

155 FERC ¶ 61,111  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Cheryl A. LaFleur, Tony Clark,  
and Colette D. Honorable.

Puget Sound Energy, Inc.

Docket Nos. ER16-923-000  
ER16-923-001

ORDER ON PROPOSED TARIFF REVISIONS TO PARTICIPATE IN THE ENERGY  
IMBALANCE MARKET

(Issued April 29, 2016)

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1. On February 10, 2016 (February 10 Filing), as corrected on March 2, 2016 (March 2 Errata), pursuant to section 205 of the Federal Power Act (FPA),<sup>1</sup> Puget Sound Energy, Inc. (Puget) submitted proposed revisions to its Open Access Transmission Tariff (OATT) in order for Puget to participate in the Energy Imbalance Market (EIM) administered by the California Independent System Operator Corporation (CAISO). In this order, the Commission will accept Puget’s proposed revisions, subject to condition, effective as of the dates requested.

## **I. Background**

### **A. The EIM**

2. The EIM was implemented in 2014 to enable entities with balancing authority areas (BAAs) outside of CAISO to voluntarily take part in the imbalance energy portion of the CAISO locational marginal price (LMP)-based real-time market alongside participants from within the CAISO BAA.<sup>2</sup> The EIM allows participating BAAs to buy and sell five-minute real-time energy, under a market-driven process to satisfy energy imbalance needs. Specifically, CAISO runs its market software to economically dispatch the energy of any BAA that joins the EIM. This optimizes imbalance energy across the

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> *Cal. Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,231, *order on reh’g*, 149 FERC ¶ 61,058 (2014). CAISO administers the EIM pursuant to section 29 of the CAISO tariff.

broader EIM footprint to the extent that transmission service between an EIM Entity<sup>3</sup> and CAISO, or among EIM Entities, is available.<sup>4</sup> CAISO financially settles the EIM in a manner that recognizes the costs attributable to each participating BAA. In turn, the EIM Entities charge transmission customers taking energy imbalance service and generator imbalance service according to the EIM Entities' respective OATTs. The EIM does not change the reliability functions of CAISO or of any EIM Entity. Participation is voluntary, and there is no fee for an EIM Entity to exit the EIM.

3. Under the EIM, each participating EIM Entity must submit resource plans to CAISO which taken together provide the baseline for the operation of the real-time market. The EIM resource plan presents the complete picture of each EIM Entity's circumstances prior to real-time operations. CAISO then uses load forecasts, base schedules submitted by EIM Entities and EIM Participating Resources, energy bids, and information regarding capacity that is available to an EIM Entity to maintain reliable operations in its own BAA, but has not been bid into the EIM (Available Balancing Capacity) to optimize imbalance energy across the EIM footprint and issue dispatch instruction on a fifteen and five-minute basis.

4. The EIM footprint has gradually expanded since its implementation. PacifiCorp's two BAAs were the initial participants in the EIM, commencing financially binding operations on November 1, 2014.<sup>5</sup> Nevada Power Company and Sierra Pacific Power Company (collectively, NV Energy), the second entity to join the EIM, commenced financially binding operations on December 1, 2015.<sup>6</sup> Puget and Arizona Public Service Company (APS) submitted separate filings to revise their respective tariffs to enable EIM

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<sup>3</sup> An EIM Entity is a BAA that represents one or more EIM transmission service providers and enters into an agreement with CAISO to enable the operation of the EIM in its BAA.

<sup>4</sup> Traditionally, in other Western BAAs that do not participate in the EIM, each utility maintains balance between supply and demand on an individual basis through the manual dispatch of the generating resources available to it.

<sup>5</sup> *PacifiCorp*, 147 FERC ¶ 61,227 (conditionally accepting in part and rejecting in part revisions to PacifiCorp's OATT to enable participation in the EIM) (PacifiCorp EIM Order), *order on reh'g*, 149 FERC ¶ 61,057 (2014), *reh'g rejected*, 150 FERC ¶ 61,084 (2015).

