BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

Docket No. UE-220066
Docket No. UG-220067

PREFILED RESPONSE TESTIMONY OF
JUSTIN BIEBER
ON BEHALF OF THE KROGER CO.

July 28, 2022
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RESPONSE TESTIMONY OF JUSTIN BIEBER

I. INTRODUCTION

Q. Please state your name and business address.
A. My name is Justin Bieber. My business address is 111 E Broadway, Suite 1200, Salt Lake City, Utah, 84111.

Q. By whom are you employed and in what capacity?
A. I am an Associate Principal for Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying?
A. My testimony is being sponsored by The Kroger Co. (“Kroger”) on behalf of its Fred Meyer Stores and Quality Food Centers divisions. Kroger is one of the largest retail grocers in the United States and operates approximately 50 facilities that are served by Puget Sound Energy (“PSE”). These facilities purchase approximately 130 million kWh annually from PSE, and are primarily served on Electric Rate Schedules 25, 26, and 31.

Q. Please describe your professional experience and qualifications.
A. My academic background is in business and engineering. I earned a Bachelor of Science in Mechanical Engineering from Duke University in 2006 and a Master of Business Administration from the University of Southern California in 2012. I am also a registered Professional Civil Engineer in the state of California.
I joined Energy Strategies in 2017, where I provide regulatory and technical support on a variety of energy issues, including regulatory services, transmission and renewable development, and financial and economic analyses. I have also filed and supported the development of testimony before various state utility regulatory commissions.

Prior to joining Energy Strategies, I held positions at Pacific Gas and Electric Company as Manager of Transmission Project Development, ISO Relations and FERC Policy Principal, and Supervisor of Electric Generator Interconnections. During my career at Pacific Gas and Electric Company, I supported multiple facets of utility operations, and led efforts in policy, regulatory, and strategic initiatives. Prior to my work at Pacific Gas & Electric, I was a project manager and engineer for heavy construction bridge and highway projects.

Q. Have you testified previously before this Commission?
A. No, this is my first opportunity to testify before this Commission.

Q. Have you filed testimony previously before any other state utility regulatory commissions?
A. Yes. I have testified in regulatory proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Colorado, Indiana, Kentucky, Michigan, Montana, Nevada, New Mexico, North Carolina, Ohio, Oregon, Utah, Virginia, and Wisconsin.
II. RECOMMENDATIONS

Q. What is the purpose of your testimony?

A. My testimony addresses PSE’s proposed rate design for Schedules 141C, 141N, and 141R. I also address the Company’s Conjunctive Demand Service Option pilot program. Absence of comment on my part regarding a particular issue does not signify support (or opposition) toward PSE’s filing with respect to the non-discussed issue.

Q. Please summarize your conclusions and recommendations.

PSE’s proposed rate design for Schedules 141C, 141N, and 141R would recover the entire revenue requirement for these riders through an energy based $/kWh charge. This rate design would not be aligned with cost causation because these riders are intended to recover both demand and energy related costs. I recommend that the rider rate design applicable customers taking service on Schedules 25, 26, and 31 be modified to include an energy and demand rate component. This will improve the alignment between the rider rate design and the underlying cost of service and provide more efficient price signals to customers.

I strongly support the Company’s current Conjunctive Demand Service Option pilot program and recommend that it be expanded. It is a well-designed program that places a customer with multiple locations on an equal footing with single-site customers, by charging participating multi-site customers for the amount of generation and transmission services that they actually use, thereby promoting equitable treatment of these customers. Specifically, I recommend that
the Commission approve an expansion of the current Conjunctive Demand Service Option pilot program to increase the account limit from 5 accounts to 15 accounts per customer, increase the customer’s participating load limit from 2 MW to 6 MW of winter demand, and increase the total retail load served under this program from 20 average megawatts to 40 average megawatts. I also recommend that the sunset provision be eliminated, and that PSE should include a proposal in its next general rate case to make this program permanent.

