Exh. ASR-1CT
Docket UE-200115
Witness: Andrew Rector
REDACTED VERSION

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-200115**

TESTIMONY OF

Andrew S. Rector

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

Compliance with Clean Energy Transformation Act;
Greenhouse Gas Emissions; and
The Colstrip Transmission System Sale

October 2, 2020

CONFIDENTIAL PER PROTECTIVE ORDER – REDACTED VERSION

TABLE OF CONTENTS

LIST OF EXHIBITS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Andrew Rector, and my business address is 621 Woodland Square Loop SE, Lacey, Washington, 98503. My business mailing address is P.O. Box 47250, Olympia, Washington, 98504-7250. My business email address is andrew.rector@utc.wa.gov.

Q. By whom are you employed and in what capacity?

A. I am employed by the Washington Utilities and Transportation Commission (Commission) as a Regulatory Analyst in the Conservation and Energy Planning Section of the Regulatory Services Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since April 2018.

Q. Please state your qualifications to provide testimony in this proceeding.

A. I hold a Master of Public Affairs degree, with concentrations in sustainable development and policy analysis from Indiana University, and a Bachelor of Arts degree from Northern Arizona University. Prior to joining the Commission, I was a market analyst for a clean technology research firm for more than two years; managed grants and programs for the City of Tucson for nearly two years; and analyzed an energy efficiency project as a summer fellow for the Environmental

Defense Fund. I completed the Public Utilities Reports Guide's "Principles of Public Utilities Operations and Management" in October 2018, and frequently attend webinars, conferences, and other training sessions.

With the Commission, my recent responsibilities include serving as lead on a Clean Energy Transformation Act (CETA)-related rulemaking, as well as serving as a team member on other CETA rulemakings. I am also the lead on Commission Staff (Staff) for utility greenhouse gas (GHG) emission reporting. Lastly, I serve as the Staff lead for one utility's integrated resource planning (IRP) process, and two utilities' energy conservation programs.

Q. Have you testified previously before the Commission?

A. No.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the scope and purpose of your testimony?

A. Pursuant to WAC 480-143-170, for the Commission to render a decision on a transfer of property application, it must first reach a conclusion on whether the transfer of property in question is consistent with the public interest. The purpose of my testimony is to provide Staff's assessment of the extent to which the Proposed Transactions align with public policy objectives related to greenhouse gas (GHG) emissions. Specifically, my testimony examines whether the Proposed Transactions:

(1) ensure meaningful and cost-effective progress toward meeting CETA mandates; and (2) reduce company-specific and global GHG emissions.

Q. Please summarize your conclusions as to whether the Unit 4 sales align with the statutory mandates of CETA.

A. I conclude that PSE failed to demonstrate that the proposed sale of Unit 4 to NorthWestern Energy (NorthWestern) and Talen Montana (Talen) represents the lowest reasonable cost approach for complying with CETA's mandate that utilities eliminate coal-fired resources from their allocation of electricity by December 31, 2025.[1] PSE failed to produce evidence showing how the costs and benefits of the proposed transfers of property stack up against the costs and benefits of alternative courses of action.

The Unit 4 sale is a half-step toward CETA compliance. The Unit 4 sale does not address PSE's allocation of electricity from Unit 3, and virtually assures that Unit 4 will remain in PSE's allocation of electricity through the end of 2025, when the Colstrip Unit 4 power purchase agreements (PPAs) with NorthWestern and Talen expire.

Furthermore, the Unit 4 sale requires PSE to enter two PPAs that present risk to ratepayers. As explored further in Staff Witness Ms. Jing Liu's testimony, this risk is primarily a consequence of the PPAs using the Mid-Columbia (Mid-C) Price Index as the *price floor*—and having no *price ceiling* on the power costs ratepayers will be responsible for paying. Consequently, I conclude that there is insufficient

[1] RCW 19.405.030.

evidence that the Unit 4 sale represents the lowest reasonable cost towards PSE's compliance with the allocation of electricity provision of CETA.

Q. Please summarize your conclusions as to whether PSE's sale of Unit 4 reduces GHG emissions.

A. I conclude that the extent to which the PSE's sale of Colstrip Unit 4 will help reduce PSE's GHG emissions over the next five years is entirely unclear. While PSE would no longer own the facility, PSE would replace half of the lost capacity resulting from the sale with PPAs—supplied solely by Unit 4 coal-fired generation. The other half of the lost capacity would likely consist of market purchases at Mid-C, for which carbon intensity is largely unknown.

Additionally, given that the Proposed Transactions provide no assurance that either Units 3 or 4 will retire,[2] PSE's sale of Unit 4 is unlikely to reduce GHG emissions at all on a macro level. To the contrary, the Proposed Transactions could provide avenues for Northwestern and Talen to prolong the operational lives of Units 3 and 4—avenues which would not exist absent PSE's sale of Unit 4.

Q. Please summarize your conclusions as to whether PSE's sale of its ownership interest in the Colstrip Transmission System is consistent with the public interest.

[2] *See* Gomez, Exh. DCG-1T (concluding that the Proposed Transaction provides no certainty regarding the future decision making at Colstrip).

A. I conclude that the sale of PSE's ownership interest in the Colstrip Transmission System (CTS) to Northwestern is not in this public interest. This sale may constrain PSE's future options for complying with CETA's 2030 and 2045 mandates. PSE is evaluating plans for how to comply with the 2030 and 2045 requirements under CETA, and given that the CTS could allow PSE to access renewable resources in Montana, it is premature for PSE to determine that the CTS has no value to Washington ratepayers beyond the balance remaining on PSE's books. As I describe in Section V, subsection F below, not only did PSE not provide an assessment of the value of the CTS for CETA compliance optionality, but in selling the CTS at depreciated book value, PSE greatly undervalues the asset from a market value perspective.

Separately, the sale of the CTS also could increase the price of renewable energy from producers in Montana who want to be interconnected into the CTS. NorthWestern's transmission rates are significantly higher than PSE's and, therefore, the sale of the CTS would likely increase the price of renewable energy from Montana—that would interconnect with the CTS.[3] [4] Additionally, NorthWestern's and Talen's purchase of Unit 4 increases the uncertainty with respect to whether the CTS will be available to renewable energy developers. These points are further discussed in Section V (subsections E and D) below.

[3] As evidenced by Exh. ASR-13, NorthWestern's transmission rate comes to $4.48 per kilowatt-month (kW-month), while PSE's transmission rate is $2.85/kW-month.

