce must convene an energy and climate policy advisory committee to develop recommendations to the legislature for the coordination of existing resources, or the establishment of new ones, for the purposes of examining the costs and benefits of energy-related policies, programs, functions, activities, and incentives on an on-going basis and conducting other energy-related studies and analyses as may be directed by the legislature.

(2) The advisory committee convened under this section must consist of, at minimum, representatives of each the state's public four-year institutions of higher education, the Pacific Northwest National Laboratory, and the Washington state institute for public policy.

(3) Subject to the availability of amounts appropriated for this specific purpose, and in compliance with RCW 43.01.036, the department of commerce must submit its recommendations in a report to the legislature by December 31, 2020.

(4) This section expires January 1, 2021.

NEW SECTION. **Sec. 24.** By December 31, 2020, the department of health must develop a cumulative impact analysis to designate the communities highly impacted by fossil fuel pollution and climate change in Washington. The cumulative impact analysis may integrate with and build upon other concurrent cross-agency efforts in developing a cumulative impact analysis and population tracking resources used by the department of health and analysis performed by the University of Washington department of environmental and occupational health sciences.

NEW SECTION. **Sec. 25.** (1) The legislature finds that based on current technology, there will likely need to be upgrades to electricity transmission and distribution infrastructure across the state to meet the goals specified in this act. These facilities require a significant planning horizon to deliver electricity generation sites to retail electric load. Pursuant to RCW 80.50.040, the energy facility site evaluation council chair shall convene a transmission corridors work group and report its findings to the governor and the appropriate committees of the legislature by December 31, 2022.

(2) The work group must include one representative from each of the following state agencies: The department of commerce, the utilities and transportation commission, the department of ecology, the department of fish and wildlife, the department of natural resources, the department of transportation, the department of

archaeology and historic preservation, and the state military department. The work group shall also include two representatives designated by the association of Washington cities, one from central or eastern Washington and one from western Washington; two representatives designated by the Washington state association of counties, one from central or eastern Washington and one from western Washington; two members designated by sovereign tribal governments; one member representing affected utility industries; one member representing public utility districts; and two members representing statewide environmental organizations. The energy facility site evaluation council chair shall invite the Bonneville power administration and the United States department of defense to each appoint an ex officio work group member.

(3) The work group shall:

(a) Review the need for upgraded and new electricity transmission and distribution facilities to improve reliability, relieve congestion, and enhance the capability of the transmission and distribution facilities in the state to deliver electricity from electric generation, nonemitting electric generation, or renewable resources to retail electric load;

(b) Identify areas where transmission and distribution facilities may need to be enhanced or constructed; and

(c) Identify environmental review options that may be required to complete the designation of such corridors and recommend ways to expedite review of transmission projects without compromising required environmental protection.

(4) The energy facility site evaluation council may contract services to assist in the work group efforts.

(5) This section expires January 1, 2023.

NEW SECTION. **Sec. 26.** This chapter may be known and cited as the Washington clean energy transformation act.

NEW SECTION. **Sec. 27.** Sections 1 through 13 and 26 of this act constitute a new chapter in Title 19 RCW.

Sec. 28. RCW 19.285.030 and 2017 c 315 s 1 are each amended to read as follows:

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Attorney general" means the Washington state office of the attorney general.

(2) "Auditor" means: (a) The Washington state auditor's office or its designee for qualifying utilities under its jurisdiction that are not investor-owned utilities; or (b) an independent auditor selected by a qualifying utility that is not under the jurisdiction of the state auditor and is not an investor-owned utility.

(3)(a) "Biomass energy" includes: (i) Organic by-products of pulping and the wood manufacturing process; (ii) animal manure; (iii) solid organic fuels from wood; (iv) forest or field residues; (v) untreated wooden demolition or construction debris; (vi) food waste and food processing residuals; (vii) liquors derived from algae; (viii) dedicated energy crops; and (ix) yard waste.

(b) "Biomass energy" does not include: (i) Wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; (ii) wood from old growth forests; or (iii) municipal solid waste.

(4) "Coal transition power" has the same meaning as defined in RCW 80.80.010.

(5) "Commission" means the Washington state utilities and transportation commission.

(6) "Conservation" means any reduction in electric power consumption resulting from increases in the efficiency of energy use, production, or distribution.

(7) "Cost-effective" has the same meaning as defined in RCW 80.52.030.

(8) "Council" means the Washington state apprenticeship and training council within the department of labor and industries.

(9) "Customer" means a person or entity that purchases electricity for ultimate consumption and not for resale.

(10) "Department" means the department of commerce or its successor.

(11) "Distributed generation" means an eligible renewable resource where the generation facility or any integrated cluster of such facilities has a generating capacity of not more than five megawatts.

(12) "Eligible renewable resource" means:

(a) Electricity from a generation facility powered by a renewable resource other than freshwater that commences operation after March 31, 1999, where: (i) The facility is located in the Pacific

Northwest; or (ii) the electricity from the facility is delivered into Washington state on a real-time basis without shaping, storage, or integration services;

(b) Incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation projects owned by a qualifying utility and located in the Pacific Northwest where the additional generation does not result in new water diversions or impoundments;

(c) Hydroelectric generation from a project completed after March 31, 1999, where the generation facility is located in irrigation pipes, irrigation canals, water pipes whose primary purpose is for conveyance of water for municipal use, and wastewater pipes located in Washington where the generation does not result in new water diversions or impoundments;

(d) Qualified biomass energy;

(e) For a qualifying utility that serves customers in other states, electricity from a generation facility powered by a renewable resource other than freshwater that commences operation after March 31, 1999, where: (i) The facility is located within a state in which the qualifying utility serves retail electrical customers; and (ii) the qualifying utility owns the facility in whole or in part or has a long-term contract with the facility of at least twelve months or more; ((~~or~~))

(f)(i) Incremental electricity produced as a result of a capital investment completed after January 1, 2010, that increases, relative to a baseline level of generation prior to the capital investment, the amount of electricity generated in a facility that generates qualified biomass energy as defined under subsection (18)(c)(ii) of this section and that commenced operation before March 31, 1999.

(ii) Beginning January 1, 2007, the facility must demonstrate its baseline level of generation over a three-year period prior to the capital investment in order to calculate the amount of incremental electricity produced.

(iii) The facility must demonstrate that the incremental electricity resulted from the capital investment, which does not include expenditures on operation and maintenance in the normal course of business, through direct or calculated measurement<u>;</u>

<u>(g) That portion of incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, attributable to a qualifying utility's share of the electricity</u>

output from hydroelectric generation projects whose energy output is marketed by the Bonneville power administration where the additional generation does not result in new water diversions or impoundments; or

(h) The environmental attributes, including renewable energy credits, from (g) of this subsection transferred to investor-owned utilities pursuant to the Bonneville power administration's residential exchange program.

(13) "Investor-owned utility" has the same meaning as defined in RCW 19.29A.010.

(14) "Load" means the amount of kilowatt-hours of electricity delivered in the most recently completed year by a qualifying utility to its Washington retail customers.

(15)(a) "Nonpower attributes" means all environmentally related characteristics, exclusive of energy, capacity reliability, and other electrical power service attributes, that are associated with the generation of electricity from a renewable resource, including but not limited to the facility's fuel type, geographic location, vintage, qualification as an eligible renewable resource, and avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases.

(b) "Nonpower attributes" does not include any aspects, claims, characteristics, and benefits associated with the on-site capture and destruction of methane or other greenhouse gases at a facility through a digester system, landfill gas collection system, or other mechanism, which may be separately marketable as greenhouse gas emission reduction credits, offsets, or similar tradable commodities. However, these separate avoided emissions may not result in or otherwise have the effect of attributing greenhouse gas emissions to the electricity.

(16) "Pacific Northwest" has the same meaning as defined for the Bonneville power administration in section 3 of the Pacific Northwest electric power planning and conservation act (94 Stat. 2698; 16 U.S.C. Sec. 839a).

(17) "Public facility" has the same meaning as defined in RCW 39.35C.010.

(18) "Qualified biomass energy" means electricity produced from a biomass energy facility that: (a) Commenced operation before March 31, 1999; (b) contributes to the qualifying utility's load; and (c) is owned either by: (i) A qualifying utility; or (ii) an industrial

facility that is directly interconnected with electricity facilities that are owned by a qualifying utility and capable of carrying electricity at transmission voltage.

(19) "Qualifying utility" means an electric utility, as the term "electric utility" is defined in RCW 19.29A.010, that serves more than twenty-five thousand customers in the state of Washington. The number of customers served may be based on data reported by a utility in form 861, "annual electric utility report," filed with the energy information administration, United States department of energy.

(20) "Renewable energy credit" means a tradable certificate of proof of ((~~at least~~)) one megawatt-hour of an eligible renewable resource ((~~where the generation facility is not powered by freshwater~~)). The certificate includes all of the nonpower attributes associated with that one megawatt-hour of electricity, and the certificate is verified by a renewable energy credit tracking system selected by the department.

(21) "Renewable resource" means: (a) Water; (b) wind; (c) solar energy; (d) geothermal energy; (e) landfill gas; (f) wave, ocean, or tidal power; (g) gas from sewage treatment facilities; (h) biodiesel fuel ((~~as defined in RCW 82.29A.135~~)) that is not derived from crops raised on land cleared from old growth or first-growth forests where the clearing occurred after December 7, 2006; or (i) biomass energy.

(22) "Rule" means rules adopted by an agency or other entity of Washington state government to carry out the intent and purposes of this chapter.

(23) "Year" means the twelve-month period commencing January 1st and ending December 31st.

Sec. 29. RCW 19.285.040 and 2017 c 315 s 2 are each amended to read as follows:

(1) Each qualifying utility shall pursue all available conservation that is cost-effective, reliable, and feasible.

(a) By January 1, 2010, using methodologies consistent with those used by the Pacific Northwest electric power and conservation planning council in the most recently published regional power plan as it existed on June 12, 2014, or a subsequent date as may be provided by the department or the commission by rule, each qualifying utility shall identify its achievable cost-effective conservation potential through 2019. Nothing in the rule adopted under this subsection precludes a qualifying utility from using its utility specific conservation measures, values, and assumptions in identifying its achievable cost-effective conservation potential. At least every two years thereafter, the qualifying utility shall review and update this assessment for the subsequent ten-year period.

(b) Beginning January 2010, each qualifying utility shall establish and make publicly available a biennial acquisition target for cost-effective conservation consistent with its identification of achievable opportunities in (a) of this subsection, and meet that target during the subsequent two-year period. At a minimum, each biennial target must be no lower than the qualifying utility's pro rata share for that two-year period of its cost-effective conservation potential for the subsequent ten-year period.

(c)(i) Except as provided in (c)(ii) and (iii) of this subsection, beginning on January 1, 2014, cost-effective conservation achieved by a qualifying utility in excess of its biennial acquisition target may be used to help meet the immediately subsequent two biennial acquisition targets, such that no more than twenty percent of any biennial target may be met with excess conservation savings.

(ii) Beginning January 1, 2014, a qualifying utility may use single large facility conservation savings in excess of its biennial target to meet up to an additional five percent of the immediately subsequent two biennial acquisition targets, such that no more than twenty-five percent of any biennial target may be met with excess conservation savings allowed under all of the provisions of this section combined. For the purposes of this subsection (1)(c)(ii), "single large facility conservation savings" means cost-effective conservation savings achieved in a single biennial period at the premises of a single customer of a qualifying utility whose annual electricity consumption prior to the conservation savings exceeded five average megawatts.

(iii) Beginning January 1, 2012, and until December 31, 2017, a qualifying utility with an industrial facility located in a county with a population between ninety-five thousand and one hundred fifteen thousand that is directly interconnected with electricity facilities that are capable of carrying electricity at transmission voltage may use cost-effective conservation from that industrial facility in excess of its biennial acquisition target to help meet the immediately subsequent two biennial acquisition targets, such that no more than twenty-five percent of any biennial target may be met with excess conservation savings allowed under all of the provisions of this section combined.

(d) In meeting its conservation targets, a qualifying utility may count high-efficiency cogeneration owned and used by a retail electric customer to meet its own needs. High-efficiency cogeneration is the sequential production of electricity and useful thermal energy from a common fuel source, where, under normal operating conditions, the facility has a useful thermal energy output of no less than thirty-three percent of the total energy output. The reduction in load due to high-efficiency cogeneration shall be: (i) Calculated as the ratio of the fuel chargeable to power heat rate of the cogeneration facility compared to the heat rate on a new and clean basis of a best-commercially available technology combined-cycle natural gas-fired combustion turbine; and (ii) counted towards meeting the biennial conservation target in the same manner as other conservation savings.

(e) The commission may determine if a conservation program implemented by an investor-owned utility is cost-effective based on the commission's policies and practice.

(f) The commission may rely on its standard practice for review and approval of investor-owned utility conservation targets.

(2)(a) Except as provided in (j) of this subsection, each qualifying utility shall use eligible renewable resources or acquire equivalent renewable energy credits, or any combination of them, to meet the following annual targets:

(i) At least three percent of its load by January 1, 2012, and each year thereafter through December 31, 2015;

(ii) At least nine percent of its load by January 1, 2016, and each year thereafter through December 31, 2019; and

(iii) At least fifteen percent of its load by January 1, 2020, and each year thereafter.

(b) A qualifying utility may count distributed generation at double the facility's electrical output if the utility: (i) Owns or has contracted for the distributed generation and the associated renewable energy credits; or (ii) has contracted to purchase the associated renewable energy credits.

(c) In meeting the annual targets in (a) of this subsection, a qualifying utility shall calculate its annual load based on the average of the utility's load for the previous two years.

(d) A qualifying utility shall be considered in compliance with an annual target in (a) of this subsection if: (i) The utility's weather-adjusted load for the previous three years on average did not increase over that time period; (ii) after December 7, 2006, the utility did not commence or renew ownership or incremental purchases of electricity from resources other than coal transition power or renewable resources other than on a daily spot price basis and the electricity is not offset by equivalent renewable energy credits; and (iii) the utility invested at least one percent of its total annual retail revenue requirement that year on eligible renewable resources, renewable energy credits, or a combination of both.

(e) ((~~The requirements of this section may be met for any given year with renewable energy credits produced during that year, the preceding year, or the subsequent year. Each renewable energy credit may be used only once to meet the requirements of this section~~)) A qualifying utility may use renewable energy credits to meet the requirements of this section, subject to the limitations of this subsection.

(i) A renewable energy credit from electricity generated by a resource other than freshwater may be used to meet a requirement applicable to the year in which the credit was created, the year before the year in which the credit was created, or the year after the year in which the credit was created.

(ii) A renewable energy credit from electricity generated by freshwater:

(A) May only be used to meet a requirement applicable to the year in which the credit was created; and

(B) Must be acquired by the qualifying utility through ownership of the generation facility or through a transaction that conveyed both the electricity and the nonpower attributes of the electricity.

(iii) A renewable energy credit transferred to an investor-owned utility pursuant to the Bonneville power administration's residential exchange program may not be used by any utility other than the utility receiving the credit from the Bonneville power administration.

(iv) Each renewable energy credit may only be used once to meet the requirements of this section and must be retired using procedures of the renewable energy credit tracking system.

(f) In complying with the targets established in (a) of this subsection, a qualifying utility may not count:

(i) Eligible renewable resources or distributed generation where the associated renewable energy credits are owned by a separate entity; or

(ii) Eligible renewable resources or renewable energy credits obtained for and used in an optional pricing program such as the program established in RCW 19.29A.090.

(g) Where fossil and combustible renewable resources are cofired in one generating unit located in the Pacific Northwest where the cofiring commenced after March 31, 1999, the unit shall be considered to produce eligible renewable resources in direct proportion to the percentage of the total heat value represented by the heat value of the renewable resources.

(h)(i) A qualifying utility that acquires an eligible renewable resource or renewable energy credit may count that acquisition at one and two-tenths times its base value:

(A) Where the eligible renewable resource comes from a facility that commenced operation after December 31, 2005; and

(B) Where the developer of the facility used apprenticeship programs approved by the council during facility construction.

(ii) The council shall establish minimum levels of labor hours to be met through apprenticeship programs to qualify for this extra credit.

(i) A qualifying utility shall be considered in compliance with an annual target in (a) of this subsection if events beyond the reasonable control of the utility that could not have been reasonably anticipated or ameliorated prevented it from meeting the renewable energy target. Such events include weather-related damage, mechanical failure, strikes, lockouts, and actions of a governmental authority that adversely affect the generation, transmission, or distribution of an eligible renewable resource under contract to a qualifying utility.

(j)(i) Beginning January 1, 2016, only a qualifying utility that owns or is directly interconnected to a qualified biomass energy facility may use qualified biomass energy to meet its compliance obligation under this subsection.

(ii) A qualifying utility may no longer use electricity and associated renewable energy credits from a qualified biomass energy facility if the associated industrial pulping or wood manufacturing facility ceases operation other than for purposes of maintenance or upgrade.