III. SCHEDULE 141C, 141N, 141R RATE DESIGN

Q. Please explain PSE’s proposal to implement multiyear rate plan riders in this docket?

A. PSE witness Birud Jhaveri explains that PSE is proposing to remove costs associated with Colstrip from base rates and to recover those costs through a separate tracking and true-up mechanism in Schedule 141C (Colstrip Adjustment).1 Additionally, PSE witness Susan Free explains that in concert with base rates, PSE is proposing two new rate schedules, Schedule 141N (Rates not Subject to Refund) and Schedule 141R (Rates Subject to Refund), to recover rates that are subject to and not subject to refund. Rates associated with the recovery of depreciation and rate base for utility plant estimated to close or retire after 2021 are included in Schedule 141R. Schedule 141N includes the rates associated with the recovery of costs not subject to refund, which includes all other costs not included in schedule 141R.2

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1 Prefiled Direct Testimony of Birud D. Jhaveri, p. 3.
2 Prefiled Direct Testimony of Susan E. Free, pp. 46-47.
According to Mr. Jhaveri, Schedule 141C is designed to recover costs in 2023, while Schedules 141N and 141R are designed to recover costs throughout the multiyear rate plan in 2023, 2024, and 2025.³

Q. Please explain PSE’s proposed rate design for Schedule 141C.

A. According to Mr. Jhaveri, PSE used the renewable peak credit methodology to allocate the revenue requirement for schedule 141C. PSE developed the energy charges for schedule 141C on a $/kWh basis using the forecasted load for all customer rate schedules.⁴

Q. Please explain PSE’s proposed rate design for Schedules 141N and 141R.

A. Mr. Jhaveri explains that the rate base costs from the electric cost of service study by rate class were used to allocate the multiyear rate plan revenue requirement for Schedules 141N and 141R. He also explains that PSE's revenue requirement for schedule 141N was adjusted for base rate revenue changes caused by changes in the forecast billing determinants between the rate plan periods. PSE developed the energy charges for schedules 141N and 141R on $/kWh basis using the forecasted load for all customer rate schedules.

Q. What is your assessment of PSE’s proposed rate design for Schedules 141C, 141N, and 141R.

A. PSE’s proposal to recover the entire revenue requirement for Schedules 141C, 141N, and 141R through energy based $/kWh charges is not aligned with the underlying cost causation. A very significant portion of these costs are fixed demand-related costs, yet PSE’s proposed rate design would recover all of the

³ Prefiled Direct Testimony of Birud D. Jhaveri, p. 3.
⁴ Id. pp. 33-34.
costs from these rider rate schedules on a volumetric basis through energy $/kWh charges for all customer classes.

Q. From a customer’s perspective, why should it matter if PSE proposes to recover all demand-related costs in Schedules 141C, 141N, and 141R through energy $/kWh charges?

A. If a utility proposes a demand charge that is below the cost of demand, or zero in the case for these rate riders, it must seek to recover its class revenue requirement by over-recovering its costs in another area, most typically through levying an energy charge that is above unit energy costs. When demand charges are set below cost, and energy charges are set above cost, those customers with relatively higher load factors are required to subsidize the lower load factor customers within the customer class.

Q. How do you define higher load factor customers?

A. For purposes of this discussion, I use this term to refer to customers whose load factors are greater than the average for the rate schedule.

Q. Why is it important for rate design to be representative of underlying cost causation?

A. Aligning rate design with underlying cost causation improves efficiency because it sends proper price signals. For example, setting a demand charge below the cost of demand understates the economic cost of demand-related assets, which in turn distorts consumption decisions, and calls forth a greater level of investment in fixed assets than is economically desirable.
At the same time, aligning rate design with cost causation is important for ensuring equity among customers, because properly aligning rate design with costs minimizes cross-subsidies among customers. As I stated above, if demand costs are understated in utility rates, the costs are made up elsewhere — typically in energy rates. When this happens, higher-load-factor customers (who use fixed assets relatively efficiently through relatively constant energy usage) are forced to pay the demand-related costs of lower-load-factor customers. This amounts to a cross-subsidy that is fundamentally inequitable.

Q. Does the Company recognize the importance of aligning rate design with the underlying costs?

A. Yes. According to Mr. Jhaveri, rates should provide for recovery of the Company's total revenue requirement, provide revenue stability and predictability to the utility and its customers, *reflect the cost of providing service, be fair, send proper price signals*, and be simple and understandable [emphasis added].

Q. What rate design do you recommend for Schedule 141C applicable to customers on base rate Schedules 26 and 31?

A. I recommend that the rider rate design applicable to customers taking service on base rate Schedules 26 and 31 be modified to include an energy and demand rate component that is aligned with the underlying cost of service. As I explained above, PSE proposes to use the renewable peak credit methodology to allocate the revenue requirement for schedule 141C. As a result, PSE classified and allocated 20% of the costs on the basis of class energy usage and 80% of the

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5 *Id.* p. 26.
costs on the basis of the class 12-coincident peak demand.\(^6\) Therefore, I recommend that the rate design for Schedule 141C, as applicable to customer classes 26 and 31, should recover 20% of the Schedule 141C revenue requirement through energy $/kWh charges and the remaining 80% of the costs should be recovered through demand $/kW charges.