[4] Tom Lutey, *NorthWestern seeks huge transmission rate increase, boosting bills for its biggest customers*, Billings Gazette, May 23, 2019. Retrieved from https://billingsgazette.com/business/northwestern-seeks-huge-transmission-rate-increase-boosting-bills-for-its-biggest-customers/article_34f02e51-7684-530f-8538-64dc5093f912.html.

Q. Have you prepared any exhibits in support of your testimony?

A. Yes. I prepared Exhibits ASR-2 through ASR-14.

- Exh. ASR-2 is a copy of Lazard's most recent "Levelized Cost of Energy Analysis (Version 13.0)".
- Exh. ASR-3 is the Company's response to a Staff data request regarding replacement of capacity lost through the Proposed Transactions.
- Exh. ASR-4 is a Staff calculation of average day-ahead Mid-C energy market prices per month from 2015 through May 2020.
- Exh. ASR-5 is a copy of PSE's "2019 IRP Progress Report".
- Exh. ASR-6 is a copy of the Energy+Environmental Economics (E3) report "Resource Adequacy in the Pacific Northwest".
- Exh. ASR-7 is a copy of the Northwest Power and Conservation Council report "Pacific Northwest Power Supply Adequacy Assessment for 2024".
- Exh. ASR-8 shows PSE's calculation of its expected emission reduction that would result if the transaction were approved.
- Exh. ASR-9 is a table showing the effects of the Proposed Transactions on PSE's existing CTS capacity.
- Exh. ASR-10 is the Company's response to a Public Counsel data request regarding the effects of the retirement of various Colstrip units on available transmission capacity on the CTS.
- Exh. ASR-11 is a copy of PSE's 2017 IRP appendix D.

- Exh. ASR-12 shows projects in NorthWestern's interconnection queue that would utilize the CTS.
- Exh. ASR-13 shows a comparison of transmission prices between PSE and NorthWestern.
- Exh. ASR-14 is the Company's response to a Staff data request regarding the market price of the CTS assets it intends to sell.

III. THE CLEAN ENERGY TRANSFORMATION ACT

A. Summary And Recommendation

Q. Please summarize your conclusions regarding the Unit 4 sale's impact on CETA compliance.

A. Although removing Colstrip from PSE's allocation of electricity is a necessary step for the Company's compliance with CETA, the Unit 4 sale introduces costs and risks to ratepayers that would not exist absent the sale. Furthermore, PSE failed to show how the costs and benefits of the proposed transfers of property stack up against the costs and benefits of alternative courses of action. Accordingly, Staff cannot conclude that the proposed sale of Unit 4 represents the lowest reasonable costs towards CETA compliance. As a result, Staff cannot conclude that the Unit 4 sale is consistent with the public interest, established by CETA, regarding the elimination of coal-fired resources from utilities' allocation of electricity. However, if the Commission were to approve the Proposed Transactions, it should do so conditioned

upon the Company mitigating the risk associated with the PPAs, as outlined in Staff witness Liu's testimony.[5]

B. CETA Provisions

Q. What actions does CETA require be taken by the end of 2025?

A. CETA requires each electric utility to "eliminate coal-fired resources from its allocation of electricity" by December 31, 2025.[6] [7]

Q. What target does CETA establish regarding the State's electric power supply by January 1, 2030?

A. CETA establishes that it is Washington State policy that "all retail sales of electricity to Washington retail electric customers be greenhouse gas neutral" by 2030.[8]

Q. What target does CETA establish regarding the State's electric power supply by January 1, 2045?

[5] Liu, Exh. JL-1TC at 20–37.
[6] RCW 19.405.030(1). According to CETA, "allocation of electricity" means, "for the purposes of setting 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." RCW 19.405.020(1).
[7] My testimony only discusses the CETA requirement to remove coal-fired generation from PSE's allocation of electricity, not the requirement for the Commission to accelerate the depreciation schedules for coal-fired resources. RCW 19.405.030(2). This is because the Commission has already accelerated PSE's depreciation schedules for Colstrip Units 3 & 4 in the company's last general rate case (UE-190529).
[8] RCW 19.405.040(1).

A. CETA establishes that it is Washington State policy that "nonemitting electric generation and electricity from renewable resources supply one hundred percent of all sales of electricity to Washington retail electric customers" by 2045.[9]

Q. What does CETA say regarding achieving targets at the lowest reasonable cost?

A. RCW 19.405.040(6)(a)(i) and 19.405.050(3)(a) establish that utilities should meet the 2030 and 2045 targets "at the lowest reasonable cost."

C. Compliance With CETA's Coal Provisions

Q. Will the Unit 4 sale allow PSE to comply with CETA's mandate to remove coal-fired generation from the Company's allocation of electricity?

A. The Unit 4 sale would represent a half-step towards compliance with RCW 19.405.030(1), but will not by itself represent full compliance. I use the word "half" here to refer to the fact that the Unit 4 sale would reduce PSE's ownership of the Colstrip facility by half—as PSE would still own and generate coal-fired power produced from Unit 3. Therefore, Unit 3's power generation would not be removed from PSE's allocation of electricity because of the sale. Moreover, the Unit 4 sale would require PSE to purchase 90 MW of Unit 4's generation through a pair of PPAs until as late as the end of 2025. This ensures that PSE is not likely to remove Unit 4 generation from its allocation of electricity much earlier than December 31, 2025. As

[9] RCW 19.405.050(1).

I note below, it is unclear how the Unit 4 sale stacks up to other viable alternatives to comply with this provision of CETA.

Q. Do the Proposed Transactions in this docket address PSE's use of coal-fired generation from Colstrip Unit 3?

A. As explained above, the Proposed Transactions are silent regarding coal-fired generation from Unit 3, of which PSE owns 25 percent.[10] Accordingly, I conclude that the Proposed Transactions in this docket will have no direct effect on PSE's allocation of electricity from Unit 3. The Proposed Transactions only pertain to PSE's share of Unit 4. PSE and the other Colstrip Unit 3 & 4 co-owners and Washington investor-owned utilities (IOUs) (Avista Corporation and Pacific Power and Light Company) will need to remove their allocation of electricity from *both* Colstrip Units 3 and 4 by December 31, 2025, in order to be in compliance with CETA.[11] At this time, it is not yet clear how PSE intends to accomplish this requirement.