(k) An industrial facility that hosts a qualified biomass energy facility may only transfer or sell renewable energy credits associated with qualified biomass energy generated at its facility to the qualifying utility with which it is directly interconnected with facilities owned by such a qualifying utility and that are capable of carrying electricity at transmission voltage. The qualifying utility may only use an amount of renewable energy credits associated with qualified biomass energy that are equivalent to the proportionate amount of its annual targets under (a)(ii) and (iii) of this subsection that was created by the load of the industrial facility. A qualifying utility that owns a qualified biomass energy facility may not transfer or sell renewable energy credits associated with qualified biomass energy to another person, entity, or qualifying utility.

(l) Beginning January 1, 2020, a qualifying utility may use eligible renewable resources as identified under RCW 19.285.030(12)(g) and (h) to meet its compliance obligation under this subsection (2). A qualifying utility may not transfer or sell these eligible renewable resources to another utility for compliance purposes under this chapter.

(m) Beginning January 1, 2030, a qualifying utility is considered to be in compliance with an annual target in (a) of this subsection if the utility uses electricity from: (i) Renewable resources and renewable energy credits as defined in RCW 19.285.030; and (ii) nonemitting electric generation as defined in section 2 of this act, in an amount equal to one hundred percent of the utility's average annual retail electric load. Nothing in this subsection relieves the requirements of a qualifying utility to comply with subsection (1) of this section.

(3) Utilities that become qualifying utilities after December 31, 2006, shall meet the requirements in this section on a time frame comparable in length to that provided for qualifying utilities as of December 7, 2006.

NEW SECTION. **Sec. 30.** If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

NEW SECTION. **Sec. 31.** This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and takes effect immediately.

Passed by the Senate April 22, 2019.
Passed by the House April 11, 2019.
Approved by the Governor May 7, 2019.
Filed in Office of Secretary of State May 13, 2019.

--- END ---

Attachment 14

HIGHLY CONFIDENTIAL

Status of Pending Colstrip Negotiations

February 21, 2019

PSE will transfer its interest in Units 3&4 to [redacted] for $1 under the following terms and conditions:

- [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
- [redacted]
- [redacted]
  - [redacted]
- Miscellaneous
  - [redacted]
  - [redacted]
  - [redacted]

[redacted]

REDACTED VERSION

Attachment 15

From: Secrist, Steven
Sent: Thursday, May 09, 2019 1:04 PM
To: 'Barbara Gordon (barbara.gordon@live.com)' <barbara.gordon@live.com>; 'Christopher Trumpy' <cmtrumpy@shaw.ca>; Harris, Kimberly <kimberly.harris@pse.com>; 'Hind, Christopher' <chind@cppib.com>; 'Kenton Bradbury' <KBradbury@Omers.com>; 'Martijn Verwoest (martijn.verwoest@pggm.nl)' <martijn.verwoest@pggm.nl>; 'Mary McWilliams (maryoliver.mcwilliams@gmail.com)' <maryoliver.mcwilliams@gmail.com>; 'Paul McMillan (phcmcmillan@gmail.com)' <phcmcmillan@gmail.com>; 'Richard Dinneny (richard.dinneny@bcimc.com)' <richard.dinneny@bcimc.com>; 'Scott Armstrong' <armstrongs215@gmail.com>; 'Steve Hooper (shooper@ignitionpartners.com)' <shooper@ignitionpartners.com>; 'Steven Zucchet (szucchet@omers.com)' <szucchet@omers.com>
Subject: Highly Confidential - draft Colstrip term sheet

Highly Confidential
Attorney/Client Privileged Communication
Do Not Forward to Others

Dear Directors:

During Wednesday's conference call discussion regarding the ongoing Colstrip negotiations, there was a request to see the current draft of the term sheet. I am attaching a copy of it but need to note that this is a "snapshot-in-time" draft of a document that is still very much in negotiations.

Steve Secrist |Senior Vice President and General Counsel
Puget Sound Energy
10885 N.E. 4th Street, Bellevue WA 98004
Phone (425) 462-3178

[redacted] Draft of April 22, 2019
CONFIDENTIAL
PREPARED BY COUNSEL

PRELIMINARY, NON-BINDING TRANSACTION TERM SHEET
FOR DISCUSSION PURPOSES ONLY

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Terms and Conditions of the Purchase and Sale of PSE's Interests in Colstrip Units 3&4

General:	[redacted]

[redacted]

[redacted]

REDACTED
VERSION

[redacted] Draft of April 22, 2019
CONFIDENTIAL
PREPARED BY COUNSEL

[redacted]

Purchase Price: [redacted]

Talen-PSE Power Purchase Agreements [redacted]

Purchased Assets: [redacted]

Retained Assets: [redacted]

- [redacted]

---

2 [redacted]
3
4

[redacted]

REDACTED
VERSION

[redacted]

- [redacted]
- [redacted]

[redacted]

Assumed Liabilities: [redacted]

Excluded Liabilities: [redacted]

	[redacted]
Environmental Costs:	[redacted]
Unit 3 Shutdown Date and Transition Costs:	[redacted]
	[redacted]
Pension Funding Costs:	[redacted]
Dispute Resolution or Review Mechanisms with Respect to Costs:	[redacted]
Indemnification:	[redacted]

[redacted]

Consequential Damages Waiver: [redacted]

Conditions Precedent to Transaction: [redacted]

- [redacted]
  - [redacted]
  - [redacted]

REDACTED VERSION

[redacted]

- [redacted]
- [redacted]
- [redacted]

- [redacted]
  - [redacted]
- [redacted]
  - [redacted]

[5] [redacted]

[redacted]

REDACTED
VERSION

- o [redacted]

Contemporaneous Entry into Agreements:	[redacted]
	• [redacted] • [redacted] • [redacted]
General Release:	[redacted]
Termination Rights:	[redacted]
Purchasers Cost Reimbursement:	[redacted]
Disclosure/Confidentiality/ Privilege:	[redacted]

[redacted]

REDACTED
VERSION

[redacted] Draft of April 22, 2019
CONFIDENTIAL
PREPARED BY COUNSEL

[redacted]

[redacted]

Governing Law: [redacted]

[redacted]

REDACTED
VERSION

EXHIBIT A

[redacted]

(see attached)

[redacted]

REDACTED
VERSION

Attachment 16

https://billingsgazette.com/news/state-and-regional/save-colstrip-plan-falls-through-on-last-day-of-montana/article_d44e457f-d7a6-517f-bc47-e4415354c6e3.html

'Save Colstrip' plan falls through on last day of Montana legislature

By TOM LUTEY tlutey@billingsgazette.com

Apr 25, 2019

In the end, the 2019 Legislature's major Colstrip plan was a stalled solution that couldn't catch a ride.

Lawmakers ended the 87-day session Thursday afternoon with amendments drawn up to commit customers of NorthWestern Energy to covering debts associated with the utility's potential purchase of Colstrip Power Plant generation and transmission lines.

Billed as a way to keep Colstrip Power Plant operating as the coal-fired generator's other utility owners left, the proposal failed to pass both chambers of the Legislature. Afterward, Republican leaders lamented the loss.

"The Senate saw the merit of it and we pursued it. We did it in a transparent fashion. We heard from people that they had some concerns about the bill and we modified it on its way over to the House," said Scott Sales, Senate president. "It's a huge issue. I don't think it's going to go away. We need to pay attention to it and hopefully future generations, at least in the next legislature it will get the attention it deserves."

House lawmakers killed the proposal, embodied in Senate Bill 331, on a strong bipartisan vote April 16, after which the bills' sponsors, Republican Sens. Tom Richmond, of Billings, and Duane Ankney, of Colstrip, drafted amendments to be added to two surviving energy bills. But neither of those bills were ever amended. One potential vessel for the Colstrip bill died awaiting action in conference committee. House Bill 22, which dealt with energy contracts, needed a committee upgrade to accommodate a Colstrip overhaul.

"I attribute it to kind an agreement across the aisle that this is not the right thing to do and that came from the progressive Democrats and the hard right," said Rep. Tom Woods, D-Bozeman, summarizing the coalition that turned back the legislation. Those lawmakers recognized the Colstrip bill not as a means to save the power plant, but rather a way to bind NorthWestern customers to debt without exposing the terms to the scrutiny of the Public Service Commission.

As part of the plan, the PSC, which balances customers' right to a fair price with the utility's opportunity to earn an authorized cost of capital, was prevented from turning back NorthWestern's Colstrip purchase, even if the commission concluded the deal was bad for ratepayers.

There's nothing stopping the utility from presenting to the PSC a plan to buy a larger share of Colstrip generation and transmission. If the company doesn't want to bake the costs into customer rates, it can make the purchase without PSC approval. NorthWestern says it will only pay a dollar for its increased share of the power plant, but hasn’t said what an added ownership share of Colstrip transmission lines would cost.

“I would assume that people appreciate that for once the company lost and didn’t get their way,” Woods said. “At the end of the day, the company could have done what they’re saying they wanted. They can still buy Colstrip on their own. Go for it. Take the risk. Do you want to grab more of the transmission? Go for it. Take the risk. That’s what businesses do. What this has been about is getting this into the rate base.”

NorthWestern Energy still sees acquiring a larger share of Colstrip transmission and generation as beneficial, said Jo Dee Black, a company spokeswoman. The company sees a need for reliable base load power, and that’s not going away.

“We support this effort, and we’ll certainly develop a plan to address this ongoing critical need,” Black said. “We’re disappointed, obviously.”

Black said NorthWestern saw increased Colstrip ownership as a way to secure electricity at a low generation cost. There’s more than generation rolled into the electricity bills of utility customers, but the cost of generation for the newly acquired Colstrip share was expected to be less than what NorthWestern currently incurs on its 30 percent share of Colstrip Unit 4.

There was a second piece of legislation, House Bill 597, that appeared headed to conference committee for a Colstrip makeover, but never made it that far. Thursday, the bill’s sponsor, Rep. Daniel Zolnikov, persuaded lawmakers to pull 597 back from conference to be passed as is without the Colstrip amendments. The bill should help customers, Zolnikov said.

“I’m just excited to be actually fixing some of the energy laws and allowing oversight on planning. And more importantly, this allows the Montana Consumer Counsel to ensure that competitive solicitation is overseen correctly,” Zolnikov said.

The Consumer Counsel is the constitutionally created state advocate for customers of monopoly utilities. When it comes to utilities like NorthWestern or Montana Dakota Utilities selecting energy projects to power Montana customers, Zolnikov wants that advocate involved early, looking at available options and not just a single project brought forth by the utility at a later stage. It’s the latter situation that now occurs, which Zolnikov wrote 597 to fix.

Attachment 17

Scenario: Ongoing Operation 2020-2042
5/22/2019

Line	*$ in millions*	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1	PSE's Share of Unit 3&4 output (MWh)	2,546,923	2,546,923	2,754,082	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632
2													
3	**REVENUE REQUIREMENT CALC.**												
4													
5	Gross Plant	$601	$601	$601	$601	$601	$601						
6	Accum Depreciation	$407	$446	$485	$524	$563	$602						
7	Net Plant	$195	$156	$117	$78	$39	($0)						
8	DFIT	($24)	($21)	($17)	($14)	($11)	($0)						
9	Total Rate Base	$171	$135	$99	$64	$28	($0)						
10													
11													
12	Average Ratebase	$189	$153	$117	$82	$46	$14						
13	PreTax Return	8.82%	8.82%	8.82%	8.82%	8.82%	8.82%						
14	Return on Ratebase	$17	$13	$10	$7	$4	$1						
15													
16	Operating Expenses (line 35)	$109	$107	$104	$104	$108	$112						
17	Depreciation	$39	$39	$39	$39	$39	$39						
18	**Revenue Requirement**	**$164**	**$159**	**$153**	**$150**	**$151**	**$152**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
19													
20	**Colstrip Operations**												
21	Capital Spend	$8	$28	$23	$24	$25	$26	$27	$28	$28	$29	$30	$31
22	Fixed Operating Expenses	$28	$6	$5	$6	$5	$6	$6	$6	$7	$7	$7	$7
23	Variable O&M	$5	$5	$5	$5	$6	$6	$6	$6	$3	$3	$3	$4
24	Coal Variable	$28	$28	$30	$30	$30	$31	$32	$33	$34	$35	$36	$37
25	Coal Fixed	$28	$28	$30	$30	$30	$31	$32	$33	$34	$35	$36	$37
26	Power Costs Savings (Market Value)							($73)	($80)	($81)	($84)	($86)	($89)
27	**Colstrip Operations Expenses**	**$97**	**$95**	**$93**	**$95**	**$96**	**$100**	**$30**	**$26**	**$25**	**$25**	**$26**	**$26**
28													
29	**PSE Expenses**												
30	Property Taxes	$7	$7	$7	$7	$7	$7	$7	$7	$7	$7	$7	$7
31	Legal Fees	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
32	Remediation Costs	$4	$4	$3	$1	$4	$4	$4	$1	$4	$4	$4	$4
33	**Total PSE Expenses**	**12**	**12**	**11**	**9**	**12**	**12**	**12**	**9**	**12**	**12**	**12**	**12**
34													
35	**Total Expenses**	**$109**	**$107**	**$104**	**$104**	**$108**	**$112**	**$42**	**$36**	**$37**	**$37**	**$38**	**$39**
36													
37													
38	**EBITDA**	**$56**	**$52**	**$49**	**$46**	**$43**	**$40**	**($42)**	**($36)**	**($37)**	**($37)**	**($38)**	**($39)**
39													
40	Depreciation	$39	$39	$39	$39	$39	$39	$0	$0	$0	$0	$0	$0
41	Taxes	$2	$2	$1	$1	$1	$0	($9)	($7)	($8)	($8)	($8)	($8)
42	**Operating Income**	**$14**	**$12**	**$9**	**$6**	**$3**	**$1**	**($33)**	**($28)**	**($29)**	**($29)**	**($30)**	**($31)**
43													
44	**Interest**	**$6**	**$5**	**$4**	**$2**	**$1**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
45													
46	**Net Income**	**$9**	**$7**	**$5**	**$4**	**$2**	**$1**	**($33)**	**($28)**	**($29)**	**($29)**	**($30)**	**($31)**
47													
48	**Cash Flow**												
49	Operating Income	**$14**	**$12**	**$9**	**$6**	**$3**	**$1**	**($33)**	**($28)**	**($29)**	**($29)**	**($30)**	**($31)**
50	Tax Benefit of Interest	($1)	$0	$0	$0	$0	$0						
51	Depreciation	$39	$39	$39	$39	$39	$39	$0	$0	$0	$0	$0	$0
52	Deferred Tax	($3)	($3)	($3)	($3)	($3)	($11)	$0	$0	$0	$0	$0	$0
53	**Unlevered Cash Flow**	**$49**	**$47**	**$45**	**$42**	**$39**	**$30**	**($33)**	**($28)**	**($29)**	**($29)**	**($30)**	**($31)**
54													
55	**Cash Flow 2020-2042 NPV @ 6.97%**	**$39**											
56	**Cash Flow 1st 5 years NPV**	**$203**											
57	**PV Cost to the Customers**	**$641**											

Scenario: Ongoing Operation 2020-2042

5/22/2019

Line	*$ in millions*	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1	PSE's Share of Unit 3&4 output (MWh)	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632
2												
3	**REVENUE REQUIREMENT CALC.**											
4												
5	Gross Plant											
6	Accum Depreciation											
7	Net Plant											
8	DFIT											
9	Total Rate Base											
10												
11												
12	Average Ratebase											
13	PreTax Return											
14	Return on Ratebase											
15												
16	Operating Expenses (line 35)											
17	Depreciation											
18	**Revenue Requirement**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
19												
20	**Colstrip Operations**											
21	Capital Spend	$32	$33	$34	$35	$36	$37	$38	$39	$41	$42	$43
22	Fixed Operating Expenses	$7	$8	$8	$8	$8	$9	$9	$9	$9	$10	$10
23	Variable O&M	$4	$4	$4	$4	$4	$4	$4	$5	$5	$5	$5
24	Coal Variable	$38	$39	$40	$42	$43	$44	$46	$47	$48	$50	$51
25	Coal Fixed	$38	$39	$40	$42	$43	$44	$46	$47	$48	$50	$51
26	Power Costs Savings (Market Value)	($92)	($98)	($104)	($112)	($124)	($129)	($139)	($144)	($148)	($153)	($157)
27	**Colstrip Operations Expenses**	**$27**	**$25**	**$22**	**$18**	**$11**	**$10**	**$4**	**$3**	**$3**	**$3**	**$3**
28												
29	**PSE Expenses**											
30	Property Taxes	$7	$7	$7	$7	$7	$7	$7	$7	$7	$7	$7
31	Legal Fees	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
32	Remediation Costs	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4
33	**Total PSE Expenses**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
34												
35	**Total Expenses**	**$39**	**$37**	**$34**	**$30**	**$23**	**$22**	**$16**	**$15**	**$15**	**$15**	**$15**
36												
37												
38	**EBITDA**	**($39)**	**($37)**	**($34)**	**($30)**	**($23)**	**($22)**	**($16)**	**($15)**	**($15)**	**($15)**	**($15)**
39												
40	Depreciation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
41	Taxes	($8)	($8)	($7)	($6)	($5)	($5)	($3)	($3)	($3)	($3)	($3)
42	**Operating Income**	**($31)**	**($30)**	**($27)**	**($24)**	**($18)**	**($17)**	**($13)**	**($12)**	**($12)**	**($12)**	**($12)**
43												
44	**Interest**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
45												
46	**Net Income**	**($31)**	**($30)**	**($27)**	**($24)**	**($18)**	**($17)**	**($13)**	**($12)**	**($12)**	**($12)**	**($12)**
47												
48	**Cash Flow**											
49	Operating Income	($31)	($30)	($27)	($24)	($18)	($17)	($13)	($12)	($12)	($12)	($12)
50	Tax Benefit of Interest											
51	Depreciation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
52	Deferred Tax	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
53	**Unlevered Cash Flow**	**($31)**	**($30)**	**($27)**	**($24)**	**($18)**	**($17)**	**($13)**	**($12)**	**($12)**	**($12)**	**($12)**
54												
55	**Cash Flow 2020-2042 NPV @ 6.97%**											
56	**Cash Flow 1st 5 years NPV**											
57	**PV Cost to the Customers**											

