EXH. CTM-1CT
DOCKET UG-230968
WITNESS: CHRISTOPHER T. MICKELSON

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY,** **Respondent.**	**Docket UG-230968**

PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF

CHRISTOPHER T. MICKELSON

ON BEHALF OF PUGET SOUND ENERGY

REDACTED VERSION

APRIL 25, 2024

PUGET SOUND ENERGY

PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF CHRISTOPHER T. MICKELSON

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I. INTRODUCTION

Q. Please state your name, business address, and position with Puget Sound Energy.

A. My name is Christopher T. Mickelson, and my business address is Puget Sound Energy, P.O. Box 97034, Bellevue, Washington 98009-9734. I am employed by Puget Sound Energy ("PSE") as Manager of Cost of Service & Pricing.

Q. Have you prepared an exhibit describing your education, relevant employment experience, and other professional qualifications?

A. Yes. Please see Exh. CTM-2.

Q. What are your duties as Manager of Cost of Service & Pricing?

A. As Manager of Cost of Service & Pricing for PSE, I am responsible for overseeing electric and gas cost of service studies, rate spread, rate design, and load research at PSE.

Q. What is the purpose of this prefiled direct testimony?

A. This prefiled direct testimony proposes a Climate Commitment Act Risk Sharing Mechanism ("CCA RSM") designed as a "possible risk-sharing mechanism for

costs incurred as a result of the Climate Commitment Act,"[1] PSE's proposed CCA RSM integrates statistical analysis, including box and whisker plot analysis,[2] to establish sharing bands determining the allocation of compliance costs and savings. Additionally, PSE's proposed CCA RSM incorporates a financial earnings test to ensure cost-sharing mechanisms reflect both market dynamics and the financial stability of PSE.

II. PSE'S PROPOSED CLIMATE COMMITMENT ACT RISK SHARING MECHANISM

Q. Has PSE developed a "possible risk-sharing mechanism for costs incurred as a result of the Climate Commitment Act"?[3]

A. Yes, PSE has developed a "possible risk-sharing mechanism for costs incurred as a result of the Climate Commitment Act"[4] in compliance with the Prehearing Conference Order in this proceeding. Please see Exh. CTM-3C for this proposed mechanism, referred to as the CCA RSM.

Q. What is the purpose of PSE's proposed CCA RSM?

A. In developing the proposed CCA RSM, PSE considered recent policy guidance issued by the Commission for performance incentive mechanisms in Docket U-

[1] *Washington Utilities and Transportation Commission ("Commission" or "WUTC") v. Puget Sound Energy*, Order 02 at ¶ 19, Docket UG-230968 (Feb. 12, 2024).

[2] A box and whisker plot provides a visual summary of the distribution of a dataset. The box in the plot contains the middle 50 percent of the data, also referred to as the interquartile range. The whiskers extend to the minimum and maximum values excluding the outliers.

[3] *WUTC v. Puget Sound Energy*, Order 02 at ¶ 19, Docket UG-230968 (Feb. 12, 2024).

[4] *Id*.

210590.[5] PSE's proposed CCA RSM aims to provide a mechanism for sharing financial risks associated with acquiring compliance instruments (allowances or offsets) under the CCA, setting thresholds based on statistical analysis to establish sharing bands between PSE and customers of its natural gas local distribution company ("LDC") operations.

Q. Did PSE consider a CCA Performance Incentive Mechanism?

A. Yes, PSE initially considered proposing a CCA Performance Incentive Mechanism ("CCA PIM"). PSE ultimately opted for more of a risk sharing mechanism (as discussed later in this testimony) to eliminate any incentives for PSE within the mechanism. PSE would prefer not to derive benefits from costs of compliance, which, in PSE's view, are pass-through costs.

Q. Why did PSE choose a financial risk mechanism based on CCA compliance instruments instead of a mechanism based on emissions reduction?