Q. What alternative options could PSE take to move closer to full compliance with CETA's coal provisions?

A. PSE's other options include (but are not limited to): (1) selling both Units 3 and 4 and not entering into the PPAs contemplated in the Proposed Transactions; (2) working with its Colstrip co-owners to permanently close one or both units; or (3)

[10] Roberts, Exh. RJR-1CT at 5: 3.
[11] RCW 19.405.030(1).

utilizing a merchant subsidiary that would sell the output from one or both units after 2025.

Q. Do any of these alternatives represent better options than the Proposed Transactions towards compliance with CETA's coal provisions?

A. Without any detailed analysis comparing the Proposed Transactions to one of these alternative options (or others), it is difficult to say whether any other options would provide greater benefits or less risk to Washington ratepayers than the Proposed Transactions. PSE has not presented such analyses in its applications. This makes it difficult to assess whether the proposed transaction is indeed the lowest reasonable cost for CETA compliance. This opens the possibility that this course of action may increase costs relative to these alternatives.

Q. Could Units 3 and 4 shut down without the Proposed Transactions?

A. Yes, it is possible (though admittedly uncertain) that this could happen. Two of Colstrip's four generating units, Units 1 and 2, closed at the beginning of January 2020,[12] ahead of their planned 2022 closure.[13] The Company's testimony notes the challenging landscape Colstrip faces as a coal-fired power plant, demonstrating that PSE is aware of the possibility that Units 3 and 4 could close on their own for economic reasons absent the Proposed Transactions.[14]

[12] Talen Energy, *Colstrip Steam Electric Station – Colstrip, Montana*. Retrieved from https://www.talenenergy.com/plant/colstrip-units-3-4/.
[13] Roberts, Exh. RJR-5C at 125.
[14] *Id*. at 22.

Q. How much coal-fired generation has shut down nationally since 2011?

A. According to the Energy Information Administration (EIA), 95 gigawatts (GW) of coal-fired generation has closed since 2011, with another 25 GW scheduled to close by 2025.[15] This data shows a clear trend of coal-fired generation closures nationwide, underscoring the vulnerability of Colstrip's remaining units.

Q. How does the cost of coal-powered generation compare to the cost of renewable generation, in general?

A. The investment firm Lazard produces an annual report comparing the levelized cost of energy (LCOE) of a variety of generation technologies, including coal, wind, and solar. Lazard's most recent analysis, from November 2019, shows that onshore wind and utility-scale solar photovoltaic (PV) power both have LCOE's lower than coal generation.[16] Moreover, the analysis concludes that unsubsidized wind and solar PV have LCOE's approaching the marginal cost of coal.[17] Additionally, wind and solar have the added benefits of being both zero emission and compliant with CETA.

Q. Will Unit 4 require significant maintenance over the next several years?

A. It appears so. Budgets for Colstrip from 2021 forward are not yet finalized, but [redacted]

[redacted]

[15] Energy Information Administration, *As U.S. coal-fired capacity and utilization decline, operators consider seasonal operation*. Retrieved from https://www.eia.gov/todayinenergy/detail.php?id=44976.
[16] Rector, Exh. ASR-2 at 3.
[17] Rector, Exh. ASR-2 at 7.

[redacted].[18] This overhaul would drive up both the price of operating Unit 4 and also the costs of the Unit 4 PPAs.

Q. Do the Proposed Transactions serve the public interest as it is envisioned in CETA?

A. Staff cannot conclude that the Proposed Transactions serve the public interest. Without any analysis from PSE comparing the Proposed Transactions to potential alternatives, and given the realistic possibility that the plant would close without the Proposed Transactions, it is not clear whether the Proposed Transactions represent the best or most cost-effective option for compliance with CETA's mandate.

D. Company's Proposed Plan To Replace The Power From Colstrip Unit 4

Q. How much capacity will the Company lose as a result of the Proposed Transactions?

A. PSE will lose up to 185 MW of capacity upon completing the sale of Colstrip Unit 4.[19]

Q. How does PSE plan to replace the capacity and energy it will lose by selling its stake in Unit 4?

[18] Song, Exh. CLS-09C at 6.
[19] Roberts, Exh. RJR-1CT at 16: 4-5.

A. There are two prongs to the Company's plan to replace the lost capacity and the energy from the Unit 4 sale. The first prong in the Company's plan are the Colstrip PPAs, which together amount to 90 MW of Colstrip Unit 4's output and will last five years or less, concluding on or before December 31, 2025.[20]

The second prong of the plan involves offsetting the loss of the remaining 95 MW through market purchases, both for energy and capacity. The Company assumes it would replace the lost capacity through market purchases at the Mid-C Day-Ahead Index Price, "unless PSE were to acquire a new resource to fill the net reduction of 95 MW of capacity."[21] In Exh. ASR-3, PSE notes that it has not acquired any such resources and expects to issue a short-term solicitation for winter peak capacity, if any is required, soon after the Unit 4 sale closes.

Q. Does the Company's plan to replace the lost energy present any risks that the Commission should consider in its approval of the sale?

A. Yes. Below, in Section IV, subsection C, I discuss the GHG emissions that would result from the PPAs. Additionally, as outlined further in Staff witness Liu's testimony, PSE will be paying a high cost through the Colstrip PPAs because the PPAs use the Mid-C market price as a floor price.[22] The PPAs have *no* price ceiling, which poses the risk of increased power costs to ratepayers.

In addition, there are significant risks posed by the Company's planned reliance on market purchases to cover the remaining 95 MW of capacity. Markets are

[20] Roberts, Exh. RJR-9T at 16: 8-10 and 37: 3-4.
[21] Roberts, Exh. RJR-1CT at 16:7-17:4.
[22] Liu, Exh. JL-1TC at 32–35.

inherently volatile, so there is a risk that purchasing power from the Mid-C market could end up being more expensive than PSE anticipates.[23] Exh. ASR-4 is a spreadsheet that shows monthly average day-ahead on-peak and off-peak power prices for the Mid-C energy market. This exhibit demonstrates just how volatile that market can be. To take one example, off-peak power prices in the month of March have ranged from an average low of $6.73/MWh in 2017 up to an average high of $95.52/MWh in 2019.