Scenario: 5-year PPA with Talen 2020-2025
5/22/2019

Line	*$ in millions*	2020	2021	2022	2023	2024	2025
1	PSE's Share of Unit 3&4 output (MWh)	2,546,923	2,546,923	2,754,082	2,758,632	2,758,632	2,758,632
2							
3	**REVENUE REQUIREMENT CALC.**						
4							
5	Gross Plant	$601	$601	$601	$601	$601	$601
6	Accum Depreciation	$407	$446	$485	$524	$563	$602
7	Net Plant	$195	$156	$117	$78	$39	($0)
8	DFIT	($24)	($21)	($17)	($14)	($11)	($0)
9	Total Rate Base	$171	$135	$99	$64	$28	($0)
10							
11							
12	Average Ratebase	$189	$153	$117	$82	$46	$14
13	PreTax Return	8.82%	8.82%	8.82%	8.82%	8.82%	8.82%
14	Return on Ratebase	$17	$13	$10	$7	$4	$1
15							
16	Operating Expenses (line 35)	$109	$107	$104	$104	$108	$128
17	Depreciation	$39	$39	$39	$39	$39	$39
18	**Revenue Requirement**	**$164**	**$159**	**$153**	**$150**	**$151**	**$152**
19							
20	**Colstrip Operations**						
21	Capital	$8	$28	$23	$24	$25	$13
22	Fixed Operating Expenses	$28	$6	$5	$6	$5	$3
23	Variable O&M	$5	$5	$5	$5	$6	$3
24	Coal Variable	$28	$28	$30	$30	$30	$16
25	Coal Fixed	$28	$28	$30	$30	$30	$16
	Market Rate						**50**
26	Replacement Power						$69
27	**Colstrip Operations Expenses**	**$97**	**$95**	**$93**	**$95**	**$96**	**$119**
28							
29	**PSE Expenses**						
30	Property Taxes	$7	$7	$7	$7	$7	$4
31	Legal Fees	$1	$1	$1	$1	$1	$1
32	Remediation Costs	$4	$4	$3	$1	$4	$4
33	**Total PSE Expenses**	**12**	**12**	**11**	**9**	**12**	**9**
34							
35	**Total Expenses**	**$109**	**$107**	**$104**	**$104**	**$108**	**$128**
36							
37	**Premium**	**$9**	**$18**	**$18**	**$18**	**$18**	**$9**
38							
39	**EBITDA**	**$47**	**$34**	**$31**	**$28**	**$25**	**$16**
40							
41	Depreciation	$39	$39	$39	$39	$39	$39
42	Taxes	$0	($2)	($2)	($3)	($3)	($5)
43	**Operating Income**	**$7**	**($3)**	**($5)**	**($8)**	**($11)**	**($18)**
44							
45	**Interest**	**$6**	**$5**	**$4**	**$2**	**$1**	**$0**
46							
47	**Net Income**	**$2**	**($7)**	**($9)**	**($10)**	**($12)**	**($19)**
48							
49	**Cash Flow**						
50	Operating Income	**$7**	**($3)**	**($5)**	**($8)**	**($11)**	**($18)**
51	Tax Benefit of Interest	($1)	$0	$0	$0	$0	$0
52	Depreciation	$39	$39	$39	$39	$39	$39
53	Deferred Tax	($3)	($3)	($3)	($3)	($3)	($11)
54	**Unlevered Cash Flow**	**$42**	**$33**	**$30**	**$28**	**$25**	**$10**
55							
56	**Cash Flow 2020-2042 NPV @ 6.97%**	**$138**					
57	**Cash Flow 1st 5 years NPV**	**$138**					
58	**PV Cost to the Customers**	**$743**					
59	**Remediation Cost Post Closure**	**$9**					

Attachment 18

Line	$ in millions		2020	2021	2022	2023	2024	2025
1	**Operational costs only**	PV						
2	Ongoing Operations	$218	$51	$54	$53	$55	$53	$57
3	PPA NWE	$193	$38	$40	$38	$39	$39	$50
4	PPA Savings	$25	$13	$14	$15	$15	$14	$7
5								
6	**Costs $/MWh**	Avg						
7	Continuing Operations	$42 / MWh	$41 / MWh	$39 / MWh	$41 / MWh	$42 / MWh	$45 / MWh	$44 / MWh
8	PPA NWE	$32 / MWh	$31 / MWh	$29 / MWh	$29 / MWh	$30 / MWh	$33 / MWh	$39 / MWh
	PPA Benefit	$10 / MWh	$10 / MWh	$10 / MWh	$12 / MWh	$12 / MWh	$12 / MWh	$5 / MWh
9								
10	**EBITDA**							
11	Ongoing Operations		$1,448	$1,485	$1,584	$1,699	$1,716	
12	PPA NWE	-	$1,448	$1,485	$1,584	$1,699	$1,716	
13		-						
14	**Net Income**	-						
15	Ongoing Operations	-	$313	$322	$365	$428	$442	
16	PPA NWE	-	$313	$322	$365	$428	$442	
17		-						
18	**ROE**	-						
19	Ongoing Operations		7.87%	7.75%	8.56%	9.72%	9.85%	
20	PPA NWE		7.87%	7.75%	8.56%	9.72%	9.85%	
21								
22								
23	**Colstrip 3&4 investment's contribution to PSE's portfolio**							
24	*$ in millions*		2020	2021	2022	2023	2024	2025
25	Ratebase		$189	$153	$117	$82	$46	$14
26	Cost to Customer/EBITDA		$56	$52	$49	$46	$43	$40
27	Net Income		$9	$7	$6	$4	$2	$1

Attachment 19

Version 8.19 updated with Hedging Costs

Line	*$ in millions*		2020	2021	2022	2023	2024	2025
1	**Operational costs only**	PV						
2	Ongoing Operations (185MW)	$218	$51	$54	$53	$55	$53	$57
3	90MW PPA NWE + 95MW Mkt Purchase	$159	$38	$40	$38	$39	$39	$50
4	PPA Savings	$58	$13	$14	$15	$15	$14	$7
5								
6	Hedging Cost (95MW Mkt Purchase)	($34)	($8)	($9)	($9)	($9)	($6)	
7	Net Transaction Benefits	$25	$5	$5	$6	$6	$8	
8								
9	**Costs $/MWh**	Avg						
10	Ongoing Operations (185MW)	$42 / MWh	$41 / MWh	$39 / MWh	$41 / MWh	$42 / MWh	$45 / MWh	$44 / MWh
11	90MW PPA NWE + 95MW Mkt Purchase	$32 / MWh	$31 / MWh	$29 / MWh	$29 / MWh	$30 / MWh	$33 / MWh	$39 / MWh
12	PPA Savings	$10 / MWh	$10 / MWh	$10 / MWh	$12 / MWh	$12 / MWh	$12 / MWh	$5 / MWh
13								
14	Hedging Cost (95MW Mkt Purchase)	($7) / MWh	($6) / MWh	($7) / MWh	($7) / MWh	($7) / MWh	($5) / MWh	
15	Net Transaction Benefits	$4 / MWh	$4 / MWh	$3 / MWh	$5 / MWh	$5 / MWh	$7 / MWh	
16								
17	**EBITDA**							
18	Ongoing Operations		$1,448	$1,485	$1,584	$1,699	$1,716	
19	PPA NWE		$1,448	$1,485	$1,584	$1,699	$1,716	
20								
21	**Net Income**							
22	Ongoing Operations		$313	$322	$365	$428	$442	
23	PPA NWE		$313	$322	$365	$428	$442	
24								
25	**ROE**							
26	Ongoing Operations		7.87%	7.75%	8.56%	9.72%	9.85%	
27	PPA NWE		7.87%	7.75%	8.56%	9.72%	9.85%	
28								
29								
30	**Colstrip 3&4 investment's contribution to PSE's portfolio**							
31	*$ in millions*		2020	2021	2022	2023	2024	2025
32	Ratebase		$189	$153	$117	$82	$46	$14
33	Cost to Customer/EBITDA		$56	$52	$49	$46	$43	$40
34	Net Income		$9	$7	$5	$4	$2	$1

Attachment 20

NorthWestern Energy
Delivering a Bright Future

August 12, 2019

Steve Secrist, Senior Vice President and General Counsel
Puget Sound Energy, Inc.
10885 NE 4th St.
Bellevue, Washington 98004

Sent via Email to steve.secrist@pse.com

Dear Steve:

This letter outlines the basic terms and conditions of the possible acquisition (the "*Acquisition*") by NorthWestern Corporation, a Delaware corporation d/b/a NorthWestern Energy ("*NorthWestern*"), from Puget Sound Energy, Inc., a Washington public utility corporation ("Puget"), of a portion of Puget's undivided interest in the 500 kilovolt Colstrip Project Transmission System (as defined in the Colstrip Project Transmission Agreement), which consists of 746 MW or a thirty-three percent (33%) interest in the Colstrip to Broadview Segment and 758.6 MW or a thirty-nine and 3/10ths (39.3%) interest in the Broadview to Townsend Segment, together with associated switchyards and substations (the "Puget Transmission Interest"), through a transaction structured as an asset purchase. While this letter does not constitute a legally binding agreement (except to the extent described below), and the proposal is subject to the negotiation and execution of a definitive asset purchase agreement (the "*Definitive Agreement*"), this letter does evidence the parties' good faith intention to proceed on the following basic terms and conditions.

1. Financial Terms. The parties would enter into a Definitive Agreement pursuant to which Puget transfers and assigns to NorthWestern a portion of its right, title and interest to the Puget Transmission Interest, subject to the terms and conditions of the Definitive Agreement. The key financial terms would be as follows:

    a. The transaction will involve a purchase by NorthWestern of an undivided ownership percentage, representing not less than 95 MW of the Puget Transmission Interest, along with the entry of an option to acquire either the remainder of the Puget Transmission Interest or not less than an undivided ownership percentage representing not less than 90MW of the Puget Transmission Interest (the "*Transmission Assets*").

    b. Subject to verification of Puget's book values for the Transmission Assets, a purchase price in the range between $2.5 and $3.75 million for 95 MW of the Puget Transmission Interest and an option price on exercise in the range of Puget's projected depreciated book value of the additional Puget Transmission Interest, as both are determined by the negotiations between Puget and NorthWestern.

    c. The purchase price, as determined per 1(b), shall be paid in cash or other readily available funds, as directed by the Definitive Agreement, upon closing of the Acquisition.

2. Liabilities and Allocation of Risk.

    a. Representations and Warranties. NorthWestern and Puget would give customary representations and warranties for a transaction of this nature.

    b. Survival; Indemnification. The Definitive Agreement will include customary indemnification provisions with agreed upon survival periods, baskets and caps.

c. Retained Liabilities. Puget would retain all liabilities relating to the Transmission Assets and existing prior to execution of the Definitive Agreement or arising from events or circumstances in existence prior to the Definitive Agreement.

3. Colstrip Transmission Agreement. Puget and NorthWestern will work together in good faith to amend the Colstrip Project Transmission Agreement in accordance with the Acquisition and to obtain consents as necessary from the other parties to the Colstrip Project Transmission Agreement.

4. Definitive Agreement. The parties will proceed in good faith toward negotiation and execution of the Definitive Agreement on the terms set forth in this letter. Counsel for NorthWestern will prepare the initial draft of the Definitive Agreement. If the Definitive Agreement has not been executed by September 20, 2019, this letter shall automatically terminate except for the items enumerated in Paragraph 7, which shall remain in full force and effect. The parties may extend the negotiation period by mutual written agreement.

5. Conditions. The Definitive Agreement would be subject to the following conditions:

   a. Completion by NorthWestern of its acquisition of additional interests in Colstrip Unit 4 from Puget;

   b. Approval of the Acquisition by the Federal Energy Regulatory Commission, the Washington Utilities and Transportation Commission, the Montana Public Service Commission, as applicable, and all other regulatory agencies having jurisdiction over the Acquisition, with such approvals imposing no conditions, limitations or terms that would materially and negatively impact the economics of the transaction or the operation of the Transmission Assets;

   c. Satisfactory resolution of all rights of first refusal contained in the Colstrip Project Transmission Agreement;

   d. Satisfactory determination, as determined solely by NorthWestern, that the Transmission Assets have a clear title and are free of all liens and encumbrances;

   e. Delivery of all closing certificates and related closing deliverables set forth in the Definitive Agreement; and

6. Fees and Expenses. Each party will be responsible for its own legal, accounting, investment banking and other expenses incurred in connection with this letter, the Definitive Agreement and all matters related thereto. Each party will indemnify and hold harmless the other against the claims of any brokers or finders in respect of the Acquisition.

7. Non-binding Agreement. This letter evidences the intent of NorthWestern to proceed in good faith to pursue the Acquisition described above, subject to the conditions stated herein. Except for the provisions of the first paragraph and of Paragraphs 6 through 10, however, nothing herein shall constitute a legally binding agreement of NorthWestern or Puget. The proposed Acquisition is expressly conditioned upon NorthWestern and Puget entering into a mutually acceptable Definitive Agreement. Unless the Definitive Agreement is entered into in writing by such parties, regardless of the reason that such agreements are not executed, neither NorthWestern nor Puget shall be under any obligation to the other (except as set forth in the first Paragraph and Paragraphs 6 through 10) for damages, expenses or otherwise, irrespective of any negotiations, agreements or understandings heretofore or hereafter existing between the parties, and irrespective of any implied course of conduct between the parties.

8. Exclusivity. PSE will not directly or indirectly, through any representative or otherwise, solicit or entertain offers from, negotiate with or in any manner encourage, discuss, accept, or consider any proposal of any other person relating to the acquisition or disposition of its interest in the Transmission Assets, in whole or in part, whether directly or indirectly, through purchase, merger, consolidation, or otherwise and will immediately notify NorthWestern regarding any contact between PSE, its representatives, and any other person regarding any such inquiry, proposal or offer, and if made in writing furnish a copy thereof.

9. Confidentiality. This letter of intent shall remain confidential and privileged, and thus any disclosure of it or its contents, and the discussion contemplated hereby, in whole or in part, is subject to the prior written consent of PSE and NorthWestern, subject to the terms of the Mutual Non-Disclosure Agreement entered between Puget and NorthWestern, dated July 19, 2019.

10. Governing Law. The letter shall be governed by and construed in accordance with the internal laws of the State of Montana without giving effect to the conflict of laws provisions thereof.

If the foregoing accurately reflects the basic terms and conditions upon which Puget would be willing to pursue consummation of the transactions contemplated by this letter, please sign one copy of this letter of intent and return it to NorthWestern.

Very truly yours,

NORTHWESTERN CORPORATION

By: Michael R. Cashell
Name: Michael Cashell
Title: Vice President Transmission

Agreed to as of Aug 14, 2019

PUGET SOUND ENERGY, INC.

By:
Name: Steve Secrist
Title: Sr VP General Counsel

PSE Draft
13 August 2019

**EXHIBIT A TO TERM SHEET
WITH RESPECT TO THE
COLSTRIP UNIT 4 TRANSACTION**

CONFIRMATION FOR UNIT COMMITMENT SERVICE – COLSTRIP UNIT 4

This Confirmation (this "Confirmation") shall confirm the terms agreed to between NorthWestern Corporation, d/b/a NorthWestern Energy ("Seller') and Puget Sound Energy, Inc. ("Buyer") regarding the purchase of Unit Commitment Service subject to the terms and conditions of the Western Systems Power Pool Agreement, dated effective as of [July 22, 2010], as amended from time to time prior to the date hereof (the "WSPP Agreement"). The undersigned Parties agree to sell and purchase electric energy pursuant to the WSPP Agreement as it is supplemented and modified below:

Seller	NorthWestern Corporation, d/b/a NorthWestern Energy
Purchaser	Puget Sound Energy, Inc.
Period of Delivery	[Commencing on hour ending ("HE") 0100 June 1, 2020 through HE 2400 May 15, 2025][1]
Schedule (Days and Hours)	7 x 24 (including NERC holidays)
Delivery Rate	N/A
Delivery Point	The high side of the 500 kV bus for Unit 4 in the Colstrip Switchyard
Type of Service	Unit Commitment Service from Colstrip Unit 4, Service Schedule B
Contract Quantity	90 MW at any time that Colstrip Unit 4 is operating at or greater than minimum load; 0 MW when Colstrip Unit 4 is off-line.
Contract Price	The Mid C Day-Ahead Index Price for on-peak and off-peak periods, as applicable; provided, however, that in no event shall the Contract Price in any hour be less than the Floor Price applicable to such hour. As used herein: "Floor Price" means, for any hour during the Period of Delivery, a per MWh price calculated in accordance with Exhibit A to this Confirmation.