A. PSE's limited ability to reduce the greenhouse gas emissions of the customers of its natural gas LDC operations led to the choice of a financial risk mechanism tied to compliance instruments. While PSE filed a proposed "decarbonization" rate adjustment mechanism to account for and recover costs associated with proposed

[5] *See, e.g., In the Matter of the Proceeding to Develop a Policy Statement Addressing Alternatives to Traditional Cost of Service Rate Making*, Interim Policy Statement Addressing Performance Measures and Goals, Targets, Performance Incentives, and Penalty Mechanisms, Docket U-210590 (Apr. 12, 2024), available at https://apiproxy.utc.wa.gov/cases/GetDocument?docID=286&year=2021&docketNumber=210590.

customer decarbonization programs within its recently filed general rate case,[6] such a mechanism relies on customer participation, consequently making it unsuitable for an associated risk mechanism. For more information, please refer to the Prefiled Direct Testimony of Matt Steuerwalt, Exh. MS-1T.

A. Statistical Analysis and Data Utilized

Q. What is the basis for the statistical analysis used to develop the proposed CCA RSM?

A. The statistical analysis used to develop the proposed CCA RSM relies on daily prices per metric ton carbon dioxide equivalents ("$MTCO_2e$") in the secondary market over the four-year compliance period of the CCA, along with volumes of compliance instruments acquired and associated costs. These data points will be based on actual historical data from the compliance period as the inputs to the box-and-whisker analysis used to establish sharing bands within the proposed CCA RSM. Once the bands are established, actual historical prices that PSE paid for compliance instruments will be compared to the bands to determine whether PSE paid more or less than the statistical analysis of the market represented by the calculated bands.

[6] *See* Steuerwalt, Exh. MS-1Tr2, at 36:1–40:8, in Dockets UE-240004/UG-240005, available at https://apiproxy.utc.wa.gov/cases/GetDocument?docID=1322&year=2024&docketNumber=240004; Mannetti, Exh. JM-1CT, at 2:20–24:19, Dockets UE-240004/UG-240005, available at https://apiproxy.utc.wa.gov/cases/GetDocument?docID=805&year=2024&docketNumber=240004.

Q. Why is PSE's proposed CCA RSM backward-looking rather than forward-looking?

A. Unlike mature markets, the nascent nature of the CCA cap-and-invest market lacks established forward projection tools. Therefore, PSE cannot rely on established and liquid market-determined pricing information, such as forward contracts for natural gas or power, or even analysis of market fundamentals, like the use of AURORA or similar software used for forecasting power costs. Thus, the proposed CCA RSM adopts a backward-looking approach to reflect actual market dynamics and avoid reliance on speculative projections given the current state of the secondary markets.

Additionally, looking back over a four-year compliance period allows a larger sample size for the Commission to review PSE's performance. Whereas an annual sample size would be around 250 data points,[7] a lookback over a four-year compliance period would provide the Commission with around 1,000 data points. A sample of 1,000 data points over a four-year period is more likely to produce a symmetric distribution curve than a sample of 250 data points over an annual period, which is more likely to produce a skewed distribution curve in either direction. Another benefit of the four-year lookback is that all parties, including the Commission, PSE, and interested parties, would be able to review and conduct their own analyses more easily by using standard business software like Microsoft

[7] The average number of trading days per year for public markets in the U.S. from 1990 to 2022 has been exactly 252 days. *See*, *e.g.*, Macroption, *Number of Trading Days per Year*, available at www.macroption.com/trading-days-per-year/.

Excel or free statistical tools like R programming, thereby eliminating the need to purchase subscription access to markets or software tools. Additionally, aligning the lookback to the four-year compliance period makes sense because PSE is not required to have compliance instruments fully procured in inventory by the end of each year of the compliance period but is required to its four-year compliance obligation by November 1 following the last year of the four-year compliance period.

Q. Rather than using actual historical data, could a meaningful forecast be determined by using the established bookends on auction pricing represented by the auction floor price and auction ceiling price?

A. No. The broad auction floor and ceiling prices of the CCA do not provide a precise forecast due to actual pricing fluctuations within these rather broad bookends. Although the Washington State Department of Ecology develops auction floor and ceiling prices for each calendar year, various external factors influence actual pricing, and most of these external factors are beyond PSE's control. To date, exogenous factors—such as interpretations of rules by the Department of Ecology and certification of Initiative Measure No. 2117, which seeks repeal of the CCA—appear to contribute to price volatility in CCA auctions and the secondary market.[8] These exogenous factors are largely unrelated to the

[8] *See generally* Exh. TLF-21 at 1.

fundamentals of the Cap-and-Invest Program, are unpredictable, and are outside of the control of PSE, the Commission, or any party to this proceeding.