PSE admits to this volatility in Exh. ASR-5. The exhibit is the Company's 2019 integrated resource plan (IRP) progress report states: "…short-term energy markets have become more volatile as western state policies have driven changes in the resource mix across the western interconnect….[W]ith a significant amount of firm generation announced for retirement in the next decade, PSE needs to secure firm capacity in a planned manner to maintain the resource adequacy of its system."[24]

Q. How do these risks implicate the coal mandate in CETA?

A. Given the increased power costs and inherent volatility of market purchases, as discussed, the Unit 4 sale may not represent the lowest reasonable cost approach or option for compliance with the coal mandate of CETA.

[23] Market volatility contributed to a $41.7 million surcharge to PSE customers through the Company's power cost adjustment mechanism in 2019. *See* Docket UE-200398, Order 01 (not an exhibit).
[24] Rector, Exh. ASR-5 at 5-6.

Q. How do these risks threaten the public interest?

A. These risks constitute a threat to the public interest because ratepayers could end up paying increased power costs that result from the PPAs and market purchases from the Mid-C energy market. Through significant exposure to market volatility, ratepayers could experience increased costs that result from power purchases, which would not be in the public interest.

Q. How should the Commission address this threat?

A. If the Commission were to approve the Unit 4 sale, Staff recommends that the Commission cap ratepayers' responsibility for the Colstrip PPA at $[redacted] million, as described in Ms. Liu's testimony.[25]

Q. Does the regional resource adequacy situation support Staff's recommendation to limit the effects of reliance on market purchases?

A. Yes. In recent years, several researchers have highlighted the need for additional capacity in the Pacific Northwest. Energy + Environmental Economics (E3), for instance, made a March 2019 report titled "Resource Adequacy in the Pacific Northwest" (submitted as Exh. ASR-6). This report concluded that the region "is expected to need new capacity in the near term in order to maintain an acceptable level of Resource Adequacy after planned coal retirements."[26] Further, the report notes that "overreliance on [market purchases] could lead to underinvestment in

[25] Liu, Exh. JL-1TC at 35.
[26] Rector, Exh. ASR-6 at iii.

resources needed to meet reliability standards."[27] Additionally, the Northwest Power and Conservation Council (NWPCC) report titled "Pacific Northwest Power Supply Adequacy Assessment for 2024" (submitted as Exh. ASR-7) found that the region's power supply becomes inadequate to meet its reliability standard as early as 2021.[28]

IV. GREENHOUSE GAS EMISSIONS

A. Summary

Q. Please summarize your conclusions regarding greenhouse gas emissions in the Proposed Transactions.

A. The State's GHG emission standard[29] is not applicable to the PPAs that would execute upon closing the sale of Unit 4. Nevertheless, achieving reductions in GHG emissions is a clear public policy objective in the State of Washington.[30] Therefore, reductions (and conversely the absence of increases) in greenhouse emissions should be considered in the public interest by the Commission. I conclude that it is far from certain, and perhaps unlikely, that the sale of Unit 4 will generate meaningful reductions in GHG emissions between now and 2025. Therefore, the sale of Unit 4 is inconsistent with the public interest from a GHG emissions perspective.

[27] *Id.*, at 72.
[28] Rector, Exh. ASR-7 at 5.
[29] RCW 80.80.040.
[30] RCW 19.405.010(3). The intent of CETA is to enact "significant and swift reductions in greenhouse gas emissions."

My testimony assumes that PSE will execute the PPAs with NorthWestern and Talen upon closing the Unit 4 sale. As explained in the testimony of Mr. Chris McGuire (Exhibit CRM-1T), the public interest standard as provided in WAC 480-143-170 applies only to transfers of property, of which the PPAs are not. Nevertheless, it is appropriate to incorporate the PPAs into the public interest analysis of the Unit 4 sale, given that these PPAs will be executed upon the Unit 4 sale closing.

B. Northwestern And Talen PPAs Do Not Apply To The Requirements Of The State's Greenhouse Gas Emissions Standard

Q. What is the state's GHG emissions performance standard?

A. RCW 80.80.040(1) sets the State's GHG performance standard as the lower of: one thousand one hundred pounds of greenhouse gases per megawatt hour (MWh), or "the average available greenhouse gas emissions output as determined under RCW 80.80.050."[31] These standards began on July 1, 2008, and apply to "all baseload electric generation for which electric utilities enter into long-term financial commitments."[32]

[31] RCW 80.80.050 requires the Department of Commerce to promulgate rules every five years to adopt the "average available greenhouse gas emissions output". In September 2018, in WAC 194-26-020, Commerce determined this number to be 925 lbs. of GHGs per MWh.
[32] RCW 80.80.040(1) (emphasis added).

Q. How is "long-term financial commitment" defined in RCW 80.80.010?

A. RCW 80.80.010(16)(b) defines "long-term financial commitment" 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 Washington.

Q. Describe the PPAs that PSE would enter as a part of this transaction.

A. As a part of the Proposed Transactions, the Company would sign two separate PPAs —one with NorthWestern and one with Talen—each for 45 MW of power generated from Colstrip Unit 4.[33] In the initial filing, the NorthWestern PPA[34] was set to begin on June 1, 2020, and end on May 15, 2025. The proposed PPAs contained within the Company's supplemental filing reference those same dates, though the Company indicates that the actual PPA dates will commence the day following the close of the Proposed Transactions, and end on the earlier of 258 weeks after closing, or December 31, 2025.[35] The Talen PPA and the NorthWestern PPA have identical terms.[36]

Q. Does the State's GHG emission standard apply to the two PPAs within the Proposed Transactions?

[33] Roberts, Exh. RJR-9T at 16: 8-10 and 37: 3-4.
[34] The original filing proposed only one PPA, with NorthWestern.
[35] Roberts, Exh. RJR-9T at 34:9-13.
[36] *Id*. at 35:3-4.

A. No, they do not. Since the PPAs will last no longer than 258 weeks (i.e., two weeks less than five full calendar years), they do not reach the threshold that would qualify them as "long-term financial commitments" as defined in RCW 80.80.010(16)(b) . Because the PPAs do not fall under the definition of long-term financial commitment, the State's GHG emission standard does not apply to the PPAs.

C. Effect Of The Unit 4 Sale On GHG Emissions

Q. What does CETA say about GHG emissions?

A. In the findings and intent section of CETA, the Legislature found that "Washington must address the impacts of climate change by leading the transition to a clean energy economy."[37] The Legislature further found that "[a]bsent significant and swift reductions in greenhouse gas emissions, climate change poses immediate significant threats to our economy, health, safety, and national security."[38] These findings can establish a Legislative intent that the implementation of CETA should result in the reduction of GHG emissions, and not just a reallocation of the same emissions across different electricity producers.