[1] Note to Draft: Delivery term to be confirmed.

	"Mid C Day-Ahead Index Price" means, as applicable, the "ELECTRICITY-MID C PEAK-ICE" price or the "ELECTRICITY-MID C OFF-PEAK-ICE" price, as published by the Intercontinental Exchange for the applicable day of delivery, or if at any time such index is no longer available, such other index as the parties agree provides an economically comparable price.[2]
Transmission Path for the Transaction	N/A
Date of Agreement	[ ], 2019
Special Terms and Exceptions	Notwithstanding anything to the contrary in the WSPP Agreement, the Parties hereby agree to the following modifications thereto:

1. Section 22 of the WSPP Agreement is hereby revised as follows:
    a. The reference to two (2) Business Days in Section 22.1(a) is amended to be a reference to ten (10) Business Days;
    b. Section 22.1(c) is hereby revised to add the following to the end there of:

       "*provided,* that, in the case of the institution of any such proceeding by another person or entity, such proceeding is consented or acquiesced to by the Defaulting Party or is not withdrawn or dismissed within sixty (60) days;"
    c. The first and second sentences of Section 22.2(a) are deleted in their entirety and the following is substituted therefor:

       "If an Event of Default shall have occurred and be continuing, the Non-Defaulting Party, upon written notice to the Defaulting Party, shall have the right to suspend, reinstate and resuspend performance of transactions under this Agreement. Suspension periods shall not affect in

[2] Note to Draft: Parties to confirm index.

any way the thirty (30) day period for exercising a right of termination under Section 22.2(b)."

d. The last sentence of Section 22.2(a) is deleted in its entirety and the following is substituted therefor:

"The Non-Defaulting Party shall provide at least twenty-four (24) hours written notice to the Defaulting Party before any suspension may be terminated."

e. The last sentence of Section 22.3(c) is hereby deleted in its entirety and the following is substituted therefor: "If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, the Termination Payment shall be deemed to equal $0 and in no event shall the Defaulting Party be entitled to be paid a Termination Payment"; and

f. Section 22.3(e) shall be deleted in its entirety.

2. Sections B-3.8 and B-5 of Service Schedule B are hereby deleted in their entirety.

3. Revision of B-3.9(b) in Schedule B to read, "By the Seller when all of the output of the unit is unavailable" and deleting the remainder of that subsection.

4. THE PARTIES HERETO HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHTS THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON, OR DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER, OR IN CONNECTION WITH, THIS CONFIRMATION OR ANY OTHER DOCUMENT DELIVERED IN CONNECTION HEREWITH, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN) OR ACTIONS OF THE PARTIES HERETO.

5. This Agreement is made under and shall be governed by and construed in accordance with the substantive laws of the State of New York, without giving effect to any choice of law rule (except Section 5-1401 of the New York General Obligations Law) that would cause the

application of the laws of any jurisdiction other than the internal laws of the State of New York[3].

Miscellaneous This Confirmation may be executed in multiple counterparts, each of which when so executed and delivered shall constitute a duplicate original and all counterparts together shall constitute one and the same instrument. The Parties acknowledge and agree that any document or signature delivered by facsimile, PDF or other electronic transmission shall be deemed to be an original executed document for the purposes hereof and such execution and delivery shall be considered valid, binding and effective for all purposes.

IN WITNESS WHEREOF the Parties have executed this Confirmation in the manner appropriate to each on the date set forth above.

NORTHWESTERN CORPORATION, d/b/a NORTHWESTERN ENERGY

By: ______________________________________
Name:
Title:

PUGET SOUND ENERGY, INC.

By: ______________________________________
Name:
Title:

[3] NTD: New York law is acceptable, but NorthWestern would prefer to stick with WSPP mediation and arbitration.

Exhibit A to
Colstrip Unit 4 Unit Contingent Confirmation

Methodology for calculating the minimum electric cost

Combination of Two parts

- Fuel related variable cost in $/MW
- Non-Fuel variable cost in $/MW

Fuel related Variable costs

- [redacted]
    - [redacted]
    - [redacted]
- [redacted]
    - [redacted]
- [redacted]

Non Fuel variable costs

- [redacted]
    - [redacted]
    - [redacted]
    - [redacted]

Minimum charge for electricity under the PPA then is the combination of Fuel and non-Fuel variable costs as described and adjusted above.

- Minimum charge = Fuel related variable cost + non-Fuel variable cost
    - the example above would produce a minimum charge of $[redacted]

REDACTED
VERSION

TERM SHEET
WITH RESPECT TO THE
COLSTRIP UNIT 4 TRANSACTION

August 12, 2019

This Term Sheet ("Term Sheet") summarizes the principal terms of the proposed transaction between Puget Sound Energy, Inc. ("PSE") and Northwestern Corporation d/b/a NorthWestern Energy ("NorthWestern") pursuant to which NorthWestern will acquire PSE's ownership interests in the asset referred to as Colstrip Unit 4 (the "Transaction").

1. Non-Binding. The parties to this Term Sheet acknowledge and agree that, except for sections 1, 7, 8, 9, 10, 11 and 12 of this Term Sheet, which shall be legally binding in accordance with their respective terms, neither this Term Sheet nor the related discussions between the parties is intended to, and shall not, create any binding legal obligation, or any obligation, of either of the parties hereto to enter into any transaction, negotiate or take any other action in contemplation thereof, execute any definitive agreements or otherwise complete the Transaction.

2. Consideration. PSE will transfer its ownership interests in Colstrip Unit 4 to NorthWestern for $1.00.

3. Transaction Structure. The parties will use commercially reasonable efforts to structure the transfer of Colstrip Unit 4 in the most efficient manner.

4. Timing. The parties will use commercially reasonable efforts to sign a definitive agreement or agreements as soon as possible.

5. Definitive Agreement Terms. Among other terms the definitive agreement is anticipated to address the following:

   (a) Indemnification. PSE will remain responsible for and will provide indemnification to NorthWestern for claims arising out of liabilities occurring and attributable to events or conditions existing prior to the closing of the Transaction, including but not limited to environmental liabilities and pension liabilities; provided that such indemnification will be limited to a percentage equal to PSE's pro rata ownership share of Colstrip Unit 4 as of immediately prior to the closing of the Transaction.

   (b) Environmental Reclamation and Remediation Costs in Connection with Decommission. In connection with any closure of Colstrip Unit 4 after the closing, PSE will agree to be responsible for any demolition, reclamation or remediation costs related to the decommissioning of Colstrip Unit 4 after the closing of the Transaction; provided that (i) PSE's portion of such costs will be limited to a percentage equal to PSE's pro rata ownership share of Colstrip Unit 4 as of immediately prior to the closing of the Transaction and (ii) in no event will PSE be responsible for any demolition, remediation or reclamation costs in connection with the decommissioning of such assets related to any actions, events or occurrences that take place after the closing of the Transaction, unless such demolition, remediation or reclamation costs result from a willful action of PSE or that are attributable to events or conditions existing prior to the closing.

(c) PSE will remain responsible for claims arising out of liabilities of all nature and for all demolition, reclamation and remediation costs, associated with Colstrip Units 1, 2 and 3, according to its pro rata ownership shares of such units.

6. Conditions to Closing. The following will be conditions to the closing of the Transaction, in addition to other conditions agreed upon by the parties:

(a) Rights of First Offer or Refusal. The parties will seek waivers or consents from any other owners or operators as required under existing ownership and/or operation agreements.

(b) Regulatory Approvals. The parties will seek and obtain all regulatory approvals necessary to complete the Transaction, including approval by the Washington Utilities and Transportation Commission and the Montana Public Service Commission.

(c) Contract Consents. The parties will mutually agree on whether any contractual consents will be a condition to closing of the Transaction.

(d) Transmission Acquisition. NorthWestern will acquire a portion, in an amount to be determined, of Puget's undivided interest in the 500 kilovolt Colstrip Project Transmission System (as defined in the Colstrip Project Transmission Agreement) as generally outlined in the Letter of Intent dated August 12, 2019 and on such other terms mutually acceptable to the parties.

(e) Power Purchase Agreement. PSE and NorthWestern will enter into a power purchase agreement for the purchase of certain of the energy generated by Colstrip Unit 4 on terms mutually acceptable to the parties, which are generally set out in Exhibit A, WSPP Schedule B Sample Form for Confirmation.

7. Exclusivity. PSE will not directly or indirectly, through any representative or otherwise, solicit or entertain offers from, negotiate with or in any manner encourage, discuss, accept, or consider any proposal of any other person relating to the acquisition or disposition of its interest in Colstrip Unit 4, in whole or in part, whether directly or indirectly, through purchase, merger, consolidation, or otherwise and will immediately notify NorthWestern regarding any contact between PSE, its representatives, and any other person regarding any such inquiry, proposal or offer, and if made in writing furnish a copy thereof.

8. Confidentiality. The parties acknowledge and agree that this Term Sheet is confidential and will be considered "Confidential Information" as defined in that certain Mutual Non-Disclosure Agreement by and between PSE and NorthWestern dated as of July 19, 2019 (the "NDA").

9. Fees and Expenses. Each party shall pay its own expenses incurred in connection with its consideration of the Transaction contemplated hereby.

10. Termination. Except for sections 1, 8, 9, 10, 11 and 12 of this Term Sheet, which shall survive termination, this Term Sheet shall terminate on the earliest to occur of (a) the execution and delivery of definitive agreements relating to the Transaction, (b) delivery of written notice by any party hereto that it no longer desires to pursue the Transaction, or (iii) September 20, 2019. Provided, the parties may extend the negotiation period by mutual written agreement. Notwithstanding the termination of this Term Sheet, each party shall continue to be liable for any breach or violation of any legally binding provision of this letter that occurred prior to such termination.

11. Governing Law. This Term Sheet shall be governed by, and construed and enforced in accordance with, the laws of the State of Montana, without regard to its conflicts of law principles.

12. Counterparts. This Term Sheet may be executed in one or more counterparts, each of which will be deemed to be an original and all of which will constitute one agreement. Delivery of an executed signature page to this Term Sheet by PDF or other electronic transmission will be as effective as delivery of a manually signed counterpart thereof.

This Term Sheet has been duly executed and delivered by each of PSE and NorthWestern as of the date first set forth above.

PUGET SOUND ENERGY, INC.

By: ______________________
Name: Steve Secrist
Title: Sr VP- General Counsel

NORTHWESTERN CORPORATION
(D/B/A NORTHWESTERN ENERGY)

By: ______________________
Name: John D Hines
Title: VP - Supply

Attachment 21

From: Secrist, Steven
Sent: Monday, August 19, 2019 11:58 AM
To: 'Barbara Gordon (barbara.gordon@live.com)' <barbara.gordon@live.com>; 'Christopher Trumpy' <cmtrumpy@shaw.ca>; Harris, Kimberly <kimberly.harris@pse.com>; 'Hind, Christopher' <chind@cppib.com>; 'Kenton Bradbury' <KBradbury@Omers.com>; 'Martijn Verwoest (martijn.verwoest@pggm.nl)' <martijn.verwoest@pggm.nl>; 'Mary McWilliams (maryoliver.mcwilliams@gmail.com)' <maryoliver.mcwilliams@gmail.com>; 'Paul McMillan (phcmcmillan@gmail.com)' <phcmcmillan@gmail.com>; 'Richard Dinneny (richard.dinneny@bcimc.com)' <richard.dinneny@bcimc.com>; 'Scott Armstrong' <armstrongs215@gmail.com>; 'Steve Hooper (shooper@ignitionpartners.com)' <shooper@ignitionpartners.com>; 'Steven Zucchet (szucchet@omers.com)' <szucchet@omers.com>; 'Tom King (tom.king@mesalinesvc.com)' <tom.king@mesalinesvc.com>; 'Mary Kipp' <mary.kipp@gmail.com>
Subject: Highly confidential - Colstrip proposed transaction

Highly Confidential

Dear Directors:

I am writing to update you regarding Colstrip negotiations and to introduce a proposed transaction between PSE and Northwestern (NWE).

As you will recall, PSE has been engaged in a three-way conversation with Talen and NWE regarding a proposal from Talen wherein PSE would transfer its interest in Units 3&4 to Talen and take, in exchange, a PPA from Talen with a corresponding “risk premium”.

As negotiations continued, it was increasingly evident that Talen would not budge from its initial risk premium offer, so PSE approached NWE to explore options regarding a PSE/NWE bilateral deal. That dialogue has culminated in a proposal that is described more fully in the attached documents but summarized as follows:

Subject to approval by both the WUTC and the Montana Public Service Commission,

- PSE would transfer its interest in Unit 4 (185 MW) to NWE,
- Northwestern would provide a five-year PPA to PSE for 90 MW from Unit 4 at the Mid C day-ahead Index Price (currently $31.23/MWH),
- PSE will sell NWE 95 MW of PSE’s interest in the Colstrip Transmission Line (approximately 12.5% of PSE’s ownership) at book value (approximately $3 million), and
- PSE retains its pre-closing liabilities (e.g., pro rata decommissioning and remediation exposure).

By way of further introduction regarding this proposed transaction, I have attached to this email the following documents:

- A summary of the nonbinding term sheet,
- A spreadsheet showing the PV of savings associated with the NWE PPA over its five-year term relative to the cost of continued ownership of Unit 4 ($25 million), and
- The list of applicable questions previously posed by the Board regarding the negotiations associated with the three-way PSE/Talen/NWE together with corresponding answers associated with the PSE/NWE proposed transaction.

Of note, this transaction does not include any transfer of ownership in Unit 3. However, NWE does not currently have any physical ownership of Unit 3, and by transferring to NWE PSE's interest in Unit 4, NWE will have its needed generation from Colstrip going forward. This will help facilitate efforts by the owners of Unit 3 (PSE, Talen, PGE, Avista, and Pacificorp) to vote to close it in 2025.

Ultimately, this transaction would allow PSE to a) transfer its interest in Unit 4 now at a cost savings to customers relative to continued ownership, b) sustain a glide path to the statutorily required exit from coal by 2025, and c) retain approximately 87.5% of our interest in the Colstrip transmission line for future renewable generation options within the State of Montana.

While this email and the attached materials are provided to introduce this proposed transaction, we will separately schedule a call with the Board to discuss it in more detail and answer your questions.

Regards,

Steve Secrist |Senior Vice President and General Counsel
Puget Sound Energy
10885 N.E. 4th Street, Bellevue WA 98004
Phone (425) 462-3178

Confidential

Key Provisions of PSE/Northwestern Term Sheet

A. PSE will transfer at no cost[1] its interest in Unit 4 to Northwestern
B. PSE will sell Northwestern 95 MW of PSE's interest in the Colstrip Transmission Line at book value (approximately $2.5 - $3.75 million)
C. PSE retains any pre-closing pro rata decommissioning and remediation obligations
D. PSE retains any applicable pro rata pre-closing liabilities
E. Northwestern will provide PSE a PPA from Unit 4 under the following terms:
    a. Term: June 1, 2020 – May 15, 2025
    b. Amount: 90 MW
    c. Price: Mid C day-ahead Index Price[2]
F. Conditions precedent are,
    a. FERC approval
    b. WUTC approval
    c. Montana Public Service Commission approval

Ownership in MW Regarding Colstrip Unit 4

a.	PSE	185 MW
b.	PGE	148 MW
c.	Avista	111 MW
d.	P-corp	74 MW
e.	NWE	222 MW
	Total:	740 MW

Ownership in MW Regarding Colstrip Unit 3

a.	PSE	185 MW
b.	PGE	148 MW
c.	Avista	111 MW

[1] Under the Clean Energy Law, utilities have authorization to accelerate full depreciation of their investment in coal generation.
[2] The Mid-Columbia hub is one of eight electricity trading hubs in the Western United States. The Mid-C represents an aggregation of the electricity market for the Northwest. Prices at the hub exhibit a strong seasonal pattern dictated by demand, as well the supply of hydro and wind. Hedges are available to increase certainty in pricing.

d. P-corp 74 MW
e. Talen <u>222 MW</u>
Total: 740 MW

Under Washington's Clean Energy Law, PSE must exit all coal generation (either owned or via PPA) by year-end 2025. However, both Northwestern and Talen intend, at a minimum, to continue operation of Unit 4 well past 2025 and have voiced strong objections to any associated early shutdown of this Unit.