Q. What are the steps in developing the proposed CCA RSM?

A. The first step is determination of the bands against which actual prices will be compared. Following data collection of prices for compliance instruments in the secondary market, the development of the proposed CCA RSM requires calculation of a box-and-whisker plot, commonly known as a boxplot. This graphical representation provides a visual insight into the distribution of prices for compliance instrument, facilitating the establishment of sharing bands essential for the proposed CCA RSM. The plot encompasses five key statistical points:

- a minimum,
- a first quartile,
- a median,
- a third quartile, and
- a maximum.

Within the boxplot, a rectangular box spans from the first quartile to the third quartile, with a horizontal line indicating the median.

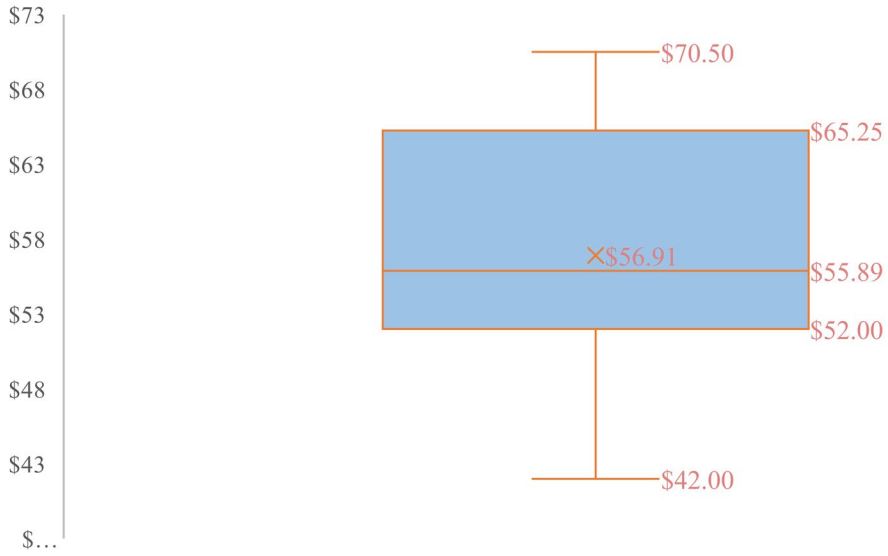
Q. Please provide an overall explanation of a boxplot and its components.

A. A boxplot partitions data into sections containing equal percentages of the dataset, offering a concise visualization of its distribution. At its core, the boxplot highlights the median, representing the midpoint value of the dataset when

arranged in ascending order. A line bisecting the shaded box depicts the median. This median line indicates that half of the data points are greater than or equal to, and half of the data points are lesser than or equal to, this value.

The lower and upper ends of the box correspond to the first quartile ("Q1") and the third quartile ("Q3"), respectively, denoting the 25th and 75th percentiles. The length of the box, known as the interquartile range ("IQR"), encapsulates the difference between these quartiles. Whiskers extend from the box, which mark the variation of the data and are drawn at the minimum and maximum value of the data set or a length equivalent to the product of 1.5 times the IQR, whichever is shorter. Outliers (*i.e.,* data points deviating significantly from the expected range) may be depicted beyond the whiskers. Figure 1 below offers a visual representation of the boxplot illustrating the associated six-number summary (the minimum, first quartile, median, mean, third quartile, and maximum), utilizing calendar year 2023 data for illustrative purposes only.

Figure 1. Boxplot: Current Auction (2023 Vintage)
Secondary Market Prices in Calendar Year 2023



Please see the tab "23 Vtg Sec Prices" in Exh. CTM-3C for the daily secondary market prices for Current Allowances (2023 vintage) during calendar year 2023.

Please see the tab "23 CCA Auction" in Exh. CTM-3C for the volume and associated costs of compliance instruments acquired by PSE during calendar year 2023.