Q. Does the Company claim that the sale of Unit 4 will result in GHG emissions reductions?

[37] RCW 19.405.010(1).
[38] RCW 19.405.010(3).

A. Yes. PSE claims that exiting Colstrip Unit 4 would "significantly reduce" the Company's GHG emissions by 350 thousand metric tons of carbon dioxide (CO_2) annually through 2025.[39]

Q. How does the Company arrive at this conclusion?

A. As illustrated in Exh. ASR-8, PSE used the total average annual metric tons of CO_2 emitted by its existing 25 percent share of Colstrip Unit 4 as a starting point for emissions reductions, then subtracted emissions from the resources it expects to use to replace the power from Unit 4, to arrive at its annual emissions reduction total. PSE performed this calculation for the five years after the closing of the Proposed Transactions. PSE assumes that emissions reductions would increase over time, due to an assumed reduction in the amount of market purchases and assumed reduced emissions from replacement peaking resources. Using these methods, the five-year average emissions reduction is approximately 360 thousand metric tons of CO_2.

Q. Are the assumptions behind this calculation sound?

A. Not necessarily. Although the calculation appears to be done correctly, the accuracy of some of the assumptions underlying the data inputs is questionable. One such assumption is the assignment of a specific megaton (MT) per MWh number (called the emissions factor) to the market purchases PSE plans to make to replace a portion of its output from Unit 4.

[39] Roberts, Exh. RJR-1CT at 3: 32-34.

Q. What emissions factor did PSE use, and what is its source?

A. The Company used 0.437 MT/MWh to calculate its expected emissions from market purchases. This figure comes from CETA, though it is meant as a default emissions factor from unspecified electricity until the Washington Department of Ecology can adopt a different rate.[40] The default figure itself comes from a calculation in the rules governing the California Air Resources Board (CARB),[41] and thus should be considered a proxy.

Q. Is this default emissions factor accurate?

A. Given that it is not a Washington-specific (or even Pacific Northwest-specific) number, it is difficult to say exactly how accurate this figure is. The actual emissions factor could be higher or lower, though Staff has no way of knowing for certain. If the market purchases of replacement power come from a renewable or non-emitting source, the emissions reductions would be higher; if the market purchases come from a natural gas plant or Colstrip, the emissions reductions would be lower.

Q. Is it realistic for PSE to claim emissions reductions from the Proposed Transactions?

A. If the Proposed Transactions were approved, it would be realistic for PSE to claim that it has reduced emissions from its own resource portfolio. That means that PSE

[40] RCW 19.405.070(2): "For unspecified electricity, the utility must use an emissions rate determined, and periodically updated, by the department of ecology by rule….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."
[41] California Code of Regulations. 17 CCR §95111(b)(1).

would be able to claim that its generating resources emit fewer GHG emissions. Ridding itself of Unit 4, a coal-fired generator, should accomplish that.

However, the actual magnitude of that reduction is uncertain, given the uncertainty around the carbon intensity of Mid-C market purchases. Additionally, the PPAs entered as part of the Proposed Transactions will see PSE continue to be allocated 90 MW of generated electricity from Unit 4 until the end of 2025 at the latest, meaning it is still responsible for those emissions during that time.

The Proposed Transactions would also not allow PSE to claim that it is responsible for actual global emission reductions. One must assume that if Talen and NorthWestern are interested in purchasing Unit 4, it would not be for the purpose of closing it down. Therefore, it is entirely possible that the sale of Unit 4 to Talen and NorthWestern will extend the operational life of Unit 4 beyond the date the facility would be retired absent the sale. This sale would likely foreclose the opportunity for Unit 4 to close prior to 2025, due to the contractual obligation and economic benefit for NorthWestern and Talen under the terms of the PPAs. Furthermore, the sale of the transmission (as discussed below) may make it more economical for Talen and NorthWestern to operate Unit 4 by lowering their cost to transmit and sell power generated from Unit 4, and thus extend the life of the plant. In other words, PSE's sale of Unit 4 to Talen and NorthWestern could result in an increase in GHG emissions relative to a counterfactual where Unit 4 closes prior to December 31, 2025.[42]

[42] Extending the life of the Unit 4 could also increase future remediation costs. Remediation costs are discussed by Mr. Gomez in his testimony DCG-1T.

Q. How does your conclusion that the sale of Unit 4 would result in uncertain emissions reductions from PSE's portfolio relate to Staff's overall assessment of PSE's Application?

A. Given that property transfer applications must be consistent with the public interest in order to be approved, Staff's analysis focuses on critically evaluating the elements that PSE claims weigh in favor of finding that the Proposed Transactions are in the public interest. PSE claims that the Unit 4 sale will result in a reduction in GHG emissions. As I have explained that claim is unlikely, which weighs against a finding that the transaction is in the public interest.

V. COLSTRIP TRANSMISSION SYSTEM

A. Summary And Recommendation

Q. Please summarize your conclusions regarding the CTS.

A. The Commission should reject the proposed sale of the CTS, as it presents too many risks with too little benefit to ratepayers. It also does not conform with the public interest as established by CETA. This is because the sale could limit the Company's access to CETA-compliant renewables and/or raise the Company's cost to procure them. Furthermore, the sale price of the CTS (depreciated book value) greatly undervalues the transmission asset.

B. PSE's Ownership And Use Of The CTS, And Montana Renewable Characteristics

Q. How much of the CTS does the Company currently own?

A. The CTS is broken into two segments. The first runs from the Colstrip substation west to the Broadview substation; the second runs west from the Broadview substation to the town of Townsend, Montana.[43] PSE currently owns approximately 750 MW of transmission capacity on each section.[44]

Q. How much of its share of the CTS is the Company currently using?

A. Currently, PSE is using about 388 MW of transmission capacity to transmit energy from its share of Colstrip Units 3 and 4.[45] The remaining 380 MW is available for transmission requests, including those for renewable resources. Most of this 380 MW was freed up by the closure of Colstrip Units 1 and 2 in early January 2020.[46]

Q. How much of its share of the CTS is the Company proposing to sell?

A. There are two components of the proposed CTS sale. The first component, the "Initial Purchase Assets", consists of "not less than" 95 MW of transmission capacity from Colstrip to Townsend. This transmission capacity transfer from PSE to NorthWestern would occur upon closing of the sale agreement.[47] The second

[43] Flynn, Exh. TMF-1T at 3: 3-6.
[44] *Id*. at 5: 13.
[45] *Id*. at 5: 21.
[46] *Id*. at 6: 18-20.
[47] *Id*. at 9: 19-26.

component of the proposed CTS sale, the "Option Assets," would consist of "not less than" 90 MW of transmission capacity from Colstrip to Townsend.[48] This second transmission capacity transfer could occur (at NorthWestern's sole discretion) once the PPAs expire by the end of 2025.[49]

Q. How much transmission capacity would remain available to PSE if the sale of both the Initial Purchase and Option Assets were to be completed?

