

**EXH. PAH-1CT  
DOCKET UE-23\_\_\_\_  
2022 PCA COMPLIANCE FILING  
WITNESS: PHILIP A. HAINES**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**In the Matter of the Petition of  
PUGET SOUND ENERGY  
For Approval of its 2022 Power Cost  
Adjustment Mechanism Report**

**DOCKET UE-23 \_\_\_\_**

**PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF**

**PHILIP A. HAINES**

**ON BEHALF OF PUGET SOUND ENERGY**

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**APRIL 28, 2023**

**PUGET SOUND ENERGY**  
**PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF**  
**PHILIP A. HAINES**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. PSE’s MANAGEMENT OF ITS POWER PORTFOLIO AND FUEL SUPPLY..... 2

III. POWEREX WINTER PEAK PPAs ..... 7

IV. CONCLUSION..... 12

**PUGET SOUND ENERGY**  
**PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF**  
**PHILIP A. HAINES**

**LIST OF EXHIBITS**

1. Exhibit PAH-2 – Professional qualifications
2. Exhibit PAH-3C – Powerex Winter Peak PPA (██████████)
3. Exhibit PAH-4C – Powerex Winter Peak PPA (██████████)
4. Exhibit PAH-5C – Memo regarding PSE’s bid for winter capacity in Powerex RFP
5. Exhibit PAH-6C – EMC presentation authorizing market reliance risk reduction strategy

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3 **PHILIP A. HAINES**

4  
5 **I. INTRODUCTION**  
6

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

9 A. My name is Philip Haines. My business address is P.O. Box 97034, Bellevue,  
10 Washington, 98009. I am employed by Puget Sound Energy (“PSE”) as Director  
11 Energy Supply Merchant.

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

14 A. Yes, I have. It is Exhibit PAH-2.

15 **Q. What are your duties as Director Energy Supply Merchant?**

16 A. As Director Energy Supply Merchant my responsibilities include the following:

- 17 (i) managing the dispatch and utilization of PSE’s generation assets,  
18 energy supply contracts, merchant transmission, and environmental  
19 attributes;
- 20 (ii) directing the front office power and gas trading operations and  
21 hedging program functions;
- 22 (iii) managing work groups that address resource adequacy, regional  
23 market design, merchant transmission optimization, and the  
24 integration of new generation assets.

1 **Q. Please summarize the contents of your testimony.**

2 A. My testimony first provides an overview of how PSE manages power costs and  
3 describes the governance structure within which the Energy Supply Merchant  
4 (“ESM”) department operates. I then describe two new power purchase agreements  
5 (“PPA”) that were included in PSE’s power supply portfolio during the last two  
6 months of 2022 and are included in current effective rates for 2023.

7 **II. PSE’s MANAGEMENT OF ITS**  
8 **POWER PORTFOLIO AND FUEL SUPPLY**

9 **Q. What governance does PSE have over power cost management activities and**  
10 **wholesale market transactions?**

11 A. PSE’s ESM department is composed of energy market analysts, energy traders, and  
12 other professionals. The ESM department develops and implements portfolio  
13 management strategies and transacts in wholesale markets for power and gas. The  
14 ESM department has been under my direction since July 2022.

15 PSE’s Energy Risk Control (“ERC”) department is responsible for independently  
16 monitoring, measuring, quantifying, and reporting official risk positions and  
17 performing credit analysis. The ERC department is led by the Director of Enterprise  
18 Risk Management.

19 PSE’s Energy Management Committee (“EMC”) is composed of five PSE officers  
20 and oversees the activities performed by both the ESM and ERC departments. The  
21 EMC is responsible for providing oversight and direction on all portfolio risk issues  
22 in addition to approving long-term resource contracts and acquisitions. The EMC

1 provides policy-level and strategic direction on a regular basis, reviews position  
2 reports, sets risk exposure limits, reviews proposed risk management strategies, and  
3 approves procedures for implementation by PSE staff. PSE's Energy Risk Policy  
4 ("Policy") and Energy Supply Transaction & Hedging Procedures Manual  
5 ("Procedures") lay out the policies that govern energy portfolio management  
6 activities and define roles and responsibilities of various departments. In addition,  
7 PSE's Board of Directors provides executive oversight of these areas through PSE's  
8 Audit Committee.