Q. Why did PSE use statistical analysis and a boxplot to develop the proposed CCA RSM bands?

A. Employing statistical analysis, particularly through the lens of a boxplot, offers a nuanced understanding of the distribution of a dataset, regardless of its shape. The shape of the boxplot signals vital characteristics of the dataset's distribution, such as symmetry or skewness. For instance, a symmetric distribution positions the median centrally within the box, with balanced whisker lengths, while skewed

distributions tilt the median towards one end, affecting whisker lengths accordingly. The breadth of the box denotes the dispersion of data, serving as a measure of variability. This methodological approach proves invaluable in comprehending the spread and central tendency of numerical data, aligning seamlessly with the analysis of price bands essential for the proposed CCA RSM. Furthermore, it allows for comparative analysis across different compliance periods, accommodating potential external influences, such as market expansions.[9]

Q. Please provide a breakdown of the statistical analysis and formulae used to develop the proposed CCA RSM bands.

A. The statistical analysis underpinning the development of the proposed CCA RSM bands requires the development of five overarching components: Percentiles, Interquartile Range, Whiskers, Outliers, and Additional Insights.

1. <u>Percentiles</u>

The following formula calculates percentiles:

$$X = \mu \pm Z\sigma$$

Where:

μ represents the mean

[9] On March 20, 2024, the Department of Ecology (on behalf of the state of Washington), the California Air Resources Board (on behalf of the state of California), and the Gouvernement du Québec issued a joint statement officially expressing their interest in the potential formation of a shared carbon market between the three jurisdictions. *See*, *e.g.*, Washington Dept. of Ecology, *California, Québec and Washington Agree to Explore Linkage* (Mar. 20, 2024), available at http://ecology.wa.gov/about-us/who-we-are/news/2024-news-stories/mar-20-shared-carbon-market.

	σ	denotes the standard deviation of the variable X
	Z	corresponds to the value from the standard normal distribution for the desired percentile.

Specifically, percentiles at 2.5th, 25th, 75th, and 97.5th percentiles are derived,[10] guiding the determination of Q1 and Q3 for subsequent IQR calculation.

2. <u>Interquartile Range</u>

The interquartile range is the difference between Q1 and Q3, calculated as:

$$IQR = Q3 - Q1$$

3. <u>Whiskers</u>

Whiskers extend from the box to encompass the smallest and largest observations within the product of 1.5 times the IQR of the quartiles. The following formulas determine the upper and lower bounds for the whiskers:

$$Upper\ Whisker = Q3 + 1.5 \times IQR$$

$$Lower\ Whisker = Q1 - 1.5 \times IQR$$

If the dataset does not extend to the end of the whiskers, then the whiskers extend to the minimum and maximum data values.

[10] Respectively, the z-values are -1.960, -0.675, 0.675, and 1.960.

4. Outliers

Outliers are observations falling beyond the whiskers' bounds, symbolized by distinct markers like asterisks. It is imperative to exercise discretion when handling outliers, considering their potential impact on the dataset. PSE's preference is to leave any outliers within the data set.

5. Additional Insights

While not exhaustive, supplementary statistical metrics such as sample size, z-score, variance, standard deviation, distribution shape, skewness, kurtosis, mode, maximum, minimum, and median prices offer valuable contextual information, enriching the analytical process. These metrics contribute to a holistic understanding of the characteristics of the dataset, informing nuanced interpretations and strategic decision-making. For example, kurtosis informs the size of the distribution tail and whether its leptokurtic (fatter), platykurtic (thinner), or mesokurtic (normal).

B. Mechanism's Band Structure

Q. Please describe the bands of the CCA PIM that PSE initially considered.

A. Initially, PSE considered five bands:

(i) one deadband surrounding the IQR prices;

(ii) two bands (Bands A1 and A2)[11] above the deadband, in which PSE shares in costs incurred during the four-year compliance period, and

(iii) two bands (Bands B1 – B2)[12] below the deadband, where PSE shares in cost savings achieved for the four-year compliance period.

The five bands would have provided some opportunity to share in the savings achieved (if actual costs fall in Bands B1 and B2) and share in the costs of CCA compliance (if actual costs fall in Bands A1 or A2).

Q. Does PSE's proposed CCA RSM include five bands?

A. No. PSE decided against the use of five bands for the proposed CCA RSM. PSE is not seeking any incentive to keep CCA compliance costs for customers as low as practicable within the constraints of the CCA and implementing regulations. If PSE were successful in keeping CCA compliance costs below the IQR prices, then PSE will pass-through all costs savings achieved through to customers of its natural gas LDC operations—this avoids adding additional cost to customers related to CCA compliance. Accordingly, PSE has modified the deadband to include both prices within and below the IQR by establishing a deadband floor that is equal to the lowest auction floor price during the applicable four-year compliance period.