A. As illustrated in Exh. ASR-9, if both the Initial Purchase Assets and the Option Assets were to convey to NorthWestern, PSE would be left with approximately 565 MW of transmission capacity, of which 185 MW is dedicated to transmitting the output of Colstrip Unit 3. That would leave 380 MW of available transmission.

Q. Would the sale of either the Initial Purchase or Optional Assets impact the currently available 380 MW of transmission capacity?

A. No.[50]

Q. If Unit 3 were to close, would the full amount of transmission currently being used to transmit its output be available to the Company?

A. Not necessarily. As explained in Exh. ASR-10, determining the precise amount of additional transmission capacity that would be available if Unit 3 were to close would require an engineering study.

[48] *Id*. at 9: 27-10: 6.
[49] Flynn, Exh. TMF-1T at 9–10.
[50] Flynn, Exh. TMF-1T at 9: 11-14.

Q. Are you aware that PSE, NorthWestern, and Talen are engaged in arbitration regarding the latter's assertion that it has a right to acquire some of PSE's interests in the CTS?

A. Yes. The Company's supplemental testimony indicates that as of the filing date, there had been no change to the terms of the originally-proposed sale of the CTS, and that if Talen were to prevail in the arbitration, none of the Company's testimony on the impacts of the proposed CTS sale would change.[51]

Q. Does Staff believe the result of the arbitration over the transmission sale makes a difference in whether the Commission should approve the Proposed Transactions?

A. Yes. If Talen were to succeed in purchasing part of the CTS, the impacts could be like those outlined below for NorthWestern's proposed purchase of transmission assets. It may also influence Talen's intention with regards to the continued operation of both Colstrip units. However, without knowing for certain whether Talen will prevail in the arbitration, it is difficult for Staff to foresee the precise result that outcome may have. The uncertainty of whether Talen could acquire an interest in the CTS from PSE adds an additional element of risk to the Proposed Transactions.

[51] Flynn, Exh. TMF-5T at 2: 20-21 and 3: 13-19.

Q. Describe Montana's wind resources.

A. Montana has abundant wind energy potential, particularly east of the Rocky Mountains. In 2011, the National Renewable Energy Laboratory (NREL) proclaimed that Montana had the fifth-highest potential for wind generation in the nation.[52] The American Wind Energy Association (AWEA) quantifies this potential to be 678,978 MW.[53]

A second way to ascertain the quality of Montana's wind resources is through its capacity factor, which the Energy Information Administration (EIA) defines as "[t]he ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period."[54] In its 2017 IRP, the Company's most recently-approved IRP (Appendix D of which is introduced as Exh. ASR-11), PSE modeled Montana wind with a 46 percent capacity factor, greater than the 30 percent capacity factor that it assigned to Washington wind.[55] This is an indication that PSE sees Montana wind as a superior resource to Washington wind.

[52] National Renewable Energy Laboratory, *NREL Triples Previous Estimates of U.S. Wind Power Potential*, Retrieved from https://www.nrel.gov/docs/fy11osti/51555.pdf.
[53] American Wind Energy Association, *Wind Energy in Montana*, Retrieved from https://www.awea.org/Awea/media/Resources/StateFactSheets/Montana.pdf.
[54] Energy Information Administration, *Glossary*, Retrieved from https://www.eia.gov/tools/glossary/index.php?id=C.
[55] Rector, Exh. ASR-11 at 65.

C. PSE's Compliance With CETA's 2030 And 2045 Mandates And The Need For Transmission On The CTS

Q. How close is the Company to meeting the 2030 and 2045 requirements detailed in CETA?

A. Exh. ASR-5 offers a preliminary review of CETA's impacts. The results show that PSE is far short of the renewable and nonemitting generation it needs to meet CETA's 2030 and 2045 requirements. While the exact need is not quantified in the progress report, PSE acknowledges its need is "significant."[56]

More recently, PSE has been contemplating releasing a 2020 "all resources" request for proposals (RFP) that provides updated data on the Company's resource need out to 2040.[57] The RFP documentation shows a need of about 1,200 MW in 2040.[58]

Q. Does PSE provide testimony that contains any information on potential new resources?

[56] Rector, Exh. ASR-5 at 16.
[57] Electric utilities are required to submit RFPs to the Commission within 135 days after the date that its most recent IRP was due to be submitted. WAC 480-107-015(3)(b). PSE has submitted its draft RFP to the Commission, but in September 2020, petitioned the Commission to withdraw its RFP due do a lack of immediate resource need. The Commission will hear PSE's petition during its October 15, 2020, open meeting. *In the matter of the Petition of Puget Sound Energy For an Order Approving Proposed Request for Proposal*, Dockets UE-200413 and UE-200414, Order 03 (September 10, 2020).
[58] *Id.*, Puget Sound Energy's (i) Motion for Withdrawal of Draft Requests for Proposals and (ii) Petition for Waiver of Certain Requirements Related to Requests for Proposals Contained in WAC 480-107, 7 (Figure 2) (September 8, 2020).

A. Yes. The Company released an "all-resources" RFP in June 2018.[59] As discussed further below and in the Company's testimony, PSE has reserved 350 MW of east-to-west transmission on the Company's share of the CTS for "potential renewable resources" in eastern Montana as a result of the RFP responses that it received.[60] While the Company's testimony notes that such resources require further study,[61] it is an indication that PSE is eyeing significant CETA-eligible resources to help fill the gap between its CETA obligations and its existing resources.