9 **Q. What actions does ESM take to manage its power costs within its governance**  
10 **structure?**

11 A. PSE's ESM uses a combination of least cost dispatch, optimization, and portfolio  
12 hedging to manage power costs.

13 **Q. Please explain least cost dispatch.**

14 A. The ESM department plans for sufficient generation capacity to meet the forecasted  
15 day-ahead demand for electricity plus a reserve margin using the lowest cost  
16 resources available, considering transmission and generation constraints. This  
17 strategy seeks to minimize portfolio costs by utilizing the most economic supply,  
18 whether generated or purchased in the wholesale market.

19 **Q. Please explain optimization.**

20 A. The variable nature of PSE's load combined with variability in output from its  
21 resources creates capacity in excess of requirements during many periods of the year.

1 The ESM department maximizes the value of PSE's electric portfolio assets by  
2 selling transmission, generation, and natural gas pipeline capacity into regional  
3 markets when it is not needed to meet PSE load. The benefits of these portfolio  
4 optimization activities provide a direct reduction to PSE's power costs, helping to  
5 minimize the net cost of energy supply used to serve customer load. All portfolio  
6 optimization activities are conducted in accordance with PSE's Policy and  
7 Procedures.

8 **Q. What are the current hedging strategies approved by the EMC?**

9 A. The purpose of hedging is to reduce the effects of commodity price volatility on  
10 power costs. PSE's ESM department does not enter into risk positions for the purpose  
11 of earning trading profits. The Policy and Procedures provide guidance and risk  
12 management strategies for hedging market price exposure in two different time  
13 periods, 1) the Programmatically Managed Hedge period and 2) the Actively  
14 Managed Hedge period. The Programmatically Managed Hedge period begins [REDACTED]  
15 [REDACTED] in advance of delivery. During the Programmatically Managed Hedge  
16 period PSE's ESM department executes hedges to systematically reduce PSE's net  
17 electric portfolio exposure (including natural gas for power generation) so that, as a  
18 month rolls into the Actively Managed Hedge period, exposure for that month will be  
19 within the monthly EMC-approved exposure limit.

20 The Actively-Managed Hedge program begins [REDACTED] in advance of delivery.

21 During this period, the ESM department monitors positions on a daily basis and

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1 authorized traders execute transactions to manage exposure within monthly and  
2 [REDACTED] limits established by the EMC.

3 **Q. How is electric portfolio exposure measured?**

4 A. Exposure is calculated individually for on-peak, off-peak, and gas-for-power  
5 positions. EMC-approved exposure limits apply to the net spot market exposure of all  
6 three positions. Spot market exposure is measured by multiplying the net open  
7 position, in megawatt hours (“MWh”) or million British Thermal Units (“MMBtu”),  
8 by a forward power or gas market price, respectively. It represents the net dollar  
9 amount that PSE has not hedged during a specific period, given forecasted load and  
10 generation volumes, and simulated market prices. PSE performs this calculation using  
11 250 simulations of forward power and gas prices to generate a probabilistic  
12 measurement of portfolio exposure.

13 **Q. How does PSE use the electric portfolio exposure limits to help make hedging  
14 decisions?**

15 A. Once PSE’s aggregated energy position and net exposure are defined for a particular  
16 period, the ESM department executes fixed-price transactions for the purchase or sale  
17 of gas or power to stay within EMC-determined exposure limits. Execution entails  
18 entering into specific transactions with approved counterparties under approved  
19 master agreements subject to credit limits.

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1 **Q. Does the ESM department rely only on net exposure to implement the hedge**  
2 **programs?**

3 A. No. The ESM department also analyzes market prices and fundamentals that impact  
4 the wholesale electric and gas markets. The ESM department determines the specific  
5 timing of when hedging transactions are entered and decides with whom, among  
6 counterparties approved by the ERC department, to execute transactions to manage  
7 net exposure, subject to counterparty credit limits.