<sup>6</sup> *Nevada Power Co.*, 151 FERC ¶ 61,131 (2015) (NV Energy EIM Order) (conditionally accepting revisions to NV Energy's OATT to enable participation in the EIM), *order on reh'g and clarification*, 153 FERC ¶ 61,306 (2015).

participation on February 12, 2016, and both intend to commence financially binding EIM operations concurrently on October 1, 2016.<sup>7</sup> The EIM footprint currently spans seven states, and will expand to include eight states, once APS begins EIM operations.

**B. Puget's Planned Participation in the EIM**

5. Puget is an investor-owned utility that provides retail electric and natural gas services in a service territory covering approximately 6,000 square miles in the Puget Sound region of the State of Washington.<sup>8</sup> Puget's retail and wholesale utility business includes the generation, purchase, transmission, distribution, and sale of electric energy, plus the purchase, transportation, storage, distribution, and sale of natural gas. Puget owns and operates electric transmission facilities and operates a BAA in Washington State. Puget is responsible for providing load and resource balancing service to its transmission customers, including both native load and third-party customers in Washington.

6. The Commission requires public utility transmission providers to offer energy imbalance service to transmission customers and generators as ancillary services under the *pro forma* OATT.<sup>9</sup> Puget currently manages energy imbalances across its BAA by utilizing both automated and manual processes to provide imbalance services from its resources under Schedule 4 (Energy Imbalance Service), Schedule 4R (Energy Imbalance Service For Retail Customers), and Schedule 9 (Generator Imbalance Service) of its OATT. CAISO manages its BAA through the operation of a bid-based real-time energy market that automatically dispatches the least-cost resource every five minutes to serve load while managing transmission congestion using a detailed network model. Under the EIM, CAISO will run its market software to economically dispatch the energy of Puget's

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<sup>7</sup> See Arizona Public Service Company, Proposed Amendments to Open Access Transmission Tariff to Participate in the Energy Imbalance Market, Docket No. ER16-938-000 (filed Feb. 12, 2016). This filing is currently pending before the Commission.

<sup>8</sup> Puget Transmittal Letter at 3-4.

<sup>9</sup> *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996) (Order No. 888), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (Order No. 888-A), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002).

BAA, allowing for optimization of imbalance energy across the broader EIM footprint to the extent that transmission between an EIM Entity and CAISO, or among EIM Entities, is available. Puget transmission customers that are not participating in the EIM will continue to take service under the Puget OATT.

7. On May 19, 2015, the Commission accepted an implementation agreement between CAISO and Puget to establish the scope and schedule of implementing the EIM and to account for Puget's upfront costs associated with EIM implementation.<sup>10</sup>

8. CAISO and Puget undertook an economic assessment of Puget's participation in the EIM based on the study year 2020.<sup>11</sup> According to Puget, the Benefits Analysis predicted significant consumer benefits resulting from Puget's participation in the EIM. Specifically, the Benefits Analysis identified \$18.3 million in sub-hourly dispatch and flexibility reserve benefits in a scenario where 300 MW of real-time transfer capability is made available for EIM Transfers,<sup>12</sup> \$9.1 million in savings related to Puget's ability to locally balance wind generation that is currently balanced in an external BAA, and annual savings of up to \$0.8 million from reduced renewable curtailment both within and external to Puget's BAA.<sup>13</sup> Puget asserts that these benefits are expected to contribute to significant savings for consumers in Washington State.

## II. Puget's Filing

### A. Overview

9. To facilitate its participation in the EIM, Puget proposes a number of amendments to its OATT, including the following: (1) a new Attachment O, which sets forth the roles and responsibilities of customers and Puget as the EIM Entity, in addition to provisions

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<sup>10</sup> *Cal. Indep. Sys. Operator Corp.*, 151 FERC ¶ 61,158 (2015).

<sup>11</sup> See Energy and Environmental Economics, Inc., *Benefits Analysis of Puget Sound Energy's Participation in the ISO Energy Imbalance Market* (September 2014) (Benefits Analysis), appended to the Puget Transmittal Letter as Attachment D.