Specifically, my recommended rate design sets the energy $/kWh charge at a level that will recover the 20% of Schedule 141C costs that PSE classified as energy related. The summer and winter $/kW demand charges are set at a level that will recover the 80% of Schedule 141C costs that PSE classified as demand-related while also maintaining the same proportional rate design relationship between these two summer and winter rate components that is contained in PSE’s proposed base rate design. My recommended rate design modifications are revenue-neutral to the Company.

Q. What rate design do you recommend for Schedule 141C applicable to customers on base rate Schedule 25?

A. The base rate design for customers on Schedule 25 secondary includes an energy charge applicable to the first 20,000 kWh of winter usage, an energy charge applicable to the first 20,000 kWh of summer usage, an energy charge applicable to all additional kWh, and summer and winter $/kW demand charges that only apply to demands above 50 kW. The energy charges for usage below 20,000 kWh are both higher than the base energy charge that is applicable to monthly usage above 20,000 kWh. This premium, or difference, between the energy charge applicable to the first 20,000 kWh of usage and the base energy charge is

\(^6\) Id. Exhibit BDJ-5, Exhibit No. BDJ-141C.
charge applicable to all additional kWh effectively recovers demand-related costs associated with customer demands below 50 kW. The summer and winter $/kW demand charges that apply to customer demands greater than 50 kW also recover demand-related costs, however, customers whose monthly peak demands never exceed 50 kW do not pay these $/kW demand charges.

In order to be consistent with the PSE’s existing base rate design structure for this customer class, I recommend that the Schedule 141C rider rate design include energy $/kWh charges and demand $/kW charges that are each set at an equal percentage of the corresponding base rate component. This rate design will not result in 100% alignment with PSE’s proposed classification of energy and demand costs to be recovered through rider 141C as I have proposed above. However, it does improve the alignment by incorporating some demand-related revenue recovery without distorting the existing Schedule 25 rate design relationships or shielding customers with demands less than 50 kW from paying for a reasonable level of demand-related cost. Similarly, these recommended rate design modifications are revenue-neutral to the Company.

Q. Please summarize your recommended rates for Schedule 141C applicable to customers on base rate Schedules 25, 26, and 31 at PSE’s proposed revenue requirements?

A. The revenue verification for my proposed rate design is presented in Exhibit JB-2 and my recommended rates are summarized in Table JB-1 below.
Table JB-1

Kroger Proposed 141C Rate Design
Applicable to Customers on Base Rate Schedules 25, 26, and 31
at PSE’s Proposed Revenue Requirement

<table>
<thead>
<tr>
<th>Tariff</th>
<th>PSE Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base Rate ($) (a)</td>
</tr>
<tr>
<td>25 Energy Charges</td>
<td></td>
</tr>
<tr>
<td>25 First 20,000 kWh (Oct to Mar)</td>
<td>0.092070</td>
</tr>
<tr>
<td>25 First 20,000 kWh (Apr to Sep)</td>
<td>0.082978</td>
</tr>
<tr>
<td>25 All additional kWh</td>
<td>0.065630</td>
</tr>
<tr>
<td>25 Demand Charges</td>
<td></td>
</tr>
<tr>
<td>25 Winter Demand over 50 kW</td>
<td>10.12</td>
</tr>
<tr>
<td>25 Summer Demand over 50 kW</td>
<td>6.75</td>
</tr>
<tr>
<td>26 Energy Charge (All kWh)</td>
<td>0.058595</td>
</tr>
<tr>
<td>26 Demand Charges</td>
<td></td>
</tr>
<tr>
<td>26 Winter Demand (Oct to Mar)</td>
<td>12.23</td>
</tr>
<tr>
<td>26 Summer Demand (Apr to Sep)</td>
<td>8.15</td>
</tr>
<tr>
<td>31 Energy Charge (All kWh)</td>
<td>0.056836</td>
</tr>
<tr>
<td>31 Demand Charges</td>
<td></td>
</tr>
<tr>
<td>31 Winter Demand (Oct to Mar)</td>
<td>11.94</td>
</tr>
<tr>
<td>31 Summer Demand (Apr to Sep)</td>
<td>7.96</td>
</tr>
</tbody>
</table>
Q. What rate design do you recommend for Schedule 141N and 141R applicable
to customers on base rate Schedules 25, 26, and 31?