Q. Has the Company made other recent acquisitions of renewable or nonemitting resources?

A. Yes. Since March of 2020, PSE has reached agreements to purchase: (1) 17 MW of biomass energy from Sierra Pacific Industries;[62] (2) 40 MW of hydroelectric power from Energy Keepers, Inc., in Montana;[63] (3) up to 100 MW of surplus hydroelectric power from the Federal Columbia River Power System from the Bonneville Power

[59] *Puget Sound Energy Final 2018 All Resource Request for Proposals,* Dockets UE-180271 and UG-180272 (filed June 8, 2018).
[60] Flynn, Exh. TMF-1T at 8: 7-15.
[61] Flynn, Exh. TMF-1T at 7.
[62] Puget Sound Energy, *PSE signs deal with local forest products company to create clean electricity*, March 2, 2020. Retrieved from https://www.pse.com/press-release/details/pse-signs-deal-with-local-forest-products-company-to-create-clean-electricity.
[63] Puget Sound Energy, *PSE to purchase zero carbon energy for the next 15 years*, March 24, 2020. Retrieved from https://www.pse.com/press-release/details/pse-to-purchase-zero-carbon-energy-for-the-next-15-years.

Administration (BPA);[64] (4) additional renewable natural gas from Klickitat Public Utility District;[65] and (5) a soon-to-be-constructed 200 MW wind farm in Oregon.[66]

Q. Is it possible to know what additional resources the Company will use to comply with its 2030 and 2045 CETA requirements?

A. At this point, not with any certainty. The 2019 IRP progress report presented as Exh. ASR-5 came out of the Company's most recent IRP process, but does not by itself constitute a long-term plan to comply with CETA. Additionally, it is referred to as a "progress report" because it did not go through the public vetting process that a full IRP would go through.[67] Resource need is typically determined through the IRP, while resource acquisition generally flows from the IRP through the RFP process. Because the progress report was not fully vetted, it is difficult to say that a plan for full CETA compliance exists.

Q. Is it realistic to expect PSE to have a plan to be fully compliant with CETA now?

[64] Puget Sound Energy, *New agreements will deliver clean BPA power to PSE customers*, May 7, 2020. Retrieved from https://www.pse.com/press-release/details/new-agreements-will-deliver-clean-bpa-power-to-pse-customers.
[65] Puget Sound Energy, *PSE signs deal with Klickitat PUD to buy renewable natural gas*, May 12, 2020. Retrieved from https://www.pse.com/press-release/details/pse-signs-deal-with-klickitat-pud-to-buy-renewable-natural-gas.
[66] Puget Sound Energy, *Puget Sound Energy and Avangrid Renewables Announce Power Purchase Agreement; Construction of New Wind Farm*, August 18, 2020. Retrieved from https://www.pse.com/press-release/details/puget-sound-energy-and-avangrid-renewables.
[67] The Commission granted a Staff petition for all three Washington electric investor-owned utilities regarding WAC 480-90-238(4)-(5) in November 2019. The Commission agreed to accept a "progress report" from PSE in lieu of a full IRP in 2019. Docket UE-180607, Order 02.

A. No, Staff believes this is not a realistic expectation. CETA instituted significant new power supply requirements for electric utilities, and it has been law for less than 18 months. It is not realistic to expect the Company to have the next quarter-century mapped out so quickly.

Q. Is it possible to know for certain that PSE will not need the transmission it intends to sell through the Proposed Transactions as it complies with CETA?

A. No, Staff believes it is not possible to know this for certain. Because CETA is so new and a path to compliance has not been mapped out yet, it is impossible to know for certain whether the Company might eventually need more transmission to access Montana renewables in the future.

Q. Would this uncertainty exist without CETA?

A. Yes, it would. However, CETA's existence adds an extra, significant layer of uncertainty that warrants additional caution when considering selling transmission assets now.

Q. Does Staff believe this additional uncertainty is sufficient reason to deny the transmission sale?

A. Yes. In addition to the reasons discussed below, Staff believes caution must be exercised in this instance in denying the transmission sale. Given that the Company currently is evaluating how it will comply with CETA, and Montana resources could be a part of this plan, it would be premature to allow PSE to sell the proposed portion

of the CTS now because it may be very valuable to Washington ratepayers in the near future.

D. The Availability Of Transmission On The CTS

Q. Please describe the existing queue of projects for transmission capacity on the CTS.

A. Exh. ASR-12 demonstrates the high demand from potential new projects on the CTS. It is a listing of projects that were in NorthWestern's interconnection queue with requests to interconnect with the CTS as of early June 2020.[68] NorthWestern's project interconnection queue for the CTS includes more than six gigawatts of nameplate capacity. Most of these projects are powered by wind, with some solar and one pumped storage hydroelectricity project mixed in. It is important to note that simply having an interconnection request does not guarantee that a project will be built. Many more steps must be taken before a generator begins producing energy. However, the size of the queue suggests that renewable energy developers are eager to use the CTS to exploit Montana's wind resources.

Q. Is there any indication regarding what NorthWestern (and, if its arbitration is successful, Talen Energy) might use the transmission capacity acquired from PSE for?

[68] NorthWestern is the operator of the CTS, as designated by Section 4 of the Colstrip Project Transmission Agreement. Flynn, Exh. TMF-03 at 8. As such, NorthWestern is responsible for conducting any necessary studies required by interconnection requests to the CTS.

A. NorthWestern's most recent IRP provides some clues. It declares that the Montana utility has a significant (645 MW) peak resource need and demonstrates that Colstrip Unit 4 operated at a 90-95 percent capacity factor during NorthWestern's periods of peak demand.[69] This data suggests a reason for NorthWestern's proposed purchase of PSE's share of Unit 4, and also suggests that NorthWestern needs the transmission capacity to transmit the additional energy from its increased share of Unit 4. Additionally, as co-owners of Colstrip, there is little reason to expect that either NorthWestern or Talen desires to purchase the Initial Purchase Assets or the Option Assets and then not use them.

Q. What does this mean for PSE's access to the Initial Purchase Assets or Option Assets, should the transmission sale be approved, and the Company discovers it needs transmission capacity later to access Montana renewables?

A. It suggests that PSE would not be able to access those assets in the future and would have to explore other options. That represents a significant risk inherent in the Proposed Transactions, and another reason to exercise caution in this case.

Q. What possible options could exist for PSE if the proposed transmission sale were to be approved, and the Company later found Montana renewables to be a cost-effective resource but lacked transmission access?

[69] NorthWestern Energy, *2019 Electricity Supply Resource Procurement Plan Summary, August 2019*, at 4, 7. Retrieved from https://www.northwesternenergy.com/docs/default-source/documents/defaultsupply/plan19/electric_procurement_plan_summary_0819.pdf.