8 **Q. What information does the ESM department rely on to inform portfolio**  
9 **management decisions?**

10 A. In addition to the net energy position and power portfolio exposure, the ESM  
11 department utilizes a wide set of tools and sources of information to make informed  
12 decisions about dispatching plants, purchasing fuel, and executing hedges within  
13 EMC-approved limits. The ESM department collects and analyzes regional supply  
14 and demand data such as weather trends and hydro generation conditions.  
15 Additionally, ESM reviews forecasted wholesale market prices and industry  
16 publications. ESM receives real-time information from sources including  
17 Intercontinental Exchange (“ICE”) Data and Analytics, live ICE price data, and  
18 brokers.

19 The ESM department reviews operational events, discusses market trends, and  
20 reviews supply and demand information. The information is used to understand risks  
21 in the portfolio and determine hedging priorities. The ESM department may also use  
22 such information to develop recommendations to the EMC regarding potential

1 changes to PSE’s overarching hedging strategies or to recommend transactions that  
2 do not fall within current strategies.

3 **Q. Does PSE use any other information to manage its energy portfolio?**

4 A. Yes. The ERC department is responsible for establishing and monitoring counterparty  
5 credit limits in accordance with the EMC-approved Credit Risk Management Policy.  
6 Counterparty-specific exposure is calculated and monitored frequently, and ESM staff  
7 are permitted to transact only within established credit limits.

8 **III. POWEREX WINTER PEAK PPAs**

9 **Q. Does PSE seek a prudence determination for any new resources in this filing?**

10 A. Yes. PSE seeks a prudence determination in this filing for three new PPAs executed  
11 during 2022. Details regarding one of these PPAs, the Chelan Power Sales  
12 Agreement, are provided in the Prefiled Direct Testimony of Zacarias C. Yanez,  
13 Exhibit ZCY-1CT. The remaining two PPAs, the Powerex Winter Peak PPAs, are  
14 addressed in my testimony below.

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15 **Q. What are the Powerex Winter Peak PPAs?**

16 A. In September 2022 Powerex issued a request for proposals (“RFP”) for the purchase  
17 of firm hydroelectric capacity and energy during winter [REDACTED] beginning in  
18 [REDACTED]. PSE submitted two bids to purchase up to [REDACTED]  
19 MW for the offered term: [REDACTED] MW with delivery at [REDACTED]  
20 [REDACTED] and [REDACTED] MW with delivery at [REDACTED] Powerex ultimately accepted  
21 PSE’s [REDACTED] offer for both products. PSE executed the Powerex Winter Peak

1 PPA on September 26, 2022. The agreements provide PSE with [REDACTED] MW of [REDACTED]  
2 [REDACTED]  
3 [REDACTED]. PSE will  
4 pay [REDACTED] per MWh for the product [REDACTED] and  
5 \$ [REDACTED] for the product [REDACTED]

6 Copies of the Powerex Winter Peak PPAs are included as the Second and Third  
7 Exhibits to the Prefiled Direct Testimony of Philip A. Haines, Exh. PAH-3C and Exh.  
8 PAH-4C.

9 **Q. Why is PSE providing details of these new PPAs in this PCA filing?**

10 A. As part of PSE's 2013 power cost only rate case, Docket UE-130617, PSE and parties  
11 to that proceeding initiated a collaborative process to address issues relevant to the  
12 PCA mechanism. That process resulted in a multiparty settlement that changed  
13 certain elements of the PCA. The multiparty settlement was approved by the  
14 Commission and changes became effective on January 1, 2017. The PCA Settlement  
15 states, "New resources will be included in the allowable PCA costs. The prudence of  
16 new resources with a term less than or equal to two years will be determined in the  
17 Commission's review of the annual PCA report."<sup>1</sup> Costs and benefits of these new  
18 PPAs, [REDACTED], are included in 2022 actual allowable  
19 PCA costs presented in this filing.