A. As I explained above, the rate base costs from the electric cost of service
study by rate class were used to allocate the multiyear rate plan revenue
requirement for Schedules 141N and 141R. The nature of the costs proposed to
be recovered through these riders is similar to the costs that are recovered through
base rates. Therefore, it is appropriate to utilize a rate design for Schedules 141N
and 141R that is consistent with the base rate design. I recommend that the rate
design for Schedule 141N and 141R should include energy $/kWh charges and
demand $/kW charges that are each set at an equal percentage of the
corresponding base rate component. This rate design for Schedules 141N and
141R will maintain the existing rate design relationships contained in PSE’s
proposed base rates in this docket. And similar to my recommendations described
above, these recommended rate design modifications are revenue-neutral to the
Company.

Q. Please summarize your recommended rates for Schedule 141N and 141R
applicable to customers on base rate Schedules 25, 26, and 31 at PSE’s
proposed revenue requirements?

A. The revenue verification for my proposed rate design is presented in
Exhibit JB-2. The proposed rates are summarized in Tables JB-2 through JB-4
below.
Table JB-2

Kroger Proposed 141N and 141R Rate Design
at PSE’s Proposed Revenue Requirement - 2023
Applicable to Customers on Base Rate Schedules
25 and 26 Secondary and 31 Primary

<table>
<thead>
<tr>
<th>Tariff</th>
<th>Base Rate</th>
<th>Sch 141N</th>
<th>Sch 141N</th>
<th>Sch 141R</th>
<th>Sch 141R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($)</td>
<td>($)</td>
<td>% of Base Rate</td>
<td>($)</td>
<td>% of Base Rate</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>(c) = (b) / (a)</td>
<td></td>
<td>(e) = (d) / (a)</td>
</tr>
<tr>
<td>Energy Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>First 20,000 kWh (Oct to Mar)</td>
<td>0.092070</td>
<td>0.010640</td>
<td>11.56%</td>
<td>0.004525</td>
</tr>
<tr>
<td>25</td>
<td>First 20,000 kWh (Apr to Sep)</td>
<td>0.082978</td>
<td>0.009590</td>
<td>11.56%</td>
<td>0.004078</td>
</tr>
<tr>
<td>25</td>
<td>All additional kWh</td>
<td>0.065630</td>
<td>0.007585</td>
<td>11.56%</td>
<td>0.003225</td>
</tr>
<tr>
<td>Demand Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Winter Demand over 50 kW</td>
<td>10.12</td>
<td>1.17</td>
<td>11.56%</td>
<td>0.50</td>
</tr>
<tr>
<td>25</td>
<td>Summer Demand over 50 kW</td>
<td>6.75</td>
<td>0.78</td>
<td>11.56%</td>
<td>0.33</td>
</tr>
<tr>
<td>Energy Charge (All kWh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Demand Charges</td>
<td>0.058595</td>
<td>0.006424</td>
<td>10.96%</td>
<td>0.002732</td>
</tr>
<tr>
<td>26</td>
<td>Winter Demand (Oct to Mar)</td>
<td>12.23</td>
<td>1.34</td>
<td>10.96%</td>
<td>0.57</td>
</tr>
<tr>
<td>26</td>
<td>Summer Demand (Apr to Sep)</td>
<td>8.15</td>
<td>0.89</td>
<td>10.96%</td>
<td>0.38</td>
</tr>
<tr>
<td>Energy Charge (All kWh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Demand Charges</td>
<td>0.056836</td>
<td>0.006307</td>
<td>11.10%</td>
<td>0.002682</td>
</tr>
<tr>
<td>31</td>
<td>Winter Demand (Oct to Mar)</td>
<td>11.94</td>
<td>1.32</td>
<td>11.10%</td>
<td>0.56</td>
</tr>
<tr>
<td>31</td>
<td>Summer Demand (Apr to Sep)</td>
<td>7.96</td>
<td>0.88</td>
<td>11.10%</td>
<td>0.38</td>
</tr>
</tbody>
</table>
Table JB-3
Kroger Proposed 141N and 141R Rate Design
at PSE’s Proposed Revenue Requirement - 2024
Applicable to Customers on Base Rate Schedules
25 and 26 Secondary and 31 Primary