[11] Where "A" stands for "above."
[12] Where "B" stands for "below."

1. Understanding the Bands

Q. Explain the bands based on the analysis.

A. PSE structured the proposed CCA RSM bands around floors and ceilings for each band, calculated as follows:

1. **Deadband ("DB")**: Spans from Q3 to the lowest auction floor price during the applicable four-year compliance period, the DB encompasses costs and savings solely assigned to customers of PSE's natural gas LDC operations. For instance, in calendar year 2023, the DB floor would have been the auction floor price of $22.20 per $MTCO_2e$, and the DB ceiling would be $65.25 per $MTCO_2e$.[13] If the AFCP is more than the DB, then PSE could share in some of the costs incurred with CCA compliance.[14]

2. **Band A1**: For Band A1, PSE could share in ten percent of costs incurred between the Band A1 floor (one penny above the DB) and the Band A1 ceiling (the 97.5th percentile), with customers responsible for the remainder of the costs.[15] Using calendar year 2023 as an example, the Band A1 floor would have been $65.26 per $MTCO_2e$, and the Band A1 ceiling would have been $69.00 per $MTCO_2e$.[16]

3. **Band A2**: For Band A2, PSE could share in

   (a) twenty percent of costs incurred between the Band A2 floor (one penny above the 97.5th percentile) and the Band A2 ceiling (the highest auction ceiling price during the applicable four-year compliance period), and

   (b) ten percent of costs incurred between the Band A1 floor (one penny above the DB) and the Band A1 ceiling (the 97.5th percentile).

[13] *See* Exh. CTM-3C (Bands+Calc). See column (b) for the ceiling and column (c) for the floor band ranges. For upper bands, the succeeding band floor is one cent more than the previous band's ceiling.
[14] An Earnings Test condition is discussed later in my testimony.
[15] The 97.5th percentile is two standard deviations from the mean.
[16] *See* Exh. CTM-3C (Bands+Calc).

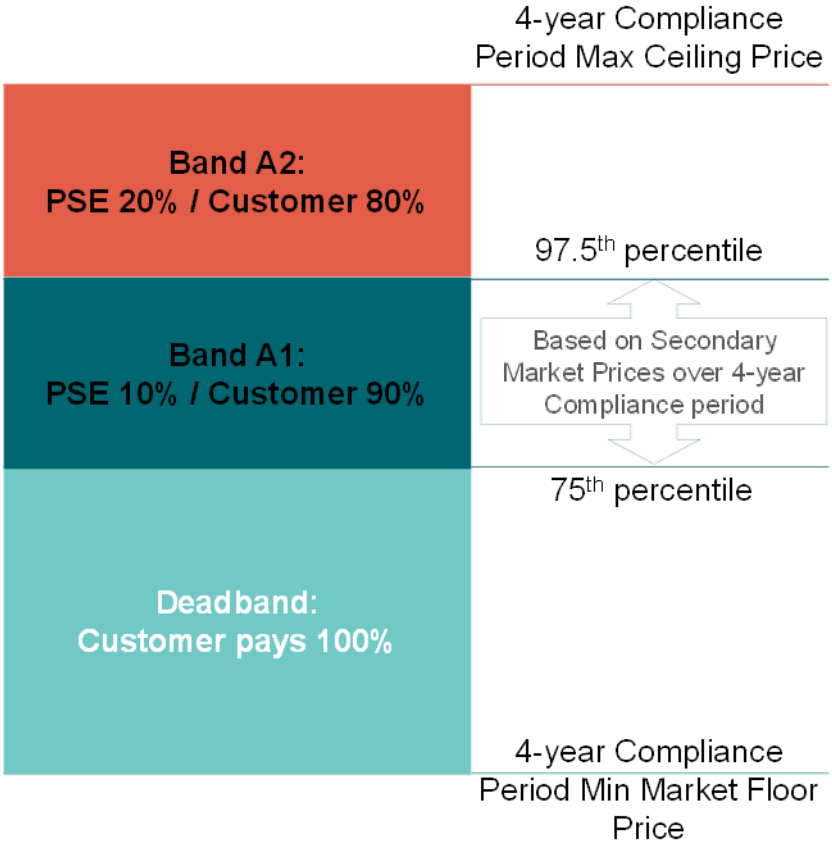
Customers of PSE's natural gas LDC operations would be responsible for the remainder of the costs.