The proposed transaction outlined above affords PSE an exit from Unit 4 by the statutory deadline of 2025 with very little additional cost to PSE customers. Additionally, PSE will be able to demonstrate an immediate reduction in carbon emissions associated with coal generation of 95 MW[3] upon closing this proposed transaction.

Importantly, PSE will retain all but 95 MW of its interest in the Colstrip Transmission Line (approximately 13% will be transferred under this proposed transaction) to capitalize on renewable energy projects now or in the future within Montana.

As shown in the attached spreadsheet, the average cost to PSE of continued operations of Unit 4 is on average $42/MWH; whereas, the average cost to PSE of the PPA from Northwestern at Mid C pricing would average $32/MWH (including the estimated cost of a replacement PPA for the 95 MW no longer available to PSE under this proposed transaction). Additionally, this transaction also avoids potential,

a) litigation costs associated with PSE exiting Unit 4 no later than 2025 as required by law, and/or
b) ongoing operational costs for so long as Unit 4 operates post 2025 (per the terms of the Colstrip Ownership Agreement)
c) regulatory (WUTC) disallowance associated with maintenance or upgrades associated with Unit 4
d) punitive or retaliatory legislation in Montana associated with an attempted early shutdown of Unit 4 in 2025

[3] Separate from this transaction, PSE will then explore viable options to backfill this 95 MW generation reduction. Please note that the MW replacements necessitated by the 2019 planned shutdown of Units 1&2 are short term. PSE will therefore have an opportunity to assess longer term options to replace this combined generation reduction.

Line	$ in millions		2020	2021	2022	2023	2024	2025
1	**Operational costs only**	PV						
2	Ongoing Operations	$218	$51	$54	$53	$55	$53	$57
3	PPA NWE	$193	$38	$40	$38	$39	$39	$50
4	PPA Savings	$25	$13	$14	$15	$15	$14	$7
5								
6	**Costs $/MWh**	Avg						
7	Continuing Operations	$42 / MWh	$41 / MWh	$39 / MWh	$41 / MWh	$42 / MWh	$45 / MWh	$44 / MWh
8	PPA NWE	$32 / MWh	$31 / MWh	$29 / MWh	$29 / MWh	$30 / MWh	$33 / MWh	$39 / MWh
	PPA Benefit	$10 / MWh	$10 / MWh	$10 / MWh	$12 / MWh	$12 / MWh	$12 / MWh	$5 / MWh
9								
10	**EBITDA**							
11	Ongoing Operations		$1,448	$1,485	$1,584	$1,699	$1,716	
12	PPA NWE	-	$1,448	$1,485	$1,584	$1,699	$1,716	
13		-						
14	**Net Income**	-						
15	Ongoing Operations	-	$313	$322	$365	$428	$442	
16	PPA NWE	-	$313	$322	$365	$428	$442	
17		-						
18	**ROE**	-						
19	Ongoing Operations		7.87%	7.75%	8.56%	9.72%	9.85%	
20	PPA NWE		7.87%	7.75%	8.56%	9.72%	9.85%	
21								
22								

Line							
23	**Colstrip 3&4 investment's contribution to PSE's portfolio**						
24	$ in millions	2020	2021	2022	2023	2024	2025
25	Ratebase	$189	$153	$117	$82	$46	$14
26	Cost to Customer/EBITDA	$56	$52	$49	$46	$43	$40
27	Net Income	$9	$7	$6	$4	$2	$1

Colstrip – Q&A August 14, 2019

Number	Question	Response
		Commercial Questions
1	Can management please provide us with a time line for this transaction?	Northwestern has expressed a desire to execute the agreement by September 20, 2019, due to potential changes in the makeup of their Public Service Commission.
2	What is driving Northwestern to pursue this transaction?	Northwestern's motivation for the bill is driven by three essential needs: a) Their version of an IRP shows need of approximately 150 MW's of base load generation (which this transaction would satisfy), b) they are very interested in gaining additional transmission resources to match their growing need within MT, and c) acquiring PSE's 25% interest in Unit 4 would provide Northwestern with 55% ownership in Unit4. Northwestern is aware that Unit 3's owners (PSE, Avista, PacifiCorp, PGE and Talen) are motivated to close Unit 3 at the end of 2025, so gaining a majority ownership in Unit 4 is very strategic from their vantage point.
3	Has Management looked at alternate options for Colstrip 3&4 beyond selling to NWE or holding the assets?	Management has considered multiple options over the last five years for a resolution regarding Colstrip, including a) acquiring more interest in Colstrip, b) talking with the State of Montana (Governor and AG) together with the legislature about a transaction that would transfer our interest in Colstrip to a Montana entity, c) discussing with the other owners options regarding a forced shutdown of Unit 3 and/or 4, and d) the possibility of converting Colstrip to natural gas.
3(a)	Do we have a view on how economic units 3&4 are on a standalone basis? How does this compare to other coal plants in the region?	See attached
4	What are the other partners at Colstrip doing - especially those who must also eliminate coal from their portfolio? How would they view this proposed deal?	PSE is the only utility operating exclusively within the State of Washington. All other utility owners either operate exclusively in Oregon (PGE), or in multiple jurisdictions (Avista and PacifiCorp) that have differing views regarding coal generation. As such, their issues are more complicated and make the pathway to an exit more difficult. For instance, PacifiCorp operates in six different states. While each of the other utility owners (Avista, PGE and PacifiCorp) have communicated to PSE an interest in exiting Colstrip, they don't believe that some of the states in which they operate would allow them to pass on to additional costs as the cost of exiting coal.
5	What is the rationale behind selling the Colstrip transmission segment? Does that RAB get recovered?	As part of the initial offer presented to PSE by Northwestern, Northwestern communicated that its ability to acquire some portion of PSE's interest in transmission was a key element in the justification for the transaction because they have an immediate need for additional transmission. This transaction contemplates the sale of 95MW's of the Colstrip Transmission System to Northwestern (approximately 12.5% of PSE's Ownership share). Northwestern would like the option to purchase the remainder of PSE's shares, should PSE ever entertain the sale of those assets. The sale price is contemplated to be the book value of that percentage of the system.
5	What impact does doing this deal have on the deal we have for units 1 & 2; and timing for these units shutdown?	The pending negotiations do not impact the timing for the shutdown of Units 1&2 (year end in 2019).
6	Have we always taken the full amount of our pro rata share from the Colstrip complex and applied it to our underlying electricity costs for our customers?	We seasonally and when markets are depressed, decrease our take of the output of Colstrip Units 3&4, when it is favorable for our customers to do so.
7	How is the PPA structured in this proposed transaction?	In this transaction, the PPA would be priced at a Mid-C market value, with a floor set at Colstrip variable O&M expense + fuel costs (for 2019, that floor price would be $25.70 per MW).
8	What is the term and structure of the PPA?	The PPA for 90 MW's of power would be for a term of one day less than 5 years per state law. The PPA would be a unit commitment type of agreement and specify the power from Colstrip Unit 4. In the event of forced outages, etc., PSE would be in the same position as we currently are, going to the open market for power when the unit is off line.
		Financial Questions

Colstrip – Q&A August 14, 2019

Number	Question	Response
1	Is it fair to assume the PPA we enter into with Northwestern would be recoverable from customers via our underlying rates?	Yes, the assumption is the PPA would be recovered in rates. PSE would seek approval from the Commission prior to the transaction to ensure the recovery of the PPA. The operating costs for the five years of the PPA would be the same as continuing operations. Commission approval is a condition precedent to closing of this transaction.
2	If this transaction is implemented, how would it be reflected in our regulatory filings and what implications does it have for our financial statements (e.g. ARO, Regulatory Assets, accelerated depreciation of Colstrip, and other accounts)?	The Clean Energy Law specifically provides for accelerated depreciation not later than 2025, and ongoing recovery of decommissioning and remediation costs thereafter. If Colstrip 4 was sold for $1 and with the Clean Energy Bill requiring recovery of the plant, we would setup a regulatory asset balance (unrecovered plant/loss on sale of plant), and seek regulatory approval (a condition precedent in the proposed deal) for the transaction. At December 31, 2018 our net utility plant for units 3&4 was $220M, roughly half of that in Unit 4. PSE would remain liable for the decommissioning and remediation work which includes the ARO. At March 31, 2019 the ARO balance for 1&2 is $52.9M and 3&4 is $39.3M. We have the Hydro treasury grants that can be used to offset units 1&2 and PTCs that can be used to recover these costs for all units.
3	Does the RAB related to Colstrip get recovered or is it lost as part of this transaction?	Yes, we would seek WUTC approval to setup a regulatory asset account and get full recovery to 2025 in connection with the Clean energy legislation and adjust out.
4	What would be the changes to our financial and regulatory accounts to reflect selling units 4 for $1? Is there any way we might be able to creatively use any PTC's which otherwise might be stranded?	For changes to our financial and regulatory accounts, see our response to question #2 above. There is certainly an opportunity to offset remaining plant balance with PTC's. According to the settlement agreement from the 2017 GRC, all production tax credits will be set aside for Colstrip related shutdown costs. The priority for use of monetized PTC shall be as follows: (1) community transition planning funds of $5M, (2) recovery of unrecovered plant balances, and (3) prudent decommissioning and remediation costs for Colstrip Units 1-4. With the early shutdown of Colstrip 3&4 mandated by legislation, we will seek WUTC approval to get full recovery to 2025 under the clean energy legislation and use the PTCs to offset future decommissioning and remediation costs.
5	How was the Mid-C Pricing arrived at?	The Mid-C pricing forecast was derived from an interim forecast for the 2019 IRP.
6	How is the transmission valued in this analysis? Is it part of the net $218M NPV calculation?	Transmission was not part of the $218M NPV calculation. The difference in the cost of transmission between the two scenarios is minimal.

Questions	Question	Response
		Legal Issues
1	Can Management confirm that under the owners operating agreement each unit can only be shut down early when there is unanimous agreement between the partners? If this is so, then does this mean that the plant continues to operate and will be obligated to operate and pay all the fixed and variable costs as outlined in the pro forma?	Yes. Even as it relates to Units 3&4, the Owner and Operator Agreement (O&O Agreement) treats the two as one unit, and necessitates unanimity. As such, PSE faces the real risk of continued obligation to pay fixed and variable costs as long as the units operate – even if PSE doesn't take any of the generated power. It is also worth noting that in light of the passage of the Clean Energy Bill by the Washington State legislature, these costs would represent a risk post 2025, given the bill's requirement that utilities exit coal by that date.
2	What leverage do we have to reduce operations and spend at C3 & C4 (e.g. reduce costs at the coal mine, eliminate capital spends, etc.)? If none, are there any rights of arbitration which might help to reduce costs?	PSE, together with the other northwest utilities, have already taken steps to reduce operational costs associated with Units 3&4 (this effort is particularly focused on Unit 3). For instance, the 2019 budget was rejected this year because of the inclusion of a superheater expenditure that the northwest utilities felt was not appropriate. Similarly, Talen as the operator has taken numerous steps to reduce costs without compromising the longer term viability of the Units. However, there is also a requirement that approval not be "unreasonably withheld", and that the operator may make all expenditures in the normal course of business for the proper and safe operation of the Units, so there are boundaries to the extent the owners can simply reduce plant expenditures to accelerate a shutdown.
3	What would prevent us from abandoning the plant, or forcing the operations to be significantly reduced if we are stuck with the units? Would either of these strategies possibly be a more plausible economic alternative than doing the PPA deal?	PSE can suspend the power it takes from Units 3&4 at any time. However, that does not relieve PSE of its continuing obligation to pay the fixed and variable costs associated with the operation of Units 3&4 for so long as they continue to operate (a determination of shutdown requires unanimity of all owners).
4	Does this proposed PPA arrangement require the other partners to approve any Unit 4 deal?	The PPA arrangement envisioned in the transaction does not on its own trigger the approval of the other owners. However, the proposed transfer of PSE's interest in Unit 4 would require either a) the opportunity (for 90 days) to match the offer made to PSE (based on each owners' proportionate share of ownership), or b) the explicit consent of all owners.
5	Does any deal require WUTC approval?	PSE has explicitly communicated to Northwestern that any deal must be contingent upon WUTC approval. PSE views this as an essential condition precedent to any proposed transaction.

Questions	Question	Response
		Technical Questions
1	With regards to the ability to resell or make merchant sales backed by coal power in the market. If there is no feasible way for the market to absorb the production of power from the units at Colstrip would this wash of power available at cheap prices in the region also help to drive down the costs of other sources of power (like natural gas), thereby resulting in a beneficial portfolio effect to PSE and our customers through 2042?	Washington, Oregon and California have or will place outright bans on the ability to recover in retail rates the cost of generating or purchasing coal-generated energy after 2025-2035. The primary trading hubs where wholesale electricity changes hands are located in Washington (MidC), Oregon (COB) and California (NP15 and SP15). Any oversupply of coal-generated energy will likely be trapped within the State where it is generated as utilities dedicate limited transmission capacity to sourcing and transmitting renewable resources to meet new compliance requirements. As a result it is not likely that over-supply trapped in Montana will exert downward pressure on wholesale prices at these three primary trading hubs.
2	What resources normally set the clearing price in the markets that 3 & 4 would have to compete in when selling excess power? What would the underlying heat rate be? What neighboring markets could you reasonably expect excess power from 3 & 4 to penetrate or compete in, and what other assets are required to get there?	Coal generation is considered a baseload asset. Depending upon streamflow and natural gas prices, the market clearing price will generally be set by hydro or CCCT generation. Colstrip Units #3 and 4 dispatch at a very low price of $25/MWh, effectively reiterating the baseline nature of the generation. In the future expect Montana and Wyoming to be over-supplied by coal-generation, thereby depressing power prices even further. If adequate transmission capability existed for energy moving east the Midwest Reliability Organization (MRO) could be a likely target. Unfortunately, there are severe transmission constraints in moving energy between the WECC and MRO NERC sub-regions.

Response to question 3a: Management does not believe that the Colstrip units possess material standalone value (outside of regulation) for the following reasons:

1. In 2013 and 14, Talen performed an extensive RFP process to sell its interest in the Colstrip units. Talen engaged with several reputable counterparties but could not reach an agreement to sell the Colstrip units on acceptable financial terms. Management believes that the environment to sell/exit the Colstrip units (in a scenario where they would operate on a standalone-merchant basis outside of regulation) on acceptable financial terms has deteriorated significantly over the last 5 years.
2. Pressures to reduce carbon and eliminate coal from power supply portfolios (both as a direct source of generation and/or purchased capacity and energy) has intensified and will continue to gain momentum in the Pacific Northwest:
   a. Under existing state of Washington statutes, the Centralia coal facility will be decommissioned by 2025 and prohibitions exist on entering new coal PPAs.
   b. As part of a settlement of litigation brought by the Sierra Club, all Colstrip owners agreed to shut down Colstrip units 1 and 2 no later than July 1, 2022, and the company negotiated cost recovery mechanisms in connection with the settlement of the 2017 general rate case in support of that shut down.
   c. The recently passed clean energy legislation prohibits the cost recovery of coal-based energy supply to serve customer load beyond 2025. The legislation also requires the acceleration of depreciation schedules related to coal generating assets to fully recover the remaining net book value of those assets by 2025.
   d. Existing state of Oregon statutes currently require utilities to eliminate coal sourced energy from their power portfolios no later than 2030.
   e. The proliferation of and demand for green tariffs (e.g., Green direct and the Microsoft buy-out) continue to gain momentum and will further serve to reduce the value of coal-based energy in the Pacific Northwest.

Management believes that the greatest share owner value, corporate risk reduction and brand value enhancement are optimized by selling/exiting our Colstrip investment in Unit 4 and recovering replacement PPA expenses and the remaining net book value through the regulatory process with return as required by the clean energy legislation.