<table>
<thead>
<tr>
<th>Tariff</th>
<th>PSE Proposed Base Rate</th>
<th>Sch 141N ($)</th>
<th>% of Base Rate (c) = (b) / (a)</th>
<th>Sch 141N Rate ($)</th>
<th>% of Base Rate (d) = (d) / (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25  Energy Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25  First 20,000 kWh (Oct to Mar)</td>
<td>0.092070</td>
<td>0.008083</td>
<td>8.78%</td>
<td>0.009640</td>
<td>10.47%</td>
</tr>
<tr>
<td>25  First 20,000 kWh (Apr to Sep)</td>
<td>0.082978</td>
<td>0.007284</td>
<td>8.78%</td>
<td>0.008688</td>
<td>10.47%</td>
</tr>
<tr>
<td>25  All additional kWh</td>
<td>0.065630</td>
<td>0.005761</td>
<td>8.78%</td>
<td>0.006872</td>
<td>10.47%</td>
</tr>
<tr>
<td>25  Demand Charges</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25  Winter Demand over 50 kW</td>
<td>10.12</td>
<td>0.89</td>
<td>8.78%</td>
<td>1.06</td>
<td>10.47%</td>
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<tr>
<td>25  Summer Demand over 50 kW</td>
<td>6.75</td>
<td>0.59</td>
<td>8.78%</td>
<td>0.71</td>
<td>10.47%</td>
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<tr>
<td>26  Energy Charge (All kWh)</td>
<td>0.058595</td>
<td>0.004896</td>
<td>8.36%</td>
<td>0.005839</td>
<td>9.97%</td>
</tr>
<tr>
<td>26  Demand Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26  Winter Demand (Oct to Mar)</td>
<td>12.23</td>
<td>1.02</td>
<td>8.36%</td>
<td>1.22</td>
<td>9.97%</td>
</tr>
<tr>
<td>26  Summer Demand (Apr to Sep)</td>
<td>8.15</td>
<td>0.68</td>
<td>8.36%</td>
<td>0.81</td>
<td>9.97%</td>
</tr>
<tr>
<td>31  Energy Charge (All kWh)</td>
<td>0.056836</td>
<td>0.004851</td>
<td>8.53%</td>
<td>0.005785</td>
<td>10.18%</td>
</tr>
<tr>
<td>31  Demand Charges</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>31  Winter Demand (Oct to Mar)</td>
<td>11.94</td>
<td>1.02</td>
<td>8.53%</td>
<td>1.22</td>
<td>10.18%</td>
</tr>
<tr>
<td>31  Summer Demand (Apr to Sep)</td>
<td>7.96</td>
<td>0.68</td>
<td>8.53%</td>
<td>0.81</td>
<td>10.18%</td>
</tr>
</tbody>
</table>

Response Testimony of Justin Bieber Kroger Exhibit No. (JB-1T) Page 13 of 17
Table JB-4
Kroger Proposed 141N and 141R Rate Design
at PSE’s Proposed Revenue Requirement - 2025
Applicable to Customers on Base Rate Schedules
25 and 26 Secondary and 31 Primary