Using calendar year 2023 as an example, the Band A2 floor would have been $69.01 per $MTCO_2e$, and the Band A2 ceiling would have been the auction ceiling price of $81.47 per $MTCO_2e$.[17]

Q. Could you provide a graphical representation of these bands?

A. Figure 2 below offers a visual representation of PSE's proposed CCA RSM's bands and associated thresholds.

Figure 2. Graphical Representation of PSE's Proposed CCA RSM Bands



[17] *See id.*

Q. What would have been the outcome of the proposed CCA RSM if it were in place for calendar year 2023?

A. If the proposed CCA RSM were operational in calendar year 2023, the Average Annual Compliance Price ("AACP") of $55.59 per $MTCO_2e$, it would have fallen within the DB. Consequently, customers would be responsible for 100 percent of the compliance costs.

Please see the tab "Bands+Calc" of Exh. CTM-3C for the calculation of the proposed CCA RSM using data from the calendar year 2023.

Q. What would have been the outcome of the proposed CCA RSM if it were in place for calendar year 2023 with an AACP of $67.00 per $MTCO_2e$?

A. With an AACP of $67.00 per $MTCO_2e$ in 2023, falling within Band A1, PSE could have been responsible for (*i.e.,* PSE's customers would have saved) costs of [redacted], and customers of PSE's natural gas LDC operations would have paid the remaining costs of $[redacted].[18]

[18] *See* the tab "Exh CTM-3C (Bands+Calc)" in the MS Excel version of Exh. CTM-3C and substitute cell G18 (exhibit labels d8) with an AACP of $67.00 per $MTCO_2e$.

2. Auction Floor and Ceiling Prices

Q. Are there rules restricting bid prices in the Cap-and-Invest Program?

A. Yes. The CCA requires the Department of Ecology to establish both an auction floor price[19] and an auction ceiling price[20] to regulate bid submissions. In 2023 the auction floor price was $22.20 per $MTCO_2e$[21] and the auction ceiling price was $81.47 per $MTCO_2e$.[22] The auction floor and ceiling prices increase annually by the sum of five percent plus the rate of inflation as measured by the most recently available twelve months of the consumer price index for all urban consumers as of the first business day in December of the prior year.[23]

Q. What auction floor and ceiling prices does PSE intend to use for the proposed CCA RSM?

A. PSE proposes adopting the maximum ceiling price and the minimum floor price from within the four-year compliance period, typically the last and first year respectively.

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[19] *See* RCW 70A.65.150(1) (requiring auction floor prices); *see also* WAC 173-446-335(1)-(3) (establishing the methodology for calculation of auction floor prices).

[20] *See* RCW 70A.65.160 (requiring auction ceiling prices); *see also* WAC 173-446-335(4)-(6) (establishing the methodology for calculation of auction ceiling prices).

[21] *See* Wash. Dep't of Ecology, *Washington Cap-and-Invest Program: 2023 Annual Auction Floor Price Notice*, Pub. No. 22-02-060 (Dec. 1, 2022), available at https://apps.ecology.wa.gov/publications/documents/2202060.pdf.

[22] *See* Wash. Dep't of Ecology, *Washington Cap-and-Invest Program: 2023 Annual Allowance Price Containment Reserve and Price Ceiling Notice*, Pub. No. 22-02-059 (Dec. 1, 2022), available at https://apps.ecology.wa.gov/publications/documents/2202059.pdf.

[23] *See* WAC 173-446-335(2) & (5).

C. Integration of a Financial Earnings Test into the Sharing Bands of the Proposed CCA RSM

Q. Why is PSE integrating a financial earnings test into the sharing bands of the proposed CCA RSM?

A. The inclusion of a financial earnings test considers PSE's financial stability and its capacity to cover its share of compliance costs for the CCA during the applicable four-year compliance period. The risk-sharing bands, which determine the allocation of compliance costs between PSE and its customers, would be influenced by the financial performance of PSE within a specified period, assessed through a financial earnings test.

Q. What criteria are typically included in a financial earnings test?

A. A financial earnings test may encompass metrics such as net income or other relevant financial indicators specific to the utility industry, serving as benchmarks to evaluate PSE's financial health.