A. Some options include paying one of the other CTS owners for access to transmission, building additional transmission from Montana to Washington, or purchasing resources elsewhere that did not have such transmission constraints.

E. The Price Of Transmission On The CTS

Q. How does PSE's price for transmission access compare to that of NorthWestern?

A. Exh. ASR-13 compares the transmission prices for PSE and NorthWestern. It is drawn from data contained within each company's open access transmission tariff (OATT). As evidenced by Exh. ASR-13, NorthWestern charges significantly more for transmission than does PSE. NorthWestern's transmission rate comes to $4.48 per kilowatt-month (kW-month), while PSE's transmission rate is $2.85/kW-month.

Q. How much would Talen Energy charge for transmission access, if its arbitration succeeds and it becomes a co-owner of the CTS?

A. This is unknown. Talen would have to file an OATT with the Federal Energy Regulatory Commission (FERC) to determine the rate it could charge for transmission access.

Q. What impact could the difference in transmission price have on PSE's ability to develop Montana renewables if the transmission sale were approved?

A. Assuming transmission capacity was available in the first place, it could have the effect of increasing the price PSE pays for those renewables. NorthWestern representatives acknowledged this point publicly. When NorthWestern filed its most recent transmission rate increase with the FERC in May 2019, a company representative noted that the proposed rate would increase the cost of a hypothetical $22 per MWh renewable energy project crossing NorthWestern's transmission lines by $2.30 per MWh,[70] or about 10 percent.

Q. How could this price increase impact PSE's attempt to procure renewable energy from Montana to comply with CETA?

A. It could ultimately raise the price PSE has to pay for CETA-compliant renewable projects. PSE would presumably have to bake these costs into its IRP modeling. The IRP modeling results, in turn, would either select the more expensive Montana renewable resource, or select a different resource, one that may not have been cost-effective had the cost of transmission in Montana been lower. This represents another potentially costly risk to approving the transmission sale in this case.

[70] Tom Lutey, "NorthWestern seeks huge transmission rate increase, boosting bills for its biggest customers". Billings Gazette, May 23, 2019. Retrieved from https://billingsgazette.com/business/northwestern-seeks-huge-transmission-rate-increase-boosting-bills-for-its-biggest-customers/article_34f02e51-7684-530f-8538-64dc5093f912.html.

F. The Sale Price Of The Initial Purchase Assets And Option Assets

Q. What price does the Company expect to receive for the transmission assets in this transaction?

A. The exact purchase price of both the Initial Purchase Assets and the Option Assets is not finalized in the transaction. Instead, the Company notes that three business days prior to the closing of the acquisition of each of the Initial Purchase Assets and the Option Assets, it will provide NorthWestern with "a calculation of the depreciated net book value" of the asset.[71] The purchase price for each of the Initial Purchase Assets and the Option Assets would be each asset's depreciated net book value. PSE offered various projections of the value of the Initial Purchase Assets. An email to the PSE Board of Directors in August 2019 stated a price in the range of $2.5 to $3.75 million.[72] More recently, as noted in Staff witness Liu's testimony, the Company offered a price estimate of around $1.6 million.[73]

Q. Why does the Company believe that this is a reasonable price for the assets?

A. Exh. ASR-14 illustrates the Company's reasons for selling the transmission assets at depreciated net book value. Among the Company's arguments for using depreciated net book value as the sale price is its claim that the depreciated net book value is the best representation of the market value for the transmission assets.

[71] Roberts, Exh. RJR-1CT at 38:22-39:2.
[72] Roberts, Exh. RJR-5C at 322.
[73] Liu, Exh. JL-1TC at 36.

Q. What concerns does Staff have with PSE's justification for using depreciated net book value as the sale price?

A. Staff believes that there are other ways to look at an asset's value that could set a sale price higher than the depreciated net book value. Depreciated net book value is an accounting method of determining how much of a project's original cost has not yet been recovered by the owner. While it is one method of establishing the price of an asset, it may not accurately reflect how much value that asset can provide. Assuming the CTS continues to operate normally, it can be expected to continue to provide value to PSE and its ratepayers by transmitting electricity that helps keep people's lights on. While that value may be difficult to quantify over long periods of time, it is easy to imagine that it would be greater than the depreciated net book value sale price.

Another way to look at the sale price of an asset is by determining what it would cost to replace that asset. PSE gives some indication of this price in its 2017 IRP.[74] It models three hypothetical Montana wind projects and the interconnection and transmission capital costs that would be required to construct them. The assumptions include construction of 75 miles of new 230 kilovolt (kV) transmission from the plant site to either the Colstrip or Broadview substations. The price for this transmission line is listed as $44.7 million. That works out to $596,000 per mile. While this may not be an apples-to-apples comparison, if these assumptions are remotely illustrative, that would mean that a depreciated net book value price of $3.75 million (the highest estimate offered by PSE) would purchase PSE fewer than

[74] Rector, Exh. ASR-11 at 71.

10 miles of replacement transmission lines, should those lines be needed in the future.

Q. Has the Company presented a cost-benefit analysis comparing the sale of the Initial Purchase and Optional Assets to a no-sale scenario?

A. No, it has not.

Q. Has the Company established that the sale of the transmission assets represents a net benefit to ratepayers?

A. No. As a level-setting matter, the transmission sale would at best produce zero net benefit to ratepayers because the assets are priced at the depreciated net book value at the time of sale.

G. Conclusion

Q. Does Staff conclude that approving the sale of the Initial Purchase and Option Assets is in the public interest?

A. No. Staff concludes that the sale of the Initial Purchase and Option Assets are not in the public interest. The public interest in this instance includes complying with CETA and ensuring that ratepayers are not harmed from the transaction. As outlined above, Staff does not believe the transmission sale meets these standards, and therefore it should be denied. PSE has not demonstrated that the transmission capacity it plans to sell will not be useful for its ratepayers and for CETA

compliance. Neither is it clear that if PSE sells the transmission capacity now, that its transmission capacity would be adequate should PSE determine it is needed to access Montana renewables in the future. Even if it is available, selling some of its capacity now could drive up the price PSE pays to access Montana renewables in the future. Last, it is not clear that PSE is getting the most appropriate price for the transmission assets it intends to sell. All these items add elements of risk, and Staff concludes that this is not a risk that ratepayers should be asked to bear.

Q. Does this conclude your testimony?

A. Yes.