20 Further, the recently-approved settlement stipulation in PSE's 2022 multiyear rate  
21 plan states, "Any new resources included in the January 1, 2023 or January 1, 2024

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<sup>1</sup> See page 4 of Attachment A (Summary of PCA Mechanism) to Settlement Stipulation in Docket UE-130617.

1 baseline update will undergo a prudency review in the annual PCA Compliance  
2 Filing. To reduce the amount of time that costs spend in deferral, the prudence of any  
3 new resources effective in 2023 will be determined in the April 2023 PCA filing.”<sup>2</sup>

4 Costs and benefits of the Powerex Winter Peak PPAs are included in the 2023 PCA  
5 baseline rate update from PSE’s 2022 multi-year rate plan compliance filing.

6 The Prefiled Direct Testimony of Zacharay C. Yanez, Exh. ZCY-1CT, presents the  
7 prudence standard that PSE applies to all resource acquisitions, including the two  
8 Powerex Winter Peak PPAs.

9 **Q. What benefits do the Powerex Winter Peak PPAs bring to PSE’s portfolio?**

10 A. The Powerex Winter Peak PPAs address PSE’s capacity deficit and mitigate the  
11 [REDACTED] of continued reliance on the market to meet peak  
12 demand. The Powerex Winter Peak PPAs deliver [REDACTED] energy supply during  
13 winter [REDACTED] to meet capacity requirements in the near term, providing a bridge  
14 until additional capacity can be acquired via PSE’s longer term planning and  
15 acquisition time horizon. Via its [REDACTED], the PPAs reduce PSE’s  
16 [REDACTED] during winter months.

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<sup>2</sup> See *Wash. Utils. & Transp. Comm’n v. Puget Sound Energy*, Dockets UE-220066/UG-220067 (consolidated), Final Order 24, App. A at ¶ 30 (Dec. 22, 2022).

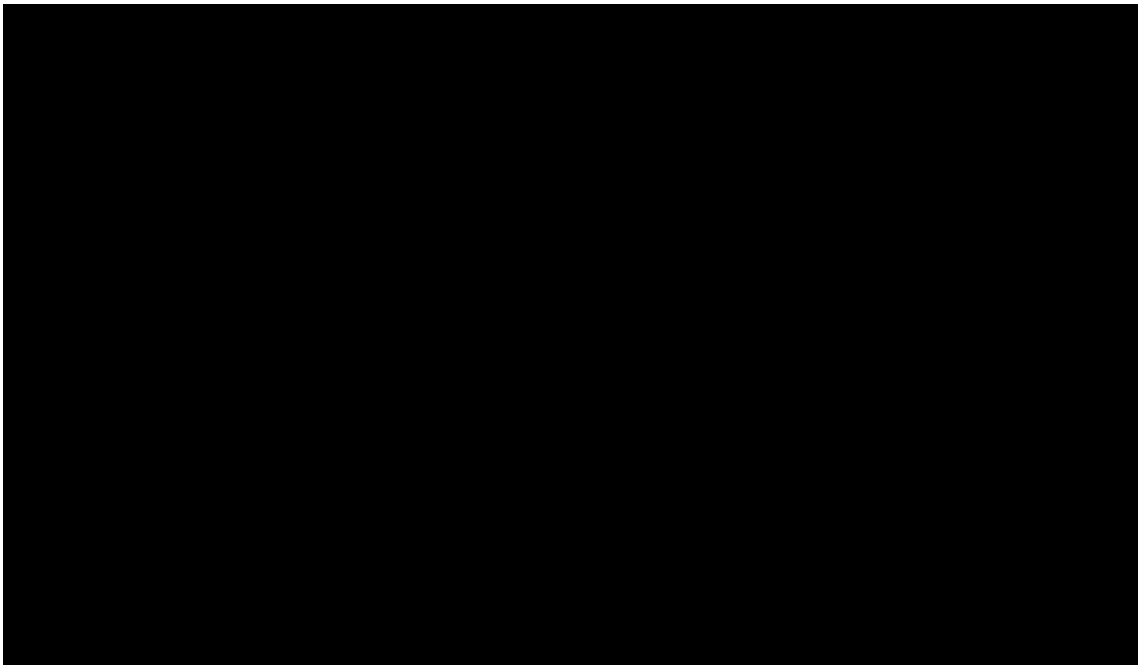
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**Q. Does energy delivered under the Powerex Winter Peak PPAs contribute to PSE's [REDACTED] objectives?**

A. [REDACTED] Energy delivered to PSE under the Powerex Winter Peak PPAs is [REDACTED] [REDACTED] and will [REDACTED] [REDACTED].