Attachment 22

Colstrip Units 3 and 4, DRAFT Coal Supply Agreement information

- Term dates - January 1, 2020 - December 31, 2025
- PSE Minimum Annual Volume (MAV), purchase commitment: [redacted]
    - [redacted]
    - [redacted]
- Price = $27.00 per ton, for the 1st 1,250,000 tons purchased in a calendar year.
    - [redacted]
    - [redacted]
    - [redacted]
- [redacted]
- [redacted]

YTD weighted average coal = [redacted]

YTD Plant Net Heat Rate = [redacted]

[redacted]

- [redacted]

REDACTED
VERSION

Attachment 23

Line	(A) $ in millions	(B) Scenario 1 No hedging	(C) Scenario 2 Hedge 95MW
1	**Operational cost**		
2	Colstrip unit 4 continuing operations	$209 M	$209 M
3	90MW 5-year PPA + 95MW replacement	$115 M	$148 M
4	PPA Savings NPV	$94 M	$61 M
5			
6	**Operational cost ($/MWh)**		
7	Colstrip unit 4 continuing operations	$45.4/MWh	$45.4/MWh
8	90MW 5-year PPA + 95MW replacement	$24.9/MWh	$31.7/MWh
9	Savings $/MWh	$20.6/MWh	$13.7/MWh

Line	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	Scenario 1 - no hedging						
			12-month ending				
	$ in millions		**May 2021**	**May 2022**	**May 2023**	**May 2024**	**May 2025**
1	**Operational cost**	**PV**					
2	Colstrip unit 4 continuing operations	$209 M	$51 M	$51 M	$50 M	$51 M	$52 M
3	90MW 5-year PPA + 95MW replacement	$115 M	$30 M	$29 M	$26 M	$26 M	$28 M
4	PPA savings	**$94 M**	$21 M	$22 M	$24 M	$25 M	$24 M
5							
6	**Operational cost ($/MWh)**	**Avg**					
7	Colstrip unit 4 continuing operations	$45.4/MWh	$40.9/MWh	$42.0/MWh	$45.9/MWh	$48.7/MWh	$49.6/MWh
8	90MW 5-year PPA + 95MW replacement	$24.9/MWh	$24.2/MWh	$24.0/MWh	$24.0/MWh	$25.1/MWh	$26.9/MWh
9	Savings $/MWh	$20.6/MWh	$16.7/MWh	$18.0/MWh	$21.8/MWh	$23.7/MWh	$22.6/MWh
10							
11	**Scenario 2 - hedge 95MW**						
12			12-month ending				
13	*$ in millions*		**May 2021**	**May 2022**	**May 2023**	**May 2024**	**May 2025**
14	**Operational cost**	**PV**					
15	Colstrip unit 4 continuing operations	$209 M	$51 M	$51 M	$50 M	$51 M	$52 M
16	90MW 5-year PPA + 95MW replacement	$148 M	$39 M	$38 M	$34 M	$33 M	$34 M
17	PPA savings	**$61 M**	$12 M	$13 M	$16 M	$18 M	$18 M
18							
19	**Operational cost ($/MWh)**	**Avg**					
20	Colstrip unit 4 continuing operations	$45.4/MWh	$40.9/MWh	$42.0/MWh	$45.9/MWh	$48.7/MWh	$49.6/MWh
21	90MW 5-year PPA + 95MW replacement	$31.7/MWh	$31.4/MWh	$31.5/MWh	$31.4/MWh	$31.8/MWh	$32.7/MWh
22	Savings $/MWh	$13.7/MWh	$9.5/MWh	$10.6/MWh	$14.5/MWh	$17.0/MWh	$16.9/MWh

Colstrip unit 4 continuing operations

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	PSE's share of unit 4 capacity	185 MW	185 MW	185 MW	185 MW	185 MW
2	PSE's take (MWh)	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
3	Net capacity factor	77%	75%	67%	65%	65%
4						
5	**Colstrip operational cost**					
6	Fixed operating expenses	$14 M	$13 M	$12 M	$12 M	$13 M
7	Capital	$3 M	$3 M	$3 M	$3 M	$3 M
8	Coal fixed	$14 M	$15 M	$15 M	$15 M	$15 M
9	Dispatch cost	$17 M	$18 M	$18 M	$18 M	$18 M
10	**Operational expense**	**$48 M**	**$48 M**	**$48 M**	**$48 M**	**$49 M**
11	**PSE Expense**					
12	Property Tax	$3 M	$3 M	$3 M	$3 M	$3 M
13	**Total PSE Expense**	**$3 M**	**$3 M**	**$3 M**	**$3 M**	**$3 M**
14						
15	**Total cost**	**$51 M**	**$51 M**	**$50 M**	**$51 M**	**$52 M**
16						
17	Dispatch cost (line 9 / 2)	$13.6/MWh	$14.8/MWh	$16.5/MWh	$17.2/MWh	$17.2/MWh
18	Cost $/MWh (line 15 / 2)	$40.9/MWh	$42.0/MWh	$45.9/MWh	$48.7/MWh	$49.6/MWh
19						
20	**Total cost NPV (line 15)**	**$209 M**				
21	**Cost $/MWh (5-year average)**	**$45.4/MWh**				

Scenario 1 - no hedging

Line	*$ in millions*	May 2021	May 2022	May 2023	May 2024	May 2025
		12-month ending				
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	606,136	590,295	530,487	509,010	510,205
5	Market price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
6	PPA cost	$14 M	$14 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	639,810	623,089	559,959	537,289	538,549
11	Mid-C price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
12	Market purchases	$15 M	$14 M	$13 M	$13 M	$14 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$30 M	$29 M	$26 M	$26 M	$28 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
23	Cost $/MWh (line 19 / 22)	$24.2/MWh	$24.0/MWh	$24.0/MWh	$25.1/MWh	$26.9/MWh
24						
25	**Total cost NPV (line 19)**	**$115 M**				
26	**Cost $/MWh (5-year average)**	**$24.9/MWh**				

Scenario 2 - hedge 95MW

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	606,136	590,295	530,487	509,010	510,205
5	Market price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
6	PPA cost	$14 M	$14 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	639,810	623,089	559,959	537,289	538,549
11	Fixed heding price ($/MWh)	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh
12	Market Purchases	$24 M	$23 M	$21 M	$20 M	$20 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$39 M	$38 M	$34 M	$33 M	$34 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
23	Cost $/MWh (line 19 / 22)	$31.4/MWh	$31.5/MWh	$31.4/MWh	$31.8/MWh	$32.7/MWh
24						
25	**Total cost NPV (line 19)**	**$148 M**				
26	**Cost $/MWh (5-year average)**	**$31.7/MWh**				

Current Operations	2020	2021	2022	2023	2024	2025
Capacity	185	185	185	185	185	185
PSE's Take	1,218,646	1,284,166	1,114,289	1,057,066	1,031,225	1,073,294
Net Capacity Factor	75%	79%	69%	65%	64%	66%
Market Rate $/MWh						
Market Revenue						
Colstrip Operations						
Fixed Operating Expenses	$14	$14	$12	$12	$12	$13
Capital	$4	$3	$2	$3	$3	$3
Coal Fixed	$14	$14	$15	$15	$15	$16
Dispatch Costs	$17	$18	$18	$18	$18	$19
Expenses Colstrip Operations	**$48**	**$50**	**$47**	**$48**	**$48**	**$50**
PSE Expenses						
Property Taxes	3	3	3	3	3	3
Total PSE Expenses	**3**	**3**	**3**	**3**	**3**	**3**
Total Costs	**$51**	**$52**	**$50**	**$51**	**$51**	**$53**
Net Costs Flow	**($51)**	**($52)**	**($50)**	**($51)**	**($51)**	**($53)**
Dispatch cost	**$14 / MWh**	**$14 / MWh**	**$16 / MWh**	**$17 / MWh**	**$17 / MWh**	**$18 / MWh**
Cost $/MWh	**$42 / MWh**	**$41 / MWh**	**$45 / MWh**	**$48 / MWh**	**$49 / MWh**	**$49 / MWh**
NPV Total Cost	**$352**					
1ST 5 Years	**$209**					
2026-2035	**$143**					
Average 2020-2025	**$46 / MWh**					

Current Operations	2026	2027	2028	2029	2030	2031
Capacity	185	185	185	185	185	185
PSE's Take	1,298,521	1,298,265	1,155,877	1,247,999	1,215,461	1,211,317
Net Capacity Factor	80%	80%	71%	77%	75%	75%
Market Rate $/MWh	$29 / MWh	$31 / MWh	$33 / MWh	$34 / MWh	$36 / MWh	$37 / MWh
Market Revenue	$38	$41	$39	$43	$44	$45
Colstrip Operations						
Fixed Operating Expenses	$13	$14	$14	$15	$15	$15
Capital	$3	$3	$2	$2	$2	$2
Coal Fixed	$16	$16	$17	$17	$18	$19
Dispatch Costs	$23	$24	$22	$24	$24	$25
Expenses Colstrip Operations	**$56**	**$57**	**$54**	**$58**	**$59**	**$60**
PSE Expenses						
Property Taxes	3	3	3	3	3	3
Total PSE Expenses	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**
Total Costs	**$58**	**$60**	**$57**	**$61**	**$62**	**$63**
Net Costs Flow	**($21)**	**($19)**	**($19)**	**($18)**	**($18)**	**($18)**
Dispatch cost	**$18 / MWh**	**$18 / MWh**	**$19 / MWh**	**$19 / MWh**	**$20 / MWh**	**$20 / MWh**
Cost $/MWh	**$45 / MWh**	**$46 / MWh**	**$50 / MWh**	**$49 / MWh**	**$51 / MWh**	**$52 / MWh**
NPV Total Cost						
1ST 5 Years						
2026-2035						
Average 2020-2025						

Current Operations	2032	2033	2034	2035	2036	2037
Capacity	185	185	185	185	185	185
PSE's Take	1,108,797	1,206,235	1,195,964	1,186,447	1,186,448	1,186,449
Net Capacity Factor	68%	74%	74%	73%	73%	73%
Market Rate $/MWh	$40 / MWh	$42 / MWh	$45 / MWh	$49 / MWh	$61 / MWh	$62 / MWh
Market Revenue	$44	$50	$54	$58	$60	$61
Colstrip Operations						
Fixed Operating Expenses	$16	$16	$17	$17	$18	$18
Capital	$2	$2	$2	$2	$2	$2
Coal Fixed	$19	$20	$20	$21	$21	$22
Dispatch Costs	$23	$26	$26	$27	$28	$29
Expenses Colstrip Operations	**$60**	**$64**	**$65**	**$67**	**$69**	**$71**
PSE Expenses						
Property Taxes	3	3	3	3	3	3
Total PSE Expenses	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**
Total Costs	**$63**	**$67**	**$68**	**$70**	**$72**	**$74**
Net Costs Flow	**($19)**	**($16)**	**($15)**	**($12)**	**($12)**	**($12)**
Dispatch cost	**$21 / MWh**	**$22 / MWh**	**$22 / MWh**	**$23 / MWh**	**$23 / MWh**	**$24 / MWh**
Cost $/MWh	**$57 / MWh**	**$55 / MWh**	**$57 / MWh**	**$59 / MWh**	**$61 / MWh**	**$62 / MWh**
NPV Total Cost						
1ST 5 Years						
2026-2035						
Average 2020-2025						

Current Operations	2038	2039	2040	2041	2042
Capacity	185	185	185	185	185
PSE's Take	1,186,450	1,186,451	1,186,452	1,186,453	1,186,454
Net Capacity Factor	73%	73%	73%	73%	73%
Market Rate $/MWh	$64 / MWh	$66 / MWh	$68 / MWh	$70 / MWh	$72 / MWh
Market Revenue	$63	$65	$67	$69	$71
Colstrip Operations					
Fixed Operating Expenses	$19	$20	$20	$21	$21
Capital	$2	$2	$2	$2	$2
Coal Fixed	$23	$23	$24	$25	$26
Dispatch Costs	$29	$30	$31	$32	$33
Expenses Colstrip Operations	**$73**	**$75**	**$78**	**$80**	**$82**
PSE Expenses					
Property Taxes	3	3	3	3	3
Total PSE Expenses	**$3**	**$3**	**$3**	**$3**	**$3**
Total Costs	**$76**	**$78**	**$80**	**$83**	**$85**
Net Costs Flow	**($13)**	**($13)**	**($13)**	**($14)**	**($14)**
Dispatch cost	**$25 / MWh**	**$26 / MWh**	**$26 / MWh**	**$27 / MWh**	**$28 / MWh**
Cost $/MWh	**$64 / MWh**	**$66 / MWh**	**$68 / MWh**	**$70 / MWh**	**$72 / MWh**
NPV Total Cost					
1ST 5 Years					
2026-2035					
Average 2020-2025					

Colstrip Unit 4

	2020	2021	2022	2023	2024	2025	2026	2027	2028
Energy Revenue Cost	[redacted]								
Market Rate Dispatch costs	[redacted]								
Emissions									
Average	[redacted]								

REDACTED
VERSION

Colstrip Unit 4

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Energy Revenue Cost	[redacted]									
Market Rate Dispatch costs	[redacted]									
Emissions										
Average										

REDACTED
VERSION

Current Operations	2020	2021	2022	2023	2024	2025	2026
Generation	1,272,390	2,546,923	2,754,082	2,758,632	2,758,632	2,758,632	2,758,632
% Output	100%	100%	100%	100%	100%	100%	100%
PSE's Take	1,272,390	2,546,923	2,754,082	2,758,632	2,758,632	2,758,632	2,758,632
Market Rate $/MWh							**33**
Regulated Revenue	**$58**	**$112**	**$109**	**$109**	**$113**	**$116**	
Market Revenue							**$90**
Revenue	**$58**	**$112**	**$109**	**$109**	**$113**	**$116**	**$90**
Colstrip Operations							
Fixed Operating Expenses	$14	$28	$23	$24	$25	$26	$27
Capital	$4	$6	$5	$6	$5	$6	$6
Variable O&M	$2	$5	$5	$5	$6	$6	$6
Coal Variable	$14	$28	$30	$30	$30	$31	$32
Coal Fixed	$14	$28	$30	$30	$30	$31	$32
Expenses Colstrip Operations	**$48**	**$95**	**$94**	**$96**	**$96**	**$99**	**$102**
PSE Expenses							
Property Taxes	6	$12	$12	$12	$12	$12	$12
Insurance	0	$0	$0	$0	$0	$0	$0
Legal Fees	1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$7**	**$12**	**$12**	**$12**	**$13**	**$13**	**$13**
Remediation Costs	**$4**	**$4**	**$3**	**$1**	**$4**	**$4**	**$4**
Total Costs	**$58**	**$112**	**$109**	**$109**	**$113**	**$116**	**$119**
Cash Flow	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($29)**
Cumulative Cash Flow	$0	$0	$0	$0	$0	$0	($18)
NPV Cash Flow	**($244)**						
All-In $/MWh	**46**	**44**	**40**	**39**	**41**	**42**	**43**
Variable	**13**	**13**	**13**	**13**	**13**	**13**	**14**

Current Operations	2027	2028	2029	2030	2031	2032	2033
Generation	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632
% Output	100%	50%	50%	50%	50%	50%	50%
PSE's Take	2,758,632	1,379,316	1,379,316	1,379,316	1,379,316	1,379,316	1,379,316
Market Rate $/MWh	**34**	**36**	**38**	**40**	**42**	**47**	**50**
Regulated Revenue							
Market Revenue	**$95**	**$50**	**$52**	**$55**	**$59**	**$64**	**$69**
Revenue	**$95**	**$50**	**$52**	**$55**	**$59**	**$64**	**$69**
Colstrip Operations							
Fixed Operating Expenses	$27	$28	$29	$30	$31	$32	$33
Capital	$6	$3	$3	$3	$3	$3	$4
Variable O&M	$6	$3	$3	$3	$3	$3	$4
Coal Variable	$33	$17	$17	$18	$19	$19	$20
Coal Fixed	$33	$34	$35	$36	$37	$38	$39
Expenses Colstrip Operations	**$105**	**$85**	**$88**	**$91**	**$93**	**$96**	**$99**
PSE Expenses							
Property Taxes	$12	$6	$6	$6	$6	$6	$6
Insurance	$0	$0	$0	$0	$0	$0	$0
Legal Fees	$1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$13**	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**
Remediation Costs	**$1**	**$4**	**$2**	**$2**	**$2**	**$2**	**$2**
Total Costs	**$119**	**$96**	**$96**	**$99**	**$101**	**$104**	**$107**
Cash Flow	**($24)**	**($46)**	**($44)**	**($44)**	**($43)**	**($40)**	**($39)**
Cumulative Cash Flow	($32)	($57)	($79)	($100)	($119)	($136)	($151)
NPV Cash Flow							
All-In $/MWh	**43**	**70**	**70**	**72**	**74**	**76**	**78**
Variable	**14**	**15**	**15**	**15**	**16**	**16**	**17**

Current Operations	2034	2035	2036	2037	2038	2039	2040
Generation	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632	2,758,632
% Output	50%	50%	50%	50%	50%	50%	50%
PSE's Take	1,379,316	1,379,316	1,379,316	1,379,316	1,379,316	1,379,316	1,379,316
Market Rate $/MWh	**53**	**57**	**59**	**62**	**65**	**67**	**69**
Regulated Revenue							
Market Revenue	**$73**	**$79**	**$82**	**$86**	**$90**	**$92**	**$95**
Revenue	**$73**	**$79**	**$82**	**$86**	**$90**	**$92**	**$95**
Colstrip Operations							
Fixed Operating Expenses	$34	$35	$36	$37	$38	$39	$40
Capital	$4	$4	$4	$4	$4	$4	$4
Variable O&M	$4	$4	$4	$4	$4	$4	$4
Coal Variable	$20	$21	$21	$22	$23	$23	$24
Coal Fixed	$41	$42	$43	$44	$46	$47	$48
Expenses Colstrip Operations	**$102**	**$105**	**$108**	**$111**	**$115**	**$118**	**$122**
PSE Expenses							
Property Taxes	$6	$6	$6	$6	$6	$6	$6
Insurance	$0	$0	$0	$0	$0	$0	$0
Legal Fees	$1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**
Remediation Costs	**$2**	**$6**	**$2**	**$2**	**$2**	**$2**	**$2**
Total Costs	**$110**	**$118**	**$117**	**$120**	**$123**	**$127**	**$131**
Cash Flow	**($38)**	**($39)**	**($35)**	**($34)**	**($34)**	**($35)**	**($36)**
Cumulative Cash Flow	($165)	($178)	($189)	($199)	($209)	($218)	($226)
NPV Cash Flow							
All-In $/MWh	**80**	**85**	**85**	**87**	**89**	**92**	**95**
Variable	**17**	**18**	**18**	**19**	**19**	**20**	**21**