<table>
<thead>
<tr>
<th>Tariff</th>
<th>PSE Proposed Base Rate</th>
<th>Sch 141N ($)</th>
<th>Sch 141N % of Base Rate</th>
<th>Sch 141R Rate ($)</th>
<th>Sch 141R % of Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($) (a)</td>
<td>($) (b)</td>
<td>(c) = (b) / (a)</td>
<td>($) (d)</td>
<td>(e) = (d) / (a)</td>
</tr>
<tr>
<td>25 Energy Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First 20,000 kWh (Oct to Mar)</td>
<td>0.092070</td>
<td>0.003523</td>
<td>3.83%</td>
<td>0.014643</td>
<td>15.90%</td>
</tr>
<tr>
<td>First 20,000 kWh (Apr to Sep)</td>
<td>0.082978</td>
<td>0.003175</td>
<td>3.83%</td>
<td>0.013197</td>
<td>15.90%</td>
</tr>
<tr>
<td>All additional kWh</td>
<td>0.065630</td>
<td>0.002511</td>
<td>3.83%</td>
<td>0.010438</td>
<td>15.90%</td>
</tr>
<tr>
<td>Demand Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Demand over 50 kW</td>
<td>10.12</td>
<td>0.39</td>
<td>3.83%</td>
<td>1.61</td>
<td>15.90%</td>
</tr>
<tr>
<td>Summer Demand over 50 kW</td>
<td>6.75</td>
<td>0.26</td>
<td>3.83%</td>
<td>1.07</td>
<td>15.90%</td>
</tr>
<tr>
<td>26 Energy Charge (All kWh)</td>
<td>0.058595</td>
<td>0.002130</td>
<td>3.63%</td>
<td>0.008852</td>
<td>15.11%</td>
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<tr>
<td>Demand Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Demand (Oct to Mar)</td>
<td>12.23</td>
<td>0.44</td>
<td>3.63%</td>
<td>1.85</td>
<td>15.11%</td>
</tr>
<tr>
<td>Summer Demand (Apr to Sep)</td>
<td>8.15</td>
<td>0.30</td>
<td>3.63%</td>
<td>1.23</td>
<td>15.11%</td>
</tr>
<tr>
<td>31 Energy Charge (All kWh)</td>
<td>0.056836</td>
<td>0.002131</td>
<td>3.75%</td>
<td>0.008860</td>
<td>15.59%</td>
</tr>
<tr>
<td>Demand Charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Demand (Oct to Mar)</td>
<td>11.94</td>
<td>0.45</td>
<td>3.75%</td>
<td>1.86</td>
<td>15.59%</td>
</tr>
<tr>
<td>Summer Demand (Apr to Sep)</td>
<td>7.96</td>
<td>0.30</td>
<td>3.75%</td>
<td>1.24</td>
<td>15.59%</td>
</tr>
</tbody>
</table>

Q. Have you prepared a rate impact analysis that incorporates your recommended changes to the Schedule 141C, 141N, and 141R rate designs?

A. Yes. My rate impact analysis is presented in Exhibit JB-3 and illustrates the total bill impacts to customers that would result from my recommended rate design modifications at the Company’s proposed revenue requirement. As can be seen in Exhibit JB-3, the variance between the monthly bill impacts for customers with different load profiles is roughly the same magnitude as would result from PSE’s proposed rate designs. However, where PSE’s proposed rider rate designs would have resulted in slightly lower rate impacts for customers with lower load factors, my recommended rate design would result in slightly lower rate impacts.
for customers with higher load factors. This is a reasonable result that better reflects the actual cost of service to serve customers on base rate Schedules 25, 26, and 31.

Q. Your proposed rate design was calculated using PSE’s proposed revenue requirement. How should your proposed rate design be implemented if the Commission adopts different rider revenue requirements?

A. To the extent that the Commission approves different revenue targets for riders 141C, 141N, and 141R, I recommend that each rate element in my proposed rate designs contained in Exhibit JB-2 be reduced by an equal percentage in order to recover the approved revenue requirement. Adjusting the rate design in this manner will maintain the approximate rate design relationships contained in my recommended rate designs.

IV. CONJUNCTIVE DEMAND SERVICE OPTION PILOT

Q. Please describe PSE’s Conjunctive Demand Service Option.

A. PSE’s Conjunctive Demand Service Option is a pilot program that allows eligible customers with multiple service locations to aggregate their demands for purposes of power and transmission billing. The Company measures the highest hourly demand occurring simultaneously across each of a customer’s participating locations, thereby measuring billing demand for the totality of the customer’s participating sites as if it were a single load for billing purposes. This is described as conjunctive demand billing and only applies to the customer’s generation and
transmission service. The distribution portion of the bill is calculated using demand billing determinants established separately at each location.\textsuperscript{7}

Q. What are the customer eligibility criteria for the Conjunctive Demand Service Option pilot program?

A. The pilot program is currently only available to customers taking service under electric Schedules 26 or 31. These customers are required to install advanced metering infrastructure for accurate demand measurements and agree to have all of the participating facilities on the same billing cycle. Also, with the exception of customers involved in the electric vehicle industry, the pilot program is limited to no more than five locations and 2 MW per eligible customer. The total program size for customers on Schedules 26 and 31 is limited to 20 average megawatts. The current pilot program will terminate with the last billing cycle in December 2026.\textsuperscript{8}

Q. What is your assessment of the Company’s conjunctive demand pilot program?

A. I strongly support the Company’s conjunctive demand pilot program. This type of aggregation properly allows a multi-site customer to capture the diversity within its loads for billing purposes, specifically in the determination of billing demand. By treating the multiple loads of a single customer as a single entity for the purpose of measuring the amount of power and transmission service provided to the customer, the customer’s load is treated in a manner that is comparable to the treatment of a single-site customer with the same aggregate

\textsuperscript{7} Id. Exhibit BDJ-19, p. 13.

\textsuperscript{8} Id.
load shape. It is also comparable to the way the customer’s load would be viewed in a competitive market.

**Q. Why is it appropriate to apply a conjunctive demand rate to fixed generation and transmission costs as distinct from distribution costs?**

**A.** Each facility owned by a multi-site customer causes unique distribution costs and therefore it is appropriate to recover those costs based on the peak demand of each individual facility. But that is not the case for fixed production and transmission costs. At the power supply and transmission level, it does not make a difference whether 5 MW in a given hour is going to a single-site customer with a 5 MW load or to a multi-site customer with five facilities taking 1 MW each. The cost to produce and transmit the 5 MW in that hour is the same in both cases. In PSE’s last general rate case, Mr. Piliaris correctly recognized this neutrality with respect to cost causation when he stated that “customers served by PSE through multiple locations look no different (i.e., have no materially different cost of service) than a single customer with similar load characteristics.”

For a multi-site customer, it would not be unusual for each of its sites to be peaking at a different hour in each month. Under the current rate structure, this means that the customer’s cumulative billing demand for fixed production costs would exceed the customer’s actual aggregated peak demand measured on an hour-by-hour basis (as if it were a single-site customer). In other words, under the current rate structure, the multi-site customer might be billed for 5.5 MW of fixed production demand based on the sum of the individual peaks of each of its sites.

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9 2019 PSE General Rate Case, Docket UE-190529 (June 20, 2019), Prefiled Direct Testimony of Jon. A. Piliaris (Exhibit JAP-1T), p. 31.
(occurring at different hours), whereas in fact, the customer’s actual aggregate demand for fixed production demand in any hour might be no greater than 5 MW.

A conjunctive demand can correct for this upward bias in the billing demand that would otherwise be charged to a multi-site customer by aggregating the customer’s billing demands for peak demand measurement purposes. With the proper metering in place, this correction simply charges multi-site customers for the fixed production service that they actually use and places them on an equal footing with single-site customers. Under a well-designed conjunctive demand rate, such as PSE’s current pilot program, a multi-site customer that has the same aggregate demand for power supply as a single-site customer pays exactly the same rate and dollar amount for power supply as that single-site customer.

Q. What is your recommendation regarding PSE’s conjunctive demand billing proposal?

A. I recommend that the Commission approve an expansion of the current Conjunctive Demand Service Option pilot program to increase the account limit from 5 accounts to 15 accounts per customer, increase the customer’s participating load limit to 6 MW of winter demand, and increase the limit for the total retail load served under this program from 20 average megawatts to 40 average megawatts. I also recommend that the sunset provision be eliminated, and that PSE should include a proposal in its next general rate case to make this program permanent.

Kroger is currently participating in this pilot program and Kroger’s experience with the program to date has been very positive. It is a well-designed
demand aggregation program that places a customer with multiple locations on an equal footing with single-site customers, by charging participating multi-site customers for the amount of generation and transmission services that they actually use, thereby promoting equitable treatment of these customers. It is also comparable to the way the customer’s load would be viewed in a competitive market.

Q. **Does this conclude your response testimony?**

A. Yes, it does.
BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v. 

PUGET SOUND ENERGY, INC.,

Respondent.

Docket No. UE-220066
Docket No. UG-220067

AFFIDAVIT OF JUSTIN BIEBER

STATE OF UTAH

COUNTY OF SALT LAKE

Justin Bieber, being first duly sworn, deposes and states that:

1. He is an Associate Principal with Energy Strategies. L.L.C., in Salt Lake City, Utah;

2. He is the witness who sponsors the accompanying testimony entitled "Prefiled Response Testimony of Justin Bieber;"

3. Said testimony was prepared by him and under his direction and supervision;

4. If inquiries were made as to the facts and schedules in said testimony he would respond as therein set forth; and

5. The aforesaid testimony and schedules are true and correct to the best of his knowledge, information and belief.

[Signature]
Justin Bieber

Subscribed and sworn to or affirmed before me this 26th day of July, 2022, by Justin Bieber.

[Signature]
Notary Public