**Q. How did PSE determine the price it offered for the Powerex Winter Peak PPAs?**

A. There is no organized or active market for products directly comparable to those offered in the Powerex RFP, so it was not possible to rely on a single market price reference in determining its value. PSE's bid amount was therefore determined by estimating the cost of alternative products and attributes that collectively offer benefits comparable to those of the Powerex PPAs.<sup>3</sup> PSE [REDACTED]



<sup>3</sup> PSE employed a similar methodology to value the cost of alternatives to the Chelan Slice PPA, with the Wells Colville Slice PPA, and the Powerex Summer Peak PPA that were approved for cost recovery in PSE's 2022 multi year rate plan. See Docket UE-220066, Final Order 24, Revenue Requirement Settlement at ¶ 31, Yanez, Exh. ZCY-1CT, and Wetherbee, Exh. PKW-1CT.

1 [REDACTED]

2 [REDACTED] The Fourth Exhibit to the Prefiled Direct Testimony of Philip A.  
3 Haines, Exh. PAH-5C, contains details regarding PSE's analysis of the Powerex  
4 Winter Peak products and PSE's determination of the price offered.

5 **Q. What alternatives to the Powerex Winter Peak PPAs did PSE consider to meet**  
6 **its firm capacity need?**

7 A. Opportunities to acquire firm capacity products to meet PSE's immediate needs are  
8 very limited. Absent an organized market for capacity in the Pacific Northwest, the  
9 Powerex RFP offered the most transparent mechanism available for acquiring such  
10 capacity. Without the Powerex Winter Peak PPAs PSE would need to secure a similar  
11 amount of energy, capacity, and [REDACTED] from other northwest market  
12 participants.

13 PSE's bid strategy ensured that the price of the Powerex Winter Peak PPAs reflects  
14 the best information available regarding the market value of the products. The bid  
15 price is comparable to the cost of securing similar benefits from alternate market  
16 products. PSE evaluates the costs and benefits of participating in offerings such as the  
17 Powerex RFP as they become available and will continue to do so in conjunction with  
18 its near-term market reliance reduction strategy. Such offers are often not bid into  
19 PSE's active RFP process, which includes longer lead time resources selected to meet  
20 PSE's long-term capacity needs.

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1 **Q. Did the EMC consider and authorize PSE’s acquisition of the Powerex Winter**  
2 **Peak PPAs?**

3 A. Yes. On October 28, 2021, the EMC authorized PSE to acquire [REDACTED] MW of new  
4 capacity as part of a near-term market reliance risk reduction strategy. PSE’s October  
5 28, 2021 presentation to the EMC describes this strategy and the capacity deficit and  
6 associated risks it addresses. This presentation is included as the Fifth Exhibit to the  
7 Prefiled Direct Testimony of Philip A. Haines, Exh. PAH-6C.

8 **Q. Was the decision to enter into the Powerex Winter Peak PPAs a prudent**  
9 **decision?**

10 A. Yes, PSE analyzed the Powerex Winter Peak PPAs in the method normally applied to  
11 such resource acquisitions. The contemporaneous documentation provided with this  
12 testimony and exhibits demonstrates that PSE considered and applied the  
13 Commission’s prudency factors, including need and consideration of alternatives. The  
14 Winter Peak PPAs are providing needed new capacity in the form of [REDACTED]  
15 energy [REDACTED], during  
16 the winter months [REDACTED] PSE requests the  
17 Commission determine that PSE’s acquisition of these resources is prudent and allow  
18 PSE full recovery of the associated costs in rates.

19 **IV. CONCLUSION**

20 **Q. Does that conclude your testimony?**

21 A. Yes, it does.

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