Current Operations	2041	2042
Generation	2,758,632	2,758,632
% Output	50%	50%
PSE's Take	1,379,316	1,379,316
Market Rate $/MWh	**71**	**73**
Regulated Revenue		
Market Revenue	**$98**	**$101**
Revenue	**$98**	**$101**
Colstrip Operations		
Fixed Operating Expenses	$42	$43
Capital	$4	$5
Variable O&M	$4	$5
Coal Variable	$25	$26
Coal Fixed	$50	$51
Expenses Colstrip Operations	**$125**	**$129**
PSE Expenses		
Property Taxes	$6	$6
Insurance	$0	$0
Legal Fees	$1	$1
Total PSE Expenses	**$7**	**$7**
Remediation Costs	**$2**	**$10**
Total Costs	**$134**	**$146**
Cash Flow	**($36)**	**($45)**
Cumulative Cash Flow	($235)	($244)
NPV Cash Flow		
All-In $/MWh	**97**	**106**
Variable	**21**	**22**

Federal Tax	21%				
	Ratio	**Cost**	**Weighted**	**Weighted**	
ST Debt	0.00%	0.00%	0.00%	0.00%	0.0%
ST & LT Debt Net	51.50%	5.81%	2.99%	2.36%	100.0%
					100.0%
Total Tax Deductible !	51.50%	5.81%	2.99%	2.36%	
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.0%
Equity	48.50%	9.50%	4.61%	4.61%	100.0%
					100.0%
Total Non-Tax Deduct	48.50%		4.61%	4.61%	
	100.00%		7.60%	6.97%	
			9.62%	8.82%	
				8.82%	

	Ratio	Pretax **Cost**	**Pre-Tax Weighted**	**After-Tax Weighted**
Tax Deductible Debt	51.50%	5.81%	2.99%	2.36%
Preferred	0.00%	0.00%	0.00%	0.00%
Equity	48.50%	9.50%	4.61%	4.61%
	100.00%		7.60%	6.97%

Attachment 24

Proposed Colstrip transaction update

PUGET SOUND ENERGY

September 4, 2019

Updates since Board call on August 26, 2019

1. Market prices updated from $24.80/MWh to $23.97/MWh to the latest forecast from the 2019 draft IRP, a 3.3% price drop. 5-year average capacity factor changed from 79% to 70% as a result.
2. 95MW replacement
   1) Energy replacement – remains the same, assumed market purchases.
   2) Capacity replacement
      - Previous analysis assumed year round capacity PPA product based on the cost of a generic peaking plant ($5M annually).
      - Update analysis is consistent with Colstrip 1&2 early shutdown replacement, assumed winter only PPA based on short term RFP ($1M annually) .
3. Included 2 scenarios for hedging
   1) Scenario 1 no hedging
   2) Scenario 2 hedge 95MW – only hedge the 95MW replacement
4. Colstrip 2020 budget is currently being developed. It will include the new coal contract on the cost impact of the early closure on units 1&2 to unites 3&4 operations.

Significant savings to customers under both the no hedging and hedge 95MW scenarios

Line	*$ in millions*	Scenario 1 No hedging	Scenario 2 Hedge 95MW
1	**Operational cost**		
2	Colstrip unit 4 continuing operations	$209 M	$209 M
3	90MW 5-year PPA + 95MW replacement	$115 M	$148 M
4	PPA Savings NPV	$94 M	$61 M
5			
6	**Operational cost ($/MWh)**		
7	Colstrip unit 4 continuing operations	$45.4/MWh	$45.4/MWh
8	90MW 5-year PPA + 95MW replacement	$24.9/MWh	$31.7/MWh
9	Savings $/MWh	$20.6/MWh	$13.7/MWh

PUGET SOUND ENERGY

Colstrip unit 4 continuing operations

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	PSE's share of unit 4 capacity	185 MW	185 MW	185 MW	185 MW	185 MW
2	PSE's take (MWh)	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
3	Net capacity factor	77%	75%	67%	65%	65%
4						
5	**Colstrip operational cost**					
6	Fixed operating expenses	$14 M	$13 M	$12 M	$12 M	$13 M
7	Capital	$3 M	$3 M	$3 M	$3 M	$3 M
8	Coal fixed	$14 M	$15 M	$15 M	$15 M	$15 M
9	Dispatch cost	$17 M	$18 M	$18 M	$18 M	$18 M
10	**Operational expense**	**$48 M**	**$48 M**	**$48 M**	**$48 M**	**$49 M**
11	**PSE Expense**					
12	Property Tax	$3 M	$3 M	$3 M	$3 M	$3 M
13	**Total PSE Expense**	**$3 M**	**$3 M**	**$3 M**	**$3 M**	**$3 M**
14						
15	**Total cost**	**$51 M**	**$51 M**	**$50 M**	**$51 M**	**$52 M**
16						
17	Dispatch cost (line 9 / 2)	$13.6/MWh	$14.8/MWh	$16.5/MWh	$17.2/MWh	$17.2/MWh
18	Cost $/MWh (line 15 / 2)	$40.9/MWh	$42.0/MWh	$45.9/MWh	$48.7/MWh	$49.6/MWh
19						
20	**Total cost NPV (line 15)**	**$209 M**				
21	**Cost $/MWh (5-year average)**	**$45.4/MWh**				

Scenario 1 – no hedging

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	606,136	590,295	530,487	509,010	510,205
5	Market price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
6	PPA cost	$14 M	$14 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	639,810	623,089	559,959	537,289	538,549
11	Mid-C price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
12	Market purchases	$15 M	$14 M	$13 M	$13 M	$14 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$30 M	$29 M	$26 M	$26 M	$28 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
23	Cost $/MWh (line 19 / 22)	$24.2/MWh	$24.0/MWh	$24.0/MWh	$25.1/MWh	$26.9/MWh
24						
25	**Total cost NPV (line 19)**	**$115 M**				
26	**Cost $/MWh (5-year average)**	**$24.9/MWh**				

Scenario 2 –hedge 95MW

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	606,136	590,295	530,487	509,010	510,205
5	Market price ($/MWh)	$23.6/MWh	$23.0/MWh	$23.4/MWh	$24.4/MWh	$25.4/MWh
6	PPA cost	$14 M	$14 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	639,810	623,089	559,959	537,289	538,549
11	Fixed heding price ($/MWh)	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh
12	Market Purchases	$24 M	$23 M	$21 M	$20 M	$20 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$39 M	$38 M	$34 M	$33 M	$34 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	1,245,946	1,213,384	1,090,446	1,046,299	1,048,754
23	Cost $/MWh (line 19 / 22)	$31.4/MWh	$31.5/MWh	$31.4/MWh	$31.8/MWh	$32.7/MWh
24						
25	**Total cost NPV (line 19)**	**$148 M**				
26	**Cost $/MWh (5-year average)**	**$31.7/MWh**				

Attachment 25

Sep 11 update #2

Line	(A) $ in millions	(B) Scenario 1 No hedging	(C) Scenario 2 Hedge 95MW
1	**Operational cost**		
2	Colstrip unit 4 continuing operations	$168 M	$168 M
3	90MW 5-year PPA + 95MW replacement	$110 M	$131 M
4	PPA Savings NPV	$58 M	$37 M
5			
6	**Operational cost ($/MWh)**		
7	Colstrip unit 4 continuing operations	$43.1/MWh	$43.1/MWh
8	90MW 5-year PPA + 95MW replacement	$28.2/MWh	$33.4/MWh
9	Savings $/MWh	$14.9/MWh	$9.7/MWh

Sep 4 update

Line	(A) $ in millions	(B) Scenario 1 No hedging	(C) Scenario 2 Hedge 95MW
10	**Operational cost**		
11	Colstrip unit 4 continuing operations	$209 M	$209 M
12	90MW 5-year PPA + 95MW replacement	$115 M	$148 M
13	PPA Savings NPV	$94 M	$61 M
14			
15	Operational cost ($/MWh)		
16	Colstrip unit 4 continuing operations	$45.4/MWh	$45.4/MWh
17	90MW 5-year PPA + 95MW replacement	$24.9/MWh	$31.7/MWh
18	Savings $/MWh	$20.6/MWh	$13.7/MWh

$ in millions	Sep 11	Sep 4	Difference
PSE's share of unit 4 capacity	185 MW	185 MW	-
Output (MWh)	950,819	1,128,966	(178,147)
Coal Tons	595,058	706,549	(111,491)
Net capacity factor	59%	70%	-11%
Colstrip operational cost			
Fixed operating expenses	$14 M	$13 M	$1 M
Capital	$4 M	$3 M	$1 M
Coal fixed	$0 M	$15 M	($15) M
Dispatch cost	$20 M	$18 M	$2 M
Operational expense	$38 M	$48 M	($10) M
PSE Expense			
Property Tax	$3 M	$3 M	$0 M
Total PSE Expense	**$3 M**	**$3 M**	**$0 M**
Total cost (5-year average)	**$41 M**	**$51 M**	**($10) M**
Dispatch cost (line 10 / 2)	$21/MWh	$16/MWh	$5/MWh
Total cost $/MWh (line 16 / 2)	$43/MWh	$45/MWh	($2)/MWh
Coal cost per Ton	$27/Ton	$44/Ton	($17)/Ton

$/MWH	Sept 11 Update	Sept 4 Update	Difference
PSE's share of unit 4 capacity	185 MW	185 MW	-
Output(MWh)	950,819	1,128,966	(178,147)
Coal Tons	595,058	706,549	(111,491)
Net capacity factor	59%	70%	-11%
Colstrip operational costs			
Fixed operating expenses	$14.6/MWh	$11.3/MWh	$3.3/MWh
Capital	$4.5/MWh	$2.5/MWh	$2.0/MWh
Coal Costs	$21.1/MWh	$28.9/MWh	($7.8)/MWh
Property Tax	$2.9/MWh	$2.5/MWh	$0.5/MWh
Operational expense	$43.1/MWh	$45.1/MWh	($2.0)/MWh

Line	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	Scenario 1 - no hedging						
			12-month ending				
	$ in millions		**May 2021**	**May 2022**	**May 2023**	**May 2024**	**May 2025**
1	**Operational cost**	**PV**					
2	Colstrip unit 4 continuing operations	$168 M	$43 M	$39 M	$36 M	$41 M	$46 M
3	90MW 5-year PPA + 95MW replacement	$110 M	$28 M	$26 M	$25 M	$26 M	$28 M
4	PPA savings	**$58 M**	$15 M	$13 M	$11 M	$15 M	$18 M
5							
6	**Operational cost ($/MWh)**	**Avg**					
7	Colstrip unit 4 continuing operations	$43.1/MWh	$43.2/MWh	$41.2/MWh	$38.3/MWh	$44.0/MWh	$48.9/MWh
8	90MW 5-year PPA + 95MW replacement	$28.2/MWh	$28.3/MWh	$27.6/MWh	$26.8/MWh	$28.1/MWh	$30.1/MWh
9	Savings $/MWh	$14.9/MWh	$14.9/MWh	$13.5/MWh	$11.5/MWh	$15.8/MWh	$18.9/MWh
10							
11	**Scenario 2 - hedge 95MW**						
12			**12-month ending**				
13	*$ in millions*		**May 2021**	**May 2022**	**May 2023**	**May 2024**	**May 2025**
14	**Operational cost**	**PV**					
15	Colstrip unit 4 continuing operations	$168 M	$43 M	$39 M	$36 M	$41 M	$46 M
16	90MW 5-year PPA + 95MW replacement	$131 M	$33 M	$31 M	$31 M	$31 M	$32 M
17	PPA savings	**$37 M**	$10 M	$8 M	$5 M	$10 M	$14 M
18							
19	**Operational cost ($/MWh)**	**Avg**					
20	Colstrip unit 4 continuing operations	$43.1/MWh	$43.2/MWh	$41.2/MWh	$38.3/MWh	$44.0/MWh	$48.9/MWh
21	90MW 5-year PPA + 95MW replacement	$33.4/MWh	$33.3/MWh	$32.9/MWh	$33.2/MWh	$33.5/MWh	$34.3/MWh
22	Savings $/MWh	$9.7/MWh	$9.9/MWh	$8.3/MWh	$5.1/MWh	$10.5/MWh	$14.6/MWh

$ in millions	**May 2021**	**May 2022**	**May 2023**	**May 2024**	**May 2025**
PSE's share of unit 4 capacity	185 MW	185 MW	185 MW	185 MW	185 MW
PSE's take (MWh)	994,256	947,548	939,818	932,400	940,072
Coal Tons	622,243	593,011	588,174	583,531	588,332
Net capacity factor	61%	58%	58%	58%	58%
Colstrip operational cost					
Fixed operating expenses	$14 M	$13 M	$12 M	$14 M	$16 M
Capital	$6 M	$4 M	$1 M	$4 M	$7 M
Dispatch cost	$21 M	$20 M	$20 M	$20 M	$20 M
Operational expense	**$40 M**	**$36 M**	**$33 M**	**$38 M**	**$44 M**
PSE Expense					
Property Tax	$3 M	$3 M	$3 M	$3 M	$3 M
Total PSE Expense	**$3 M**	**$3 M**	**$3 M**	**$3 M**	**$3 M**
Total cost	**$43 M**	**$39 M**	**$36 M**	**$41 M**	**$46 M**
Dispatch cost (line 9 / 2)	$20.7/MWh	$21.2/MWh	$21.0/MWh	$21.2/MWh	$21.5/MWh
Cost $/MWh (line 15 / 2)	$43.2/MWh	$41.2/MWh	$38.3/MWh	$44.0/MWh	$48.9/MWh
Total cost NPV (line 15)	**$168 M**				
Cost $/MWh (5-year average)	**$43.1/MWh**				

	2020	2021	2022	2023	2024	2025
output	[redacted]					
O&M Costs						
High Calcuim						
Startup Fuel						
Pollution Control Fees						
Mercury Control Fees						
Water Treatment Chemicals						
O&M Maintenance						
Overhaul						
Reserves						
Total						
Capital						
Total						
Fuel Handling (50160)						
Ash Disposal (50170)						
Maint Coal Hand Equip (51210)						
Total						

REDACTED
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REDACTED VERSION

	2020	2021	2022	2023	2024	2025
O&M Costs	[redacted]					
High Calcuim						
Startup Fuel						
Pollution Control Fees						
Mercury Control Fees						
Water Treatment Chemicals						
O&M Maintenance						
Overhaul						
Reserves						
Total						
Capital						
Misc Variable						
Fuel Handling (50160)						
Ash Disposal (50170)						
Maint Coal Hand Equip (51210)						
Total						
Total						
Fixed Costs						
Variable						
Total						
Capital						

Fuel Costs

Fuel Costs	[redacted]
$/Ton	[redacted]
$/MMBTU	[redacted]
Tons	[redacted]
MMBTU	[redacted]
Heat Content BTU/lbs	[redacted]
Heat Content MMBTU/Tons	[redacted]
MMBTU	[redacted]
Heat Content	[redacted]
Tons	[redacted]
Cost/Ton	[redacted]
Total Cost	[redacted]
MWH	[redacted]
Heat Reat MMBTU/Mwh	[redacted]
MMBTU	[redacted]
Heat Content MMBTU/Tons	[redacted]
Tons	[redacted]
Cost per ton	[redacted]
Total Cost	[redacted]
Variable Coal Costs	[redacted]
Total	[redacted]
Cost/$ton	[redacted]

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Tons	[redacted]					

Previous Analysis

MWH	[redacted]					
Heat Reat MMBTU/Mwh						
MMBTU						
Heat Content MMBTU/Tons						
Tons						

	YE 5/2021	YE 5/2022	YE 5/2023	YE 5/2024	YE 5/2025	
Tons	[redacted]					
Fixed Coal Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variable Coal Costs						
Total						
Cost/$ton	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

	YE 5/2021	YE 5/2022	YE 5/2023	YE 5/2024	YE 5/2025
Cost of Coal	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

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REDACTED VERSION

Colstrip Unit 4
Assumption Coal Contract

	2020	2021	2022	2023	2024	2025	2026	2027
Energy	[redacted]							
Revenue								
Cost								
Market Rate	[redacted]							
Dispatch costs								
Emissions								
Average	[redacted]							

Colstrip Unit 4
Assumption Coal

	2028	2029	2030	2031	2032	2033	2034	2035	2036
Energy	[redacted]								
Revenue									
Cost									
Market Rate	[redacted]								
Dispatch costs									
Emissions									
Average									