<sup>12</sup> Puget proposes to define an EIM Transfer as "the transfer of real-time energy resulting from an EIM Dispatch Instruction: (1) between a [Puget] BAA and the CAISO BAA; (2) between the [Puget] BAA and an EIM Entity BAA; or (3) between the CAISO BAA and an EIM Entity BAA using transmission capacity available in the EIM." Proposed OATT § 1.11H.

<sup>13</sup> Puget Transmittal Letter at 5 (citing Benefits Analysis at 40, 57).

addressing EIM settlements and billing; (2) the addition of a new Schedule 1A to allocate EIM-related administrative costs charged by CAISO; (3) revisions to OATT Schedules 4 and 4R (addressing Energy Imbalance Service)<sup>14</sup> and 9 (addressing Generator Imbalance Service) to reflect the use of Load Aggregation Point pricing and LMP-based imbalance pricing for Schedules 4, 4R, and 9 imbalance service; (4) new definitions in section 1 (Definitions); (5) the addition of new Schedules 12 (addressing Real Power Losses on Washington Area Transmission Facilities) and 12A (addressing Real Power Losses on Colstrip and Southern Intertie Transmission Lines) to provide for the financial settlement of losses at locational EIM prices; and (6) certain other necessary revisions to parts of its OATT.<sup>15</sup>

10. Puget states that its proposed OATT revisions are designed to work in concert with the parallel provisions of the CAISO tariff, which define CAISO's role and responsibility as the EIM market operator. Puget explains that while participation in the EIM is voluntary for Puget's transmission customers, Puget's participation in the EIM will impose obligations on all of its transmission and generator interconnection customers, whether or not those specific customers participate in EIM. For instance, all of Puget's transmission and generator interconnection customers will have to provide Puget with operational data consisting of resource operational characteristics and forecast and outage data. According to Puget, this data is necessary for the EIM to properly model and account for expected load, generation, imports, and exports during each operating hour.<sup>16</sup>

11. Under Puget's proposal, transmission capacity will be made available for EIM Transfers using Interchange Rights Holder donations and Available Transfer Capability (ATC).<sup>17</sup> Puget explains that it lacks direct transmission interconnections with PacifiCorp or NV Energy, and thus it will initially utilize transmission service on Bonneville's system to facilitate transfers of imbalance energy into and out of the Puget BAA. Puget states that Bonneville has approved its long-term firm redirect requests from

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<sup>14</sup> See *infra* note 25.

<sup>15</sup> Puget Transmittal Letter at 10-11.

<sup>16</sup> *Id.* at 17-18; Proposed OATT Attachment O, § 4.2.

<sup>17</sup> Puget proposes to define an Interchange Rights Holder as a transmission customer who has informed Puget that it is electing to make reserved firm transmission capacity available for EIM Transfers without compensation. Proposed OATT, § 1.30J.

existing reservations to provide 300 MW for EIM Transfers between Puget's BAA and PacifiCorp West BAA in both directions.<sup>18</sup>

12. With respect to settlements, Puget proposes to settle energy imbalance service for transmission customers serving load within Puget's BAA under Schedules 4 and 4R of the Puget OATT using the Load Aggregation Point price produced by the EIM.<sup>19</sup> Puget proposes to settle generator imbalance service under Schedule 9 to customers with non-participating resources in the Puget BAA using LMP pricing.<sup>20</sup>

13. Puget emphasizes that its participation in the EIM does not alter its existing responsibilities as a balancing authority. Consistent with its existing balancing authority obligations, Puget states that it will set aside resource capacity at specific generators, including contingency reserves, up-regulation, and down-regulation to ensure its system balancing responsibilities are satisfied for Puget's BAA.<sup>21</sup>

14. Puget states that its proposed OATT changes are modeled upon and are substantively consistent with those accepted as just and reasonable for PacifiCorp and NV Energy, including recent OATT revisions adopted by PacifiCorp and NV Energy to accommodate CAISO's ability to incorporate Available Balancing Capacity into its

economic dispatch model.<sup>22</sup> However, Puget explains that there are several areas where its proposal differs from the tariff provisions adopted by PacifiCorp or NV Energy. Specifically, