

**EXH. JAP-18T
DOCKETS UE-190529/UG-190530
UE-190274/UG-190275
2019 PSE GENERAL RATE CASE
WITNESS: JON A. PILIARIS**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-190529
Docket UG-190530 (*Consolidated*)**

In the Matter of the Petition of

PUGET SOUND ENERGY

**For an Order Authorizing Deferral
Accounting and Ratemaking Treatment
for Short-life IT/Technology Investment**

**Docket UE-190274
Docket UG-190275 (*Consolidated*)**

PREFILED REBUTTAL TESTIMONY (NONCONFIDENTIAL) OF

JON A. PILIARIS

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 15, 2020

PUGET SOUND ENERGY

**PREFILED REBUTTAL TESTIMONY (NONCONFIDENTIAL) OF
JON A. PILIARIS**

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1 **PUGET SOUND ENERGY**

2 **PREFILED REBUTTAL TESTIMONY (NONCONFIDENTIAL) OF**
3 **JON A. PILIARIS**

4 **I. INTRODUCTION**

5 **Q. Are you the same Jon A. Piliaris who submitted prefiled direct testimony on**
6 **June 20, 2019 on behalf of Puget Sound Energy (“PSE”) in this proceeding?**

7 A. Yes.

8 **Q. What is the purpose of your rebuttal testimony?**

9 A. My testimony responds to the following:

- 10 • WUTC Staff’s recommendation regarding the calculation of PSE’s pro forma
11 gas revenue;
- 12 • Parties’ alternative electric rate spread proposals;
- 13 • Parties’ alternative proposals for the electric residential rate design;
- 14 • WUTC Staff’s proposed design and evaluation elements for, as well as
15 Kroger’s proposed modification to, PSE’s Demand Aggregation pilot
16 proposal;
- 17 • WUTC Staff’s recommendation for a time-of-use (“TOU”), critical peak
18 pricing pilot (“CPP”) and potentially a real-time pricing (“RTP) pilot;
- 19 • NW Energy Coalition’s (“NWEC’s”) proposal regarding PSE’s gas line
20 extension margin allowance calculations; and
- 21 • NWEC’s tariffed on-bill repayment proposal.

22 **Q. Please summarize your testimony.**

23 A. My testimony concludes and recommends the following:

- 1 • PSE accepts WUTC Staff’s recommendation regarding the calculation of
2 PSE’s pro forma gas revenue;
- 3 • PSE continues to believe that its electric rate spread proposal more fairly
4 balances cost causation with interclass equity and gradualism than the
5 proposals put forth by parties in this case;
- 6 • PSE accepts alternative proposals to spread residential rate increases
7 proportionally across the two existing energy blocks and is open to exploring
8 an expansion of the first block energy rate from 600 kWh to 800 kWh;
- 9 • PSE recommends adoption of its Demand Aggregation pilot proposal with the
10 further clarification of design and evaluation elements provided in this
11 testimony;
- 12 • PSE agrees that the time is right for a TOU pricing pilot, would prefer
13 exploring a peak-time rebate (“PTR”) pricing pilot in lieu of (or in addition to)
14 a CPP pilot and is willing to engage in discussions with the Pacific Northwest
15 National Laboratory (“PNNL”) regarding the potential for a RTP pilot;
- 16 • PSE recommends retaining its existing gas line extension margin allowance
17 calculations for the time being and that the Commission decide whether the
18 time is right for a broader discussion of these allowances as part of a
19 collaborative that would include the state’s other regulated gas utilities; and
- 20 • While PSE does not expect the costs to outweigh its benefits, it is willing to
21 accept NWEA’s tariffed on-bill repayment proposal.

22 **II. PSE ACCEPTS WUTC STAFF’S RECOMMENDATION**
23 **FOR CALCULATING ITS GAS PRO FORMA REVENUE**

24 **Q. Please summarize WUTC Staff’s testimony regarding the calculation of**
25 **PSE’s gas pro forma revenue.**

26 A. WUTC Staff begins with a concern about an inconsistency between the data sets
27 used by PSE in its restating gas temperature normalization analysis in its 2018
28 Commission Basis Report (“CBR”) and that used in calculating its pro forma

1 temperature normalization analysis that covered the same test year in this case.¹
2 The former used data from PSE's SAP accounting system as booked, where the
3 latter uses data from its Billing System Business Warehouse ("BW"), where one
4 difference between the two is determination of unbilled revenue.² After
5 acknowledging the pros and cons of using each data source, WUTC Staff
6 proposes that PSE use data from the utility's SAP accounting system in
7 performing the gas temperature normalization analysis and in constructing its gas
8 pro forma revenue.³

9 **Q. Are you addressing the matter of which data set is used to perform PSE's**
10 **temperature normalization analysis?**

11 A. No, this is discussed in the Prefiled Rebuttal Testimony of Lorin I. Molander,
12 Exh. LIM-3T.

13 **Q. Do you share WUTC Staff's concerns about the two inconsistent data sets for**
14 **purposes of calculating gas pro forma revenue?**

15 A. Yes. Like WUTC Staff, PSE has also recognized the pros and cons of using the
16 different data sources. However, historically PSE has determined that the BW
17 data was superior for analytical purposes, primarily for a reason unexplained in
18 WUTC Staff's testimony. That reason is that the BW data has been "cleaned" for
19 the billing and metering issues that invariably occur over time and are corrected

¹ Liu, Exh. JL-1CT at 27:17-28:15.

² *Id.*

³ *Id.* at 27:17-29:2.

1 after the accounting records are closed. On the other hand, the SAP data simply
2 reflects what was known at the time the accounting records closed.

3 **Q. Does PSE continue to believe the BW data is superior for purposes of**
4 **calculating gas pro forma revenue in general rate cases?**

5 A. Upon reflection, PSE believes the balance is beginning to tip in favor of using the
6 SAP data for purposes of developing its gas pro forma revenue.

7 **Q. What has led PSE to this conclusion?**

8 A. Historically, this load data has primarily impacted the development of gas pro
9 forma revenue, the calculation of revenue deficiencies and the derivation of
10 billing determinants used to develop rates. However, with decoupling, this load
11 data is also now used to calculate deferrals within PSE's decoupling mechanism
12 resulting from the difference between "actual" volumetric revenue and allowed
13 revenue (i.e., determined on a per-customer basis). To efficiently book these
14 deferrals, data from SAP is used to determine the actual revenue. However, PSE
15 has continued to use the data from PSE's BW for purposes of developing its gas
16 rates in its GRCs, including the "actual" rates used to derive the decoupling
17 deferrals. This creates inconsistencies with unknown, and probably unknowable,
18 implications. It is for this reason, that PSE now believes it appropriate to adopt
19 WUTC Staff's recommendation to use SAP data in the development of its gas pro
20 forma revenue in its GRCs, including this one. Doing so allows a consistent
21 underlying data source for volumetric rates and decoupling deferrals.

1 **Q. Does PSE also accept WUTC Staff’s approach to using this SAP data in the**
2 **calculation of its gas pro forma revenue?**

3 A. For purposes of this filing, PSE is willing to accept the approach outlined by
4 WUTC Staff⁴, but with a modification for how the SAP data is incorporated into
5 the pro forma revenue model. PSE will continue to look for improvements to this
6 calculation for future filings.

7 **Q. What is the modification you mention above?**

8 A. WUTC Staff noted their “quick fix” to incorporate SAP data was through the
9 temperature normalization adjustment.⁵ PSE proposes to incorporate the SAP data
10 through the actual therm data within the pro forma revenue model which is a more
11 accurate way to incorporate this data. By making this change, the revenue change
12 associated with incorporating the SAP data is no longer picked up through the
13 temperature normalization adjustment but through other revenue adjustments
14 within the pro forma revenue model. The revenue impact of this change remains
15 the same between both Staff’s and PSE’s approaches but PSE’s approach results
16 in the revenue change being picked up in the appropriate revenue adjustments.

⁴ *Id.* at 29:4-8.

⁵ *Id.* at 28:21-29:2

1 **Q. Have you prepared a new exhibit for normalized test year revenue from**
2 **natural gas operations which incorporates the changes above?**

3 A. Yes. Please see the first exhibit to my prefiled rebuttal testimony, Exh. JAP-19,
4 for an exhibit that demonstrates PSE's development of its normalized test year
5 revenue from natural gas operations.

6 **III. PSE'S ELECTRIC RATE SPREAD PROPOSAL IS MORE**
7 **BALANCED THAN ALTERNATIVES PROPOSED BY PARTIES**

8 **Q. Please summarize the alternative electric rate spread proposals made by**
9 **parties in this case.**

10 A. Four parties to this case offered alternative rate spread proposals.
11 WUTC Staff proposes that customers served on Schedule 43 (Interruptible
12 Schools) receive 150%, rather than 125%, of the average rate increase.⁶ However,
13 it accepts PSE's rate spread for all other classes.⁷
14 Public Counsel, relying on its multiple cost of service analyses, proposes a more
15 liberal +/- 10% range around parity for applying an average overall increase to
16 applicable rate classes.⁸ This results in a proposal where all but Schedule 35,
17 Schedule 449 (Retail Wheeling), Special Contract and Resale customers receive
18 an average increase.⁹

⁶ Ball, Exh. JLB-1T at 16:24-19:2.

⁷ *Id.*

⁸ Watkins, Exh. GAW-1T at 39:9-40:8.

⁹ *Id.*

1 Kroger and the Federal Executive Agencies (“FEA”) go in the opposite direction.
2 Pointing to parity percentages of 106% and a need to adhere more closely to cost
3 causation principles, Kroger proposes to reduce the rate spread to Schedules 25,
4 26, 46 and 49 from 75% to 50% of the average increase.¹⁰ Similarly, calling on a
5 need “to create greater movement towards cost-based rates,” the FEA proposes
6 that Schedules 24, 25, 26, 31, 46 and 49 receive no rate increase at all in this
7 case.¹¹

8 **Q. What are your observations regarding these alternative electric rate spread**
9 **proposals?**

10 A. In broad terms, Public Counsel leans most heavily on the need for gradualism,
11 Kroger and FEA rely more on cost causation and, with minor differences, PSE
12 and WUTC Staff fall somewhere between. While I wouldn’t characterize any of
13 the proposals as being outside the range of reasonableness, I believe that PSE’s
14 and WUTC Staff’s proposals strike a better balance between reflecting the
15 principles of cost causation and gradualism. However, specific to WUTC Staff’s
16 proposal, I would also submit that its proposal to assign 150% of the average
17 increase to customers served on Schedule 43 is a little too strict. As illustrated in
18 Figure 1 of the testimony of Jason L. Ball, Schedule 43 customers fall slightly
19 more than 10% below parity and yet receive the same increase under WUTC
20 Staff’s proposal as customers served under Schedule 35 whose current rates are

¹⁰ Higgins, Exh. KCH-1T at 11:3-12:3.

¹¹ Al-Jabir, Exh. AZA-1T at 21:13-21:21.

1 greater than 40% below parity.¹² Given these wide differences in results, it would
2 be reasonable to expect at least some differentiation in proposed rate increases as
3 is the case in PSE's proposal.

4 **Q. What do you recommend based on these observations?**

5 A. I would recommend that the Commission accept PSE's proposal for electric rate
6 spread for its superior balance of the principles of gradualism, cost causation and
7 equity among customers. If, however, the Commission believes PSE's proposal to
8 be too rigidly in favor of cost causation, I would support Public Counsel's
9 proposal to apply an average rate increase to customer classes whose cost of
10 service fall within +/- 10% of parity.

11 **IV. PSE ACCEPTS PARTIES' PROPOSED ALTERNATIVES**
12 **FOR RESIDENTIAL ELECTRIC RATE DESIGN**

13 **Q. Please summarize parties' responses to PSE's proposed residential electric**
14 **rate design.**

15 A. For the parties that responded to PSE's proposal to assign the entire increase in
16 revenue responsibility to the tail block of residential electric rates, they were
17 unanimous in their dislike for this proposal.

18 Citing what it believes a lack of support for PSE's proposal, WUTC Staff instead
19 recommends that the increase apply equally to both blocks of energy usage.¹³

¹² Ball, Exh. JLB-1T at 17:4-18:1.

¹³ *Id.* at 27:1-32:12.

1 Public Counsel similarly supports a proportional increase across the first and
2 second blocks of the residential electric rate and goes further by supporting a
3 proposal by The Energy Project (“TEP”) to explore the feasibility of a slightly
4 different blocking structure.¹⁴

5 Finally, citing concerns about the potential for an uneven impact across the full
6 spectrum of PSE’s low income customers, TEP also supports an equal percentage
7 increase to both blocks of the residential electric rate and further recommends that
8 the Commission direct PSE to undertake an analysis, in consultation with its Low-
9 income Advisory Committee, that explores the potential for expanding the first
10 block of energy usage from 600 kWh to 800 kWh per month.¹⁵

11 **Q. How do you respond to parties recommendations regarding PSE’s proposed**
12 **residential electric rate design?**

13 A. PSE’s proposal for residential electric rate design had a very specific group of
14 customers in mind, namely those with lower incomes. When it made its filing in
15 June 2019, PSE thought it had the support of the principal advocate for these
16 customers in this case, namely TEP. It appears now that this support has waned,
17 potentially in favor of an alternative that instead expands the first block from 600
18 kWh to 800 kWh per month. As PSE is not necessarily wedded to the residential
19 electric rate design proposal it initially put forth and has no intention of
20 advocating for a proposal that does not have the full support of the primary low-

¹⁴ Watkins, Exh. GAW-1T at 46:17-47:10.

¹⁵ Collins, Exh. SMC-1T at 11:14-15:13.

1 income advocates, PSE is willing to accept TEP's alternative proposal in this
2 case. PSE anticipates that acceptance of TEP's alternative proposal should at least
3 initially satisfy concerns of both WUTC Staff and Public Counsel whereby PSE
4 would spread the residential increase proportionally across its two energy block
5 rates.

6 **V. PSE'S DEMAND AGGREGATION PILOT PROPOSALS**
7 **ARE SUFFICIENTLY DEVELOPED AND JUSTIFIED TO**
8 **APPROVE NOW**

9 **Q. Please summarize parties' responses to PSE's Demand Aggregation pilot**
10 **proposals.**

11 A. After a lengthy discussion of the need for, the design of and the criteria upon
12 which to evaluate pricing pilots,¹⁶ WUTC Staff recommends that PSE file a
13 revised proposal that incorporates its recommended design and evaluation
14 elements.¹⁷ Kroger and FEA, on the other hand, are more supportive. Kroger,
15 while generally supporting PSE's proposal, recommends that it be "expanded at
16 the outset to allow for up to 10 locations and 5 MW per customer, up to an overall
17 maximum of 100 locations."¹⁸ FEA similarly supports PSE's proposal and further
18 recommends that the program potentially be expanded in the future to also include
19 customers served under Schedule 49.¹⁹

¹⁶ Ball, Exh. JLB-1T at 38:11-59:4.

¹⁷ *Id.* at 59:21-60:8.

¹⁸ Higgins, Exh. KCH-1T at 17:13-17:17.

¹⁹ Al-Jabir, Exh. AZA-1T at 30:13-31:2.

1 **Q. Do you have any comments regarding WUTC Staff’s principles for designing**
2 **pricing pilots?**

3 A. Yes. WUTC Staff begins its discussion of pricing pilots with a discussion of the
4 principles it believes should guide their development. Specifically, WUTC Staff
5 relies on a “21st Century Interpretation” of the ratemaking principles outlined by
6 James Bonbright that was developed by the Rocky Mountain Institute (“RMI”).²⁰

7 While an interesting twist on Bonbright’s original principles, I find them to be a
8 bit too narrowly tailored to RMI’s particular worldview, no matter how laudable.

9 For example, in updating Bonbright’s principle in ensuring a utility’s revenues
10 cover costs, RMI turns this principle into one that encourages “economically
11 efficient investment in both centralized and distributed energy resources.”²¹ It is
12 unclear to me how these two principles necessarily relate to one another.

13 Similarly, RMI takes Bonbright’s principles related to fair apportionment of costs
14 between customer groups and narrowly interprets this principle as needing to be
15 “informed by a more complete understanding of the impacts....of DERs on the
16 cost of service.”²² Again, this feels like a mixture of apples and oranges. Finally,

17 RMI takes Bonbright’s principle related to ensuring that pricing incents
18 economically efficient outcomes and suggests that pricing should encourage
19 “...improved grid resilience and flexibility and reduce environmental

²⁰ Ball, Exh. JLB-1T at 39:5-40:2.

²¹ *Id.*

²² *Id.*

1 impacts...”²³ Again, this feels like an unnecessarily narrow view of what an
2 economically efficient outcome would include.

3 In general, while PSE agrees that there are likely many benefits to investments in
4 distributed energy resources and other newer grid modernizing technology, RMI’s
5 principles appear to be framed with that specific outcome in mind, rather than that
6 outcome being a natural byproduct of the more agnostic set of principles
7 originally outlined by Bonbright. That being said, PSE recommends that great
8 care be taken before considering RMI’s spin on these enduring ratemaking
9 principles a suitable substitute for guiding the broad array of ratemaking decisions
10 facing the Commission.

11 **Q. What are WUTC Staff’s proposed elements of designing pricing pilots?**

12 A. WUTC Staff summarizes eight elements to designing pricing pilots across three
13 broad categories.²⁴ The broad categories include the goals, structure and
14 administration of the pilot. Within the category of goals, WUTC Staff suggests
15 that pilots should utilize goals that adhere to the “SMART” principle (i.e.,
16 specific, measurable, achievable, relevant and time-bound) and that they be both
17 practical and understandable. Within the category of structure, WUTC Staff
18 suggests that pilots be designed to provide meaningful signals, be based on cost
19 causation and be feasible to implement. Within the category of administration,
20 WUTC Staff believes that pricing pilots should have clear applicability to a

²³ *Id.*

²⁴ *Id.* at 55:1-56:9.

1 broader population, have consistent reporting and prioritize customer engagement
2 and communications.

3 **Q. What comments do you have on Staff’s proposed elements of designing**
4 **pricing pilots?**

5 A. While I could quibble over certain details,²⁵ the general elements outlined by
6 WUTC Staff seem reasonable so long as not applied too rigidly. Moreover,
7 flexibility should be retained to allow for pricing pilots that may not require each
8 and every design element. As discussed later in this section of my testimony,
9 PSE’s Demand Aggregation pilot may not require every design element outlined
10 by WUTC Staff, at least not to the extent to which it may be appropriate for the
11 types of pilots it proposes in other parts of its testimony.²⁶

12 **Q. What are WUTC Staff’s proposed pricing pilot evaluation elements?**

13 A. WUTC Staff provides a very lengthy and detailed list of evaluation elements
14 within four broad categories: study findings, development and administration,
15 cost and benefits, and risks.²⁷ The study findings criteria include the content to
16 include in the findings, as well as their applicability to the larger customer
17 population. Within the development and administration criteria, WUTC Staff
18 covers evaluation items including assumptions, data collection, education and

²⁵ For example, WUTC Staff’s suggestion that pricing pilots be “practical and understandable” seems to be more appropriately categorized as administrative than as part of the pilots’ goals or purpose. Similarly, the feasibility of a pilot seems more administrative than structural in nature.

²⁶ Ball, Exh. JLB-1T at 61:21-68:22.

²⁷ *Id.* at 56:13-58:23.

1 outreach efforts, and refinements made during the course of the pilot. The
2 program costs and benefits criteria cover many detailed areas, including what
3 factors to include in these evaluations, how these factors should be compared to
4 an appropriate baseline, their overall effect on consumption, impacts on other
5 regional benefits and customer satisfaction with the pilot. Finally, WUTC Staff
6 lists specific areas of risks to be evaluated including sensitivity of results to
7 wholesale pricing, vendor risks, ensuring customer acceptance and data security.

8 **Q. What comments do you have on WUTC Staff's proposed evaluation elements**
9 **for pricing pilots?**

10 A. Similar to my comments regarding the design elements, the evaluation elements
11 provide useful illustrative guidance for the types of factors that could be
12 considered. Here again, however, caution must be exercised in being overly
13 prescriptive in their application. As discussed later in this section of testimony,
14 many of WUTC Staff's evaluation elements appear to have little direct relevance
15 to PSE's Demand Aggregation pilot. For example, the evaluation elements
16 include references to impacts on and/or engagement with vulnerable populations
17 or customers. It is unclear how PSE's Demand Aggregation pricing pilot, which is
18 focused exclusively on large non-residential customers, bears any relationship to
19 vulnerable customers/populations.

1 **Q. How does WUTC Staff find PSE’s Demand Aggregation pilot deficient, given**
2 **the principles, design elements and evaluation elements discussed above?**

3 A. WUTC Staff seems unclear as to PSE’s pricing pilot programs’ goals, structure
4 and administration.²⁸ For example, WUTC Staff asks “[w]ho is the target
5 audience? What is the pricing pilot trying to measure? What will benefits will
6 [sic] be measured against? How will customer education and outreach be
7 conducted? The answers to these questions are all unclear.”²⁹ It is also unclear as
8 to PSE’s proposed evaluation elements.³⁰

9 **Q. How do you respond to WUTC Staff’s criticism of the design elements and**
10 **evaluation elements for PSE’s Demand Aggregation pilot?**

11 A. PSE is a little surprised and disappointed in WUTC Staff’s response. While PSE
12 has not “ticked every box” proposed by WUTC Staff in its response testimony,
13 many of the more important elements have been presented in PSE’s direct
14 testimony, albeit not necessarily in the form or structure outlined by WUTC Staff.
15 Moreover, to the extent that PSE agrees that certain design or evaluation elements
16 proposed by WUTC Staff have merit, PSE does not agree that a refile of its
17 pilot is necessary for the Commission to approve it in this proceeding. Instead,
18 PSE suggests that the Commission simply refer to the clarifications provided in
19 this testimony.

²⁸ *Id.* at 60:10-61:7.

²⁹ *Id.*

³⁰ *Id.* at 61:9-19.

1 **Q. Can you align PSE’s proposed Demand Aggregation pilots with the WUTC**
2 **Staff’s general design elements?**

3 A. Yes. First, the goals (or more specifically, the purpose) of these pilots were
4 explained in my direct testimony.³¹ For the pilot program directed to general
5 commercial/industrial customers, the purpose was primarily to better align the
6 recovery of costs from these customers with cost-causation. For the pilot program
7 directed to EV-related customers, the purpose was to reduce at least one potential
8 barrier to transportation electrification related to mass transit, that being the
9 traditional demand charge.

10 As for the details of what would be included in “SMART” goals related to these
11 programs, I would offer the following, most of which was already addressed in
12 my prefiled direct testimony:

- 13 • **Specific:** The specific goal of each pilot is to reduce the demand charge for the
14 eligible customers to levels more reflective of cost causation. Secondary to
15 these goals are positive responses of these customers to the price signals that
16 reduce costs to the utility.
- 17 • **Measurable:** The primary measure of achievement of the goal will be the
18 reduction in demand charges to participating customers. The secondary
19 measure will be observed shifts in peak load to minimize the aggregate monthly
20 peak loads at participating locations.

³¹ Piliaris, Exh. JAP-1T at 31:11-32-11.

- 1 • **Achievable:** PSE believes demand charges will be reduced through the pilot
2 and customers should have some ability to respond to the price signals offered
3 by the pilot, allowing them to further reduce their demand charges.
- 4 • **Relevant:** As discussed in my prefiled direct testimony,³² PSE’s
5 commercial/industrial customers have been asking for rates to better reflect cost
6 causation,³³ and the state’s carbon reduction goals hinge critically on the
7 expansion of vehicle electrification, including for mass transit.
- 8 • **Time-Bound:** As discussed in my prefiled direct testimony, this pilot will last
9 at least five years, with a filing in the final year of the pilot to potentially
10 extend and/or expand the program based on initial results of pilot.³⁴

11 **Q. Has PSE also addressed the structural design elements raised by WUTC**
12 **Staff?**

13 A. Yes. As already discussed above, an intent of this pilot is to provide a meaningful,
14 cost-based price signal to participating customers that primarily focuses on “how
15 much” and “where” energy is used. PSE has also explained the cost-based
16 approach to calculating its aggregated demand charges.³⁵ Furthermore, as
17 supported by the response testimony from Kroger and FEA, the pilots appear
18 feasible from the customers’ standpoint and, as currently structured, PSE believes

³² *Id.*

³³ PSE further references the testimony in this case by Kroger and FEA in support of these pilots, both of which prefer PSE rates to be more reflective of cost causation. See for example: Higgins, Exh. KCH-1T at 14:20-16:18 and Al-Jabir, Exh. AZA-1T at 28:14-29:14.

³⁴ Piliaris, Exh. JAP-1T at 38:9-13.

³⁵ *Id.* at 35:7-36:8.

1 it can feasibly meter, bill and account for the aggregated demand charge under its
2 proposal.

3 **Q. How does PSE address the administrative design elements raised by WUTC**
4 **Staff?**

5 A. PSE has already addressed the reporting expectations in its prefiled direct
6 testimony.³⁶ However, it is open to more frequent reporting, if desired by the
7 Commission. PSE also intends to engage directly with participating customers
8 through its business services group. These customers are generally more
9 sophisticated and require less programmatic engagement and communications.
10 Rather, participating customers are expected to require an engagement and
11 communications approach that is tailored to their unique situation, whatever that
12 may be. Finally, WUTC Staff's requirement that pricing pilots have "internal
13 validity" is not well suited to this particular pilot, as every participating customer
14 is likely to have a unique set of circumstances that makes it less likely that one
15 could conduct a "statistical extrapolation" of results to some larger population of
16 customers.³⁷

17 **Q. How does PSE respond to the application of WUTC Staff's evaluation**
18 **elements to the Demand Aggregation pilot?**

19 A. As mentioned earlier, many of WUTC Staff's proposed evaluation elements
20 appear to be geared more towards residential pricing pilots and have limited to no

³⁶ Piliaris, Exh. JAP-1T at 38:9-13.

³⁷ PSE believes that this particular design element may have been intended for customer groups with larger populations, like residential and small commercial.

1 application for the commercially-focused Demand Aggregation pilots. Also, as
2 mentioned earlier, while a helpful illustration of evaluation elements, PSE
3 recommends a less prescriptive evaluation framework. That being said, PSE
4 believes a number of the elements proposed by WUTC Staff could be added to the
5 list of criteria previously mentioned in PSE's prefiled direct testimony.³⁸ These
6 elements could include a discussion of the customer communication and
7 education conducted, a review of the costs and benefits, and the analytical
8 approach to conduct the evaluation. PSE would welcome further guidance from
9 the Commission.

10 **Q. How do you respond to Kroger's proposal to expand the pilot to allow for up**
11 **to 10 locations and 5 MW per customer, up to an overall maximum of 100**
12 **locations?**

13 A. While PSE is not opposed to an expansion of the pilot, it is reluctant to go beyond
14 the scale proposed in its prefiled testimony without some compensation for the
15 lost revenues that would result from such an expansion. At this time, PSE does
16 not believe the effort required to track this lost revenue is worth the added effort
17 and complexity that would be added to the pilot. While PSE appreciates Kroger's
18 enthusiasm for the pilot, it believes a measured roll out of this pilot is more
19 reasonable at this early stage.³⁹

³⁸ Piliaris, Exh. JAP-1T at 38:14-23.

³⁹ PSE notes that it is less concerned with the lack of limitations for transportation electrification, since the rate schedule limitations (i.e., limiting participation to customers taking service under Schedules 26 and 31) already limit the pool of eligible customers to a manageable level.

1 **Q. How does PSE respond to FEA’s suggestion to open up this pilot at some**
2 **later time to customers served under Schedule 49?**

3 A. PSE is open to such a possibility if and when it appears appropriate to do so,
4 specifically once the pilot appears to be producing the outcomes anticipated (i.e.,
5 demand charge reductions) and hoped for (i.e., load shifting in response to the
6 aggregated demand pricing) and PSE is reasonably comfortable that it can
7 reasonably manage the administration of this pilot.

8 **VI. PSE AGREES THAT THE TIME IS RIGHT FOR TIME-**
9 **BASED RATE PILOTS**

10 **Q. Please summarize WUTC Staff’s proposals related to time-based rate pilots.**

11 A. WUTC Staff proposes that the Commission require PSE to prepare pricing pilots
12 for both an electric TOU rate and an electric CPP rate. It also recommends that
13 the Commission direct PSE to engage with local resources, such as PNNL, to
14 evaluate the potential for a RTP pilot.⁴⁰ WUTC Staff goes even further in its
15 support of these pricing pilots in recommending the Commission entertain future
16 deferred accounting petitions for costs associated with setting up and
17 administering these programs.⁴¹

18 **Q. How do you respond to these proposals?**

19 A. PSE agrees that the time is right to begin exploring time-based rate options for its
20 customers. Being a few years into a multi-year roll out of its AMI investments,

⁴⁰ Ball, Exh. JLB-1T at 62:1-62:6.

⁴¹ *Id.* at 67:5-11.

1 beginning soon will allow PSE and the Commission to be prepared to adopt more
2 full (and hopefully permanent) programs shortly after the AMI roll out is
3 complete.

4 **Q. Does this mean that you agree with all of WUTC Staff's proposal regarding**
5 **time-based rate pilots?**

6 A. Not necessarily. Clearly, TOU rates are an easier place to start. However, PSE is
7 somewhat concerned with, but not outright opposed to, the prospect of CPP. This
8 concern stems both from its relatively punitive pricing approach, where customers
9 face price spikes for which they are expected to respond, as well as what is likely
10 to be a more limited application. In contrast, peak time rebates ("PTR"), where
11 the customer is rewarded for reductions in load relative to a baseline appears on
12 its face more customer friendly, albeit with similar limitations in applicability.
13 PSE is less optimistic about the prospects for real-time pricing, at least until there
14 is a wholesale market for electricity in the region where such pricing is
15 transparently available.

16 **Q. Do you have any other thoughts on WUTC Staff's recommendation for**
17 **pricing pilots?**

18 A. Yes. While it is one thing to recommend that the Commission direct PSE to
19 conduct such pilots, it is another to provide the level of specificity in program
20 details and evaluation criteria the WUTC Staff expects to launch such programs.
21 Unfortunately, WUTC Staff has provided little guidance on what it would
22 specifically expect to see related to these pilots. Instead, it recommends the

1 Commission give direct guidance to PSE so that it can immediately begin
2 developing and offering pricing pilots.⁴² If the Commission deems it necessary to
3 direct PSE to conduct the pilots recommended by WUTC Staff, PSE would also
4 request whatever guidance the Commission deemed appropriate to align
5 expectations before PSE expends the time, effort and resources required to launch
6 these pilots. Otherwise, PSE would appreciate the Commission's consideration in
7 affording it the flexibility to develop such pilots at the time and in the manner it
8 deems most appropriate.

9 **VII. BROADER DISCUSSION IS APPROPRIATE BEFORE**
10 **RECOMMENDING CHANGES TO PSE'S GAS LINE EXTENSION**
11 **MARGIN ALLOWANCE CALCULATIONS**

12 **Q. Please describe NWEC's proposals related to gas line extension margin**
13 **allowances.**

14 A. NWEC proposes that the Commission order PSE to revert back to its previous
15 methodology for calculating its gas line extension margin allowance, or
16 something similar, and that the Commission re-open Docket UG-143616 or open
17 a new collaborative docket to revisit the need for policies to push the expansion of
18 natural gas usage.⁴³

⁴² *Id.* at 68:17-22.

⁴³ Wheelless, Exh. AEW-1T at 20:10-21:5.

1 **Q. What are the primary concerns behind NWEC’s proposal?**

2 A. NWEC’s concerns appear to be generally related to the expansion of natural gas
3 use⁴⁴ and more specifically about the increase in allowances that resulted from the
4 perpetual net present value (“PNPV”) methodology.⁴⁵ NWEC’s proposal to re-
5 open Docket UG-143616 appears to address the former concern and its proposal
6 to revert back to PSE’s previous line extension allowance methodology appears to
7 address the latter concern.

8 **Q. Is an expansion of natural gas use consistent with current state policy?**

9 A. Yes. This is embodied in RCW 43.21F.088(1)(d), which reads that it is the current
10 state policy to:

11 Reduce dependence on fossil fuel energy sources through
12 improved efficiency and development of cleaner energy sources,
13 such as bioenergy, low-carbon energy sources, *and natural gas*,
14 and leveraging the indigenous resources of the state for the
15 production of clean energy.

16 (emphasis added)

17 **Q. Does PSE support NWEC’s proposals?**

18 A. Not entirely. NWEC appears to suggest through its proposal to re-open Docket
19 UG-143615 that this is an issue that should apply to more than just PSE.⁴⁶ As
20 such, it would be more appropriate to have that discussion, assuming the
21 Commission agreed that revisiting that discussion were appropriate and timely,

⁴⁴ Wheelless, Exh. AEW-1T at 15:14-19:2.

⁴⁵ *Id.* at 10:16-11:17.

⁴⁶ Indeed, NWEC noted that it has made a similar proposal in Avista’s general rate case in Docket UG-190335.

1 before making any changes to the methodology for calculating PSE's existing gas
2 line extension margin allowance. PSE's existing methodology, approved in
3 Docket UG-161268, was well vetted, followed the approval of similar
4 methodologies by the state's other regulated natural gas service providers,⁴⁷ and
5 was a significant modification from the previous approach. Going back to an
6 earlier approach only three years after making such a significant change without a
7 more thoughtful and inclusive discussion is unwarranted.

8 **Q. Are there ways to address NWECE's concern about the magnitude of PSE's**
9 **line extension margin allowance other than reverting to its previous**
10 **methodology?**

11 A. Yes. If the Commission were persuaded by NWECE's concerns that the existing
12 methodology produces margin allowances that were too high, a simpler approach
13 would be to introduce a policy-driven adjustment that reduces the resulting
14 margin allowance to a more acceptable level. One way to accomplish this would
15 be to simply change the formula to reflect a shorter period of time than assumed
16 in the PNPV methodology. The shorter time period would result in a lower
17 margin allowance.

18 **Q. Does PSE have a recommendation for that policy-driven adjustment?**

19 A. No. As noted earlier, PSE believes that a broader discussion should occur before
20 making changes to its existing line extension allowance methodology.

⁴⁷ Dockets UG-152392 and UG-160967.

1 **VIII. PSE WILL NOT OPPOSE NVEC'S PROPOSED TARIFFED**
2 **ON-BILL REPAYMENT PROPOSAL**

3 **Q. Please describe NVEC's tariffed on-bill repayment proposal.**

4 A. NVEC proposes that PSE implement a tariffed on-bill repayment program where
5 customers may finance improvements to their property through the utility related
6 to their electric or natural gas service. This program is intended to overcome
7 potential barriers to the upfront costs of energy efficiency or distributed
8 renewable generation projects by allowing these customer to pay back these
9 investments over a period of time directly on their utility bills. The recovery of
10 the investments would be assigned to the premise so that, in the event the
11 customer originally making the investment moves, the new occupant would
12 assume the remaining repayment obligation.⁴⁸

13 **Q. Do you have any general concerns about NVEC's on-bill repayment**
14 **proposal?**

15 Yes. The program outlined would not be a good use of customer funds because of
16 high implementation costs, expected low participation rates, and better financing
17 options already available to most customers. An on-bill repayment program will
18 not provide enough new projects to justify the significant costs to provide it and
19 not provide significant energy savings that would otherwise not be captured.

⁴⁸ Gerlitz, Exh. WMG-1T at 13:15-20:17.

1 **Q. Please explain why you believe that this proposal would not be a good use of**
2 **customer funds?**

3 I do not believe that this proposal would be a good use of customer funds because
4 the cost will outweigh the benefits. The estimated costs to add on-bill repayment
5 capability on PSE's billing system could range from \$750,000 to \$1.5 million. In
6 addition, there would be significant administrative costs that include setting up the
7 third-party financing, on-going labor costs to operate the program, and marketing
8 costs to educate customers and potential new customers of the on-going
9 repayment obligation.

10 The potential benefits offsetting these costs are expected to be far smaller
11 primarily because customer participation is expected to be limited.

12 Also, customer participation is projected to be low because PSE's financing
13 option would not be competitive with the many options already available in the
14 market.

15 **Q. Why do you believe customer participation under this proposal would be so**
16 **low?**

17 A. Similar programs have shown a limited number of customers participating. In
18 Attachment A to NWECC's Response to Staff Data Request No. 2, provided as
19 Exh. JAP-20 to this testimony, the chart clearly shows that a limited number of
20 customers are utilizing these services. For example, Eversource, which is the
21 utility nearest in size to PSE in terms of customers, has only had 269 projects
22 completed since the inception of its program in 2002. This is less than 20 projects

1 per year. Recovering the initiation, administrative and operating costs in addition
2 to the financing costs from such a limited number of participating customers will
3 make this option not competitive in the market, and further limit customer
4 participation.

5 **Q. Do you believe that there could be a net reduction in a customer's bill with**
6 **the repayment being offset by the reduced energy use and cost?**

7 Because of this region's relatively low energy rates, there are a very limited
8 number of unique applications in which energy efficiency and distributed energy
9 projects can provide a positive cash flow over a reasonable payback period on the
10 utility bill savings alone.

11 It is also important to note that PSE's energy efficiency program incentives do not
12 typically cover the full cost of high cost items such as heat pumps, furnaces, hot
13 water heaters, etc. Because of cost-effectiveness limits, residential customers only
14 receive incentives to install higher efficiency models than required by code or
15 standards when customers are replacing failed equipment.

16 **Q. Do you agree with NWECA that new homeowners and renters will accept the**
17 **repayment obligation?**

18 A. New homeowners will much prefer that all equipment costs be included in the
19 sale price and mortgage. Similarly, potential renters will consider the total cost of
20 renting that includes this repayment obligation. Making these properties less
21 competitive in the market will greatly reduce potential participation. This may
22 help to explain why participation has been so low in other programs.

1 **Q. Given all of PSE's concerns about NWEC's on-billed repayment proposal,**
2 **will it oppose this proposal in concept?**

3 A. No. However, PSE will remain neutral on NWEC's proposal. PSE has significant
4 incentives to acquire all the cost-effective energy savings possible and has a long
5 and successful history of implementing innovative programs and services to drive
6 participation and exceed energy savings targets. While PSE believes that an on-
7 bill repayment program would take significant resources and provide only a small
8 amount of energy savings that may not otherwise be captured, a financing
9 program that is thoughtfully designed in conjunction with contractors and the
10 financing community and that does not encumber a property owner may serve
11 customers that may not otherwise be able to participate.

12 **Q. What do you recommend that the Commission do with NWEC's on-bill**
13 **repayment proposal?**

14 A. Assuming the Commission is supportive of NWEC's proposal, I recommend that
15 the Commission direct PSE to work with its Conservation Resources Advisory
16 Group ("CRAG") to develop an on-bill repayment service for conservation and,
17 with the CRAG and other interested stakeholders, for other investments. The
18 Commission could further direct PSE to file for approval of these services within
19 one year of the conclusion of this case.

IX. CONCLUSION

1

2

Q. Does this conclude your prefiled rebuttal testimony?

3

A. Yes, it does.