Q. What measures ensure transparency and regulatory oversight in the integration of the financial earnings test?

A. The methodology for incorporating the financial earnings test into the risk-sharing mechanism should be transparent, with clear guidelines and thresholds established to determine the impact of financial performance on cost-sharing arrangements. PSE recommends using the earnings test used in past regulatory mechanisms, such as multiyear rate plans, since these earnings tests are familiar to the

Commission and have already undergone regulatory oversight.[24] However, the sharing only applies to the first 50 basis points above the authorized return established within a general rate case since any earnings exceeding the 50 basis point threshold is already deferred for future determination by the Commission in a subsequent adjudicative proceeding and is therefore not available to be applied to the CCA RSM.[25]

Q. How does the integration of a financial earnings test balance financial stability and protection?

A. By aligning risk-sharing mechanisms with the financial performance of PSE, regulators aim to strike a balance between ensuring financial stability and safeguarding consumer interests.

Q. How are cost-sharing arrangements adjusted based on the results of the financial earnings test?

A. Depending on the results of PSE's financial earnings test,[26] adjustments to cost-sharing percentage within certain bands would occur. Robust financial performance could result in PSE bearing a share of compliance costs, while

[24] *See* RCW 80.28.425(6).

[25] PSE's Current Authorized Return is 7.16 percent pursuant to Docket UG-260067.

[26] Financial earning test would be based on an average over the same four-year compliance period, utilizing the sum of the allowed net operating income for the full four-year period and comparing it to the sum of the restated net operating income from the adjusted CBRs for the same four-year period. This approach would recognize fluctuations in assets, potential alterations in authorized returns during the four-year compliance period, and the average of restated net operating income.

periods of financial strain or under-earning would eliminate PSE's share of compliance costs to ensure PSE viability and financial protection.[27]

Q. Under this proposal, how would the sharing of CCA compliance costs with PSE be affected if the results of the financial earnings test were to indicate that PSE had over-earned?

A. The amount of CCA compliance costs that PSE would share if the results of the financial earnings test were to indicate that PSE had over-earned would be dependent on two variables—the amount of over-earning indicated by the financial earnings test[28] and the amount of shared compliance costs indicated by the proposed CCA RSM sharing bands:

- If the amount of over-earning indicated by the financial earnings test were *greater than* the amount of shared compliance costs indicated by the proposed CCA RSM, then PSE would pay (with one caveat addressed below) the full amount of shared CCA compliance costs indicated by the proposed CCA RSM.

- If the amount of over-earning indicated by the financial earnings test were *less than* the amount of shared compliance costs indicated by the proposed CCA RSM, then PSE would share in CCA compliance up to the amount of over-earning indicated by the financial earnings test.

Therefore, the financial earnings test aims to prevent PSE from (i) worsening actual under-earning by sharing in CCA compliance costs, and (ii) potentially

[27] If AFCP is within Bands A1 or A2.

[28] As the recommendation is to use the earning's test prescribed by RCW 80.28.425(6) which is based on Commission Basis Report ("CBR") results, for purposes of the CCA RSM, the CBR results must be adjusted if needed to exclude recognition of deferrals and amortization of previous earning's tests and CCA RSMs.

create a situation of under-earning that would not have otherwise occurred without CCA compliance costs sharing.

Q. What is the caveat mentioned in the first bullet of the immediately preceding answer?

A. The caveat mentioned in the first bullet of the immediately preceding answer addresses complications arising from requirements of RCW 80.28.425(6), which states, in pertinent part, as follows:

> If the annual commission basis report for a gas or electrical company demonstrates that the reported rate of return on rate base of the company for the 12-month period ending as of the end of the period for which the annual commission basis report is filed is more than .5 percent higher than the rate of return authorized by the commission in the multiyear rate plan for such a company, the company shall defer all revenues that are in excess of .5 percent higher than the rate of return authorized by the commission for refunds to customers or another determination by the commission in a subsequent adjudicative proceeding.