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Colstrip Unit 4
Assumption Coal

	2037	2038	2039
Energy	[redacted]		
Revenue			
Cost			
Market Rate	[redacted]		
Dispatch costs			
Emissions			
Average			

REDACTED
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Scenario 1 - no hedging

Line	*$ in millions*	12-month ending May 2021	May 2022	May 2023	May 2024	May 2025
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	483,692	460,969	457,209	453,600	457,332
5	Market price ($/MWh)	$26.7/MWh	$26.5/MWh	$25.6/MWh	$26.4/MWh	$28.1/MWh
6	PPA cost	$13 M	$12 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	510,564	486,579	482,609	478,800	482,739
11	Mid-C price ($/MWh)	$26.7/MWh	$26.5/MWh	$25.6/MWh	$26.4/MWh	$28.1/MWh
12	Market purchases	$14 M	$13 M	$12 M	$13 M	$14 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$28 M	$26 M	$25 M	$26 M	$28 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	994,256	947,548	939,818	932,400	940,072
23	Cost $/MWh (line 19 / 22)	$28.3/MWh	$27.6/MWh	$26.8/MWh	$28.1/MWh	$30.1/MWh
24						
25	**Total cost NPV (line 19)**	**$110 M**				
26	**Cost $/MWh (5-year average)**	**$28.2/MWh**				

Scenario 2 - hedge 95MW

Line	*$ in millions*	May 2021	May 2022	May 2023	May 2024	May 2025
		12-month ending				
1	**90 MW NEW PPA**					
2	NWE PPA capacity	90 MW	90 MW	90 MW	90 MW	90 MW
3						
4	Energy (MWh)	483,692	460,969	457,209	453,600	457,332
5	Market price ($/MWh)	$26.7/MWh	$26.5/MWh	$25.6/MWh	$26.4/MWh	$28.1/MWh
6	PPA cost	$13 M	$12 M	$12 M	$12 M	$13 M
7						
8	**95 MW Replacement**					
9	Replacement energy post PPA					
10	Replacement energy (MWh)	510,564	486,579	482,609	478,800	482,739
11	Fixed heding price ($/MWh)	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh	$37.5/MWh
12	Market Purchases	$19 M	$18 M	$18 M	$18 M	$18 M
13						
14	Replacement capacity winter only					
15	Capacity (MW)	95 MW	95 MW	95 MW	95 MW	95 MW
16	Capacity charge $/KW-yr	$12.0/kw-yr	$12.3/kw-yr	$12.6/kw-yr	$12.9/kw-yr	$13.2/kw-yr
17	Capacity cost	$1 M	$1 M	$1 M	$1 M	$1 M
18						
19	Total cost (line 6+12+17)	$33 M	$31 M	$31 M	$31 M	$32 M
20						
21	Total capacity	185 MW	185 MW	185 MW	185 MW	185 MW
22	Total energy MWh	994,256	947,548	939,818	932,400	940,072
23	Cost $/MWh (line 19 / 22)	$33.3/MWh	$32.9/MWh	$33.2/MWh	$33.5/MWh	$34.3/MWh
24						
25	**Total cost NPV (line 19)**	**$131 M**				
26	**Cost $/MWh (5-year average)**	**$33.4/MWh**				

Scenario: Ongoing Operation Unit 4 2020-2035

Fixed Costs % 100%

Current Operations	2020	2021	2022	2023	2024	2025	2026
Capacity	185	185	185	185	185	185	185
PSE's Take	1,024,233	952,287	940,912	938,287	924,159	962,349	967,959
Net Capacity Factor	63%	59%	58%	58%	57%	59%	60%
Market Rate $/MWh							$31 / MWh
Market Revenue							$30
Colstrip Operations							
Fixed Operating Expenses	$14	$7	$6	$7	$8	$9	$9
Capital	$4	$3	$2	$3	$3	$3	$3
Coal Fixed	$14	$14	$15	$15	$15	$16	$16
Dispatch Costs	$21	$20	$20	$20	$20	$21	$21
Expenses Colstrip Operations	**$52**	**$44**	**$43**	**$44**	**$45**	**$48**	**$49**
PSE Expenses							
Property Taxes	3	3	3	3	3	3	3
Total PSE Expenses	**3**	**3**	**3**	**3**	**3**	**3**	**$3**
Total Costs	**$55**	**$47**	**$46**	**$47**	**$48**	**$51**	**$52**
Net Costs Flow	**($55)**	**($47)**	**($46)**	**($47)**	**($48)**	**($51)**	**($22)**
Dispatch cost	**$20 / MWh**	**$21 / MWh**	**$21 / MWh**	**$21 / MWh**	**$21 / MWh**	**$22 / MWh**	**$22 / MWh**
Cost $/MWh	**$54 / MWh**	**$49 / MWh**	**$49 / MWh**	**$50 / MWh**	**$52 / MWh**	**$53 / MWh**	**$53 / MWh**
NPV Total Cost	**$362**						
1ST 5 Years	**$200**						
2026-2035	**$162**						
Average 2020-2025	**$51 / MWh**						
Emissions Tons	1,440,013	1,589,607	1,510,416	1,513,802	1,365,680	1,490,045	
Conversion factor	0.9075185	0.9075185	0.9075185	0.9075185	0.9075185	0.9075185	
Metric Tons	1,306,839	1,442,598	1,370,731	1,373,804	1,239,380	1,352,243	

Scenario: Ongoing Operation Un
Fixed Costs %

Current Operations	2027	2028	2029	2030	2031	2032	2033
Capacity	185	185	185	185	185	185	185
PSE's Take	1,009,522	931,515	968,341	932,079	930,984	899,243	977,488
Net Capacity Factor	62%	57%	60%	58%	57%	55%	60%
Market Rate $/MWh	$32 / MWh	$34 / MWh	$34 / MWh	$36 / MWh	$36 / MWh	$38 / MWh	$40 / MWh
Market Revenue	$32	$31	$33	$33	$34	$35	$39
Colstrip Operations							
Fixed Operating Expenses	$9	$9	$10	$10	$10	$10	$11
Capital	$3	$2	$2	$2	$2	$2	$2
Coal Fixed	$16	$17	$17	$18	$19	$19	$20
Dispatch Costs	$22	$20	$22	$22	$22	$21	$24
Expenses Colstrip Operations	**$50**	**$48**	**$50**	**$51**	**$52**	**$52**	**$56**
PSE Expenses							
Property Taxes	3	3	3	3	3	3	3
Total PSE Expenses	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**
Total Costs	**$53**	**$51**	**$53**	**$54**	**$55**	**$55**	**$59**
Net Costs Flow	**($21)**	**($20)**	**($20)**	**($21)**	**($21)**	**($21)**	**($20)**
Dispatch cost	**$22 / MWh**	**$22 / MWh**	**$22 / MWh**	**$23 / MWh**	**$24 / MWh**	**$24 / MWh**	**$24 / MWh**
Cost $/MWh	**$53 / MWh**	**$55 / MWh**	**$55 / MWh**	**$58 / MWh**	**$59 / MWh**	**$61 / MWh**	**$60 / MWh**
NPV Total Cost							
1ST 5 Years							
2026-2035							
Average 2020-2025							

Emissions Tons
Conversion factor
Metric Tons

Scenario: Ongoing Operation Un
Fixed Costs %

Current Operations	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
Capacity	185	185	185	185	185	185	185
PSE's Take	931,412	927,366	1,186,448	1,186,449	1,186,450	1,186,451	1,186,452
Net Capacity Factor	57%	57%	73%	73%	73%	73%	73%
Market Rate $/MWh	$44 / MWh	$48 / MWh	$53 / MWh	$55 / MWh	$56 / MWh	$58 / MWh	$59 / MWh
Market Revenue	$41	$45	$46	$47	$49	$50	$52
Colstrip Operations							
Fixed Operating Expenses	$11	$11	$12	$12	$12	$13	$13
Capital	$2	$2	$2	$2	$2	$2	$2
Coal Fixed	$20	$21	$21	$22	$23	$23	$24
Dispatch Costs	$24	$24	$25	$26	$27	$27	$28
Expenses Colstrip Operations	**$57**	**$58**	**$60**	**$62**	**$64**	**$66**	**$68**
PSE Expenses							
Property Taxes	3	3	3	3	3	3	3
Total PSE Expenses	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**
Total Costs	**$60**	**$61**	**$63**	**$65**	**$67**	**$69**	**$71**
Net Costs Flow	**($18)**	**($17)**	**($17)**	**($18)**	**($18)**	**($18)**	**($19)**
Dispatch cost	**$25 / MWh**	**$26 / MWh**	**$21 / MWh**	**$22 / MWh**	**$22 / MWh**	**$23 / MWh**	**$24 / MWh**
Cost $/MWh	**$64 / MWh**	**$66 / MWh**	**$53 / MWh**	**$55 / MWh**	**$56 / MWh**	**$58 / MWh**	**$59 / MWh**
NPV Total Cost							
1ST 5 Years							
2026-2035							
Average 2020-2025							

Emissions Tons
Conversion factor
Metric Tons

Scenario: Ongoing Operation Un
Fixed Costs %

Current Operations	2041	2042
Capacity	185	185
PSE's Take	1,186,453	1,186,454
Net Capacity Factor	73%	73%
Market Rate $/MWh	$61 / MWh	$63 / MWh
Market Revenue	$53	$55
Colstrip Operations		
Fixed Operating Expenses	$14	$14
Capital	$2	$2
Coal Fixed	$25	$26
Dispatch Costs	$29	$30
Expenses Colstrip Operations	**$70**	**$72**
PSE Expenses		
Property Taxes	3	3
Total PSE Expenses	**$3**	**$3**
Total Costs	**$73**	**$75**
Net Costs Flow	**($19)**	**($20)**
Dispatch cost	**$24 / MWh**	**$25 / MWh**
Cost $/MWh	**$61 / MWh**	**$63 / MWh**
NPV Total Cost		
1ST 5 Years		
2026-2035		
Average 2020-2025		

Emissions Tons
Conversion factor
Metric Tons

Scenario: Ongoing Operation 2020-2042

Fixed Costs % 100%

Current Operations	2020	2021	2022	2023	2024	2025	2026	2027
Generation	1,024,233	952,287	940,912	938,287	924,159	962,349	962,349	962,349
% Output	100%	100%	100%	100%	100%	100%	100%	100%
PSE's Take	1,024,233	952,287	940,912	938,287	924,159	962,349	962,349	962,349
Market Rate $/MWh							**33**	**34**
Market Revenue							$31	$33
Revenue	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$31**	**$33**
Colstrip Operations								
Fixed Operating Expenses	$14	$13	$12	$13	$16	$17	$18	$18
Capital	$4	$6	$5	$6	$5	$6	$6	$6
Variable O&M	$2	$5	$5	$5	$6	$6	$6	$6
Coal Variable	$14	$28	$30	$30	$30	$31	$32	$33
Coal Fixed	$14	$28	$30	$30	$30	$31	$32	$33
Expenses Colstrip Operations	**$48**	**$80**	**$82**	**$84**	**$87**	**$90**	**$93**	**$96**
PSE Expenses								
Property Taxes	6	$12	$12	$12	$12	$12	$12	$12
Insurance	0	$0	$0	$0	$0	$0	$0	$0
Legal Fees	1	$1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$7**	**$12**	**$12**	**$12**	**$13**	**$13**	**$13**	**$13**
Remediation Costs	**$4**	**$4**	**$3**	**$1**	**$4**	**$4**	**$4**	**$1**
Total Costs	**$58**	**$96**	**$98**	**$98**	**$104**	**$107**	**$110**	**$109**
Cash Flow	**($58)**	**($96)**	**($98)**	**($98)**	**($104)**	**($107)**	**($78)**	**($76)**
Cumulative Cash Flow	($54)	($139)	($218)	($293)	($367)	($439)	($488)	($532)
NPV Cash Flow	**($930)**							
All-In $/MWh	**57**	**101**	**104**	**104**	**113**	**111**	**114**	**113**
Variable	**16**	**35**	**38**	**38**	**39**	**38**	**39**	**40**

Fixed Costs %

Current Operations	2028	2029	2030	2031	2032	2033	2034	2035
Generation	962,349	962,349	962,349	962,349	962,349	962,349	962,349	962,349
% Output	50%	50%	50%	50%	50%	50%	50%	50%
PSE's Take	481,174	481,174	481,174	481,174	481,174	481,174	481,174	481,174
Market Rate $/MWh	**36**	**38**	**40**	**42**	**47**	**50**	**53**	**57**
Market Revenue	**$18**	**$18**	**$19**	**$20**	**$22**	**$24**	**$25**	**$27**
Revenue	**$18**	**$18**	**$19**	**$20**	**$22**	**$24**	**$25**	**$27**
Colstrip Operations								
Fixed Operating Expenses	$19	$19	$20	$20	$21	$22	$22	$23
Capital	$3	$3	$3	$3	$3	$4	$4	$4
Variable O&M	$3	$3	$3	$3	$3	$4	$4	$4
Coal Variable	$17	$17	$18	$19	$19	$20	$20	$21
Coal Fixed	$34	$35	$36	$37	$38	$39	$41	$42
Expenses Colstrip Operations	**$76**	**$78**	**$80**	**$83**	**$85**	**$88**	**$90**	**$93**
PSE Expenses								
Property Taxes	$6	$6	$6	$6	$6	$6	$6	$6
Insurance	$0	$0	$0	$0	$0	$0	$0	$0
Legal Fees	$1	$1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**
Remediation Costs	**$4**	**$2**	**$2**	**$2**	**$2**	**$2**	**$2**	**$6**
Total Costs	**$86**	**$86**	**$88**	**$91**	**$93**	**$96**	**$99**	**$106**
Cash Flow	**($69)**	**($68)**	**($69)**	**($70)**	**($71)**	**($72)**	**($73)**	**($78)**
Cumulative Cash Flow	($570)	($604)	($637)	($669)	($698)	($726)	($753)	($779)
NPV Cash Flow								
All-In $/MWh	**180**	**179**	**184**	**189**	**194**	**200**	**205**	**219**
Variable	**42**	**43**	**44**	**45**	**47**	**48**	**50**	**51**

Fixed Costs %

Current Operations	2036	2037	2038	2039	2040	2041	2042
Generation	962,349	962,349	962,349	962,349	962,349	962,349	962,349
% Output	50%	50%	50%	50%	50%	50%	50%
PSE's Take	481,174	481,174	481,174	481,174	481,174	481,174	481,174
Market Rate $/MWh	**59**	**62**	**65**	**67**	**69**	**71**	**73**
Market Revenue	**$29**	**$30**	**$31**	**$32**	**$33**	**$34**	**$35**
Revenue	**$29**	**$30**	**$31**	**$32**	**$33**	**$34**	**$35**
Colstrip Operations							
Fixed Operating Expenses	$24	$24	$25	$26	$26	$27	$28
Capital	$4	$4	$4	$4	$4	$4	$5
Variable O&M	$4	$4	$4	$4	$4	$4	$5
Coal Variable	$21	$22	$23	$23	$24	$25	$26
Coal Fixed	$43	$44	$46	$47	$48	$50	$51
Expenses Colstrip Operations	**$96**	**$99**	**$102**	**$105**	**$108**	**$111**	**$114**
PSE Expenses							
Property Taxes	$6	$6	$6	$6	$6	$6	$6
Insurance	$0	$0	$0	$0	$0	$0	$0
Legal Fees	$1	$1	$1	$1	$1	$1	$1
Total PSE Expenses	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**	**$7**
Remediation Costs	**$2**	**$2**	**$2**	**$2**	**$2**	**$2**	**$10**
Total Costs	**$104**	**$107**	**$110**	**$114**	**$117**	**$120**	**$131**
Cash Flow	**($76)**	**($77)**	**($79)**	**($81)**	**($84)**	**($86)**	**($96)**
Cumulative Cash Flow	($804)	($827)	($849)	($870)	($890)	($910)	($930)
NPV Cash Flow							
All-In $/MWh	**217**	**223**	**229**	**236**	**243**	**250**	**273**
Variable	**53**	**54**	**56**	**58**	**59**	**61**	**63**

Federal Tax	21%				
	Ratio	**Cost**	**Weighted**	**Weighted**	
ST Debt	0.00%	0.00%	0.00%	0.00%	0.0%
ST & LT Debt Net	51.50%	5.81%	2.99%	2.36%	100.0%
					100.0%
Total Tax Deductible S	51.50%	5.81%	2.99%	2.36%	
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.0%
Equity	48.50%	9.50%	4.61%	4.61%	100.0%
					100.0%
Total Non-Tax Deduct	48.50%		4.61%	4.61%	
	100.00%		7.60%	6.97%	
			9.62%	8.82%	
				8.82%	

	Ratio	Pretax **Cost**	**Pre-Tax Weighted**	**After-Tax Weighted**
Tax Deductible Debt	51.50%	5.81%	2.99%	2.36%
Preferred	0.00%	0.00%	0.00%	0.00%
Equity	48.50%	9.50%	4.61%	4.61%
	100.00%		7.60%	6.97%