Under this provision, PSE must defer, for later determination by the Commission, any over-earnings of PSE's natural gas LDC operations that are 50 basis points higher than the authorized rate of return reported in its Commission Basis Report. Accordingly, PSE cannot commit, as part of the proposed CCA RSM to share any amount of over-earnings that are higher than the sum of the authorized rate of return plus 50 basis points. Therefore, PSE's proposed CCA RSM caps PSE's potential sharing of CCA compliance costs at an amount no greater than the difference between (i) the maximum earnings allowed before deferral occurs under RCW 80.28.425(6) and (ii) the earnings that would have resulted if there

were neither under- nor over-earning. Any amounts in excess of this difference would be subject to Commission determination pursuant to RCW 80.28.425(6) and may, or may not, address sharing of CCA compliance costs.

In essence, the proposed CCA RSM would require the following analysis:

1. **Do the sharing bands of the proposed CCA RSM indicate the potential for PSE sharing in CCA compliance costs for the applicable compliance period?**

   If no, then PSE would not share in CCA compliance costs.

   If yes, address question two below.

2. **Does the financial earnings test of the proposed CCA RSM indicate that PSE over-earned for the applicable compliance period?**

   If no, then PSE would not share in CCA compliance costs.

   If yes, address question three below.

3. **Does the financial earnings test of the proposed CCA RSM indicate that PSE over-earned for the applicable compliance period by an amount that is *less than* 50 basis points above the authorized rate of return?**

   If no, then move directly to question four below.

   If yes, cap the amount of potential sharing of CCA compliance costs at the difference between (i) earnings test rate of return, minus (ii) authorized rate of return, multiplied by (iii) the restated rate base as reflected on PSE's Commission Basis Report Summary page, then move to question 4 below.

4. **Does the financial earnings test of the proposed CCA RSM indicate that PSE over-earned for the applicable compliance period by an amount that is *greater than* 50 basis points above the authorized rate of return?**

   If no, then see question three above.

If yes, cap the amount of potential sharing of CCA compliance costs at 50 basis points multiplied by the restated rate base as reflected on PSE's Commission Basis Report Summary page.

Q. Has PSE provided an example of such earnings test?

A. Yes. The tab "Earnings Test" in Exh. CTM-3C applies PSE's financial position for gas operations, as provided by its 2023 CBR, to the earnings test. PSE's 2023 earnings test resulted in an actual return of 6.50 percent and the authorized return is 7.16 percent, this would result in no sharing. However, if the actual return were 8.82 percent, then PSE would bear a share of compliance costs had the 2023 AACP fallen within Bands A1 or A2.[29]

D. The Proposed CCA RSM Implementation

Q. In what compliance periods does PSE propose to use the proposed CCA RSM?

A. The Cap-and-Invest Program is a relatively immature market. Accordingly, it makes sense to implement the proposed CCA RSM following the conclusion of the first four-year compliance period.[30] Thus, PSE would apply the proposed CCA RSM to the second four-year compliance period.[31] The results, based on the conclusion of the second four-year compliance period, would inform pricing adjustments applied to the subsequent Schedule 111, Greenhouse Gas Emissions Cap and Invest Adjustment. PSE's corresponding sharing dollar amount would

[29] Up to the maximum.
[30] Calendar years 2023, 2024, 2025, and 2026.
[31] Calendar years 2027, 2028, 2029, and 2030.

then be applied to the filing accordingly based on size of PSE's sharing amount adjustment.[32] This approach allows the Commission to have the benefit of having the daily prices of allowances on the secondary market for the entire preceding four-year compliance period, and the volumes and costs of compliance instruments purchased by PSE for such compliance period.

Q. How about the third four-year compliance period?

A. The Commission could continue the proposed CCA RSM if it feels that the mechanism is working as intended. However, PSE recommends initially scheduling a reevaluation of the proposed CCA RSM after the second four-year compliance period to determine whether (i) it is functioning as intended and (ii) there should be any modifications. This consideration is essential because, after the second four-year compliance period, the following compliance periods appear to have differing degrees of slope for the auction market pricing. Additionally, interested parties would be able to evaluate how the first and second four-year compliance periods compare to one another; one using a hypothetical compliance period (first four-years) and the other using an actual compliance period (second four-years).

[32] If PSE's sharing amount were $10 million or less, it would be applied to the subsequent filing. If PSE's sharing amount were between $10-20 million, it would be applied over two years. If PSE's sharing amount were greater than $20 million, it would be applied over three years.

III. CONCLUSION

Q. Does that conclude your prefiled direct testimony?

A. Yes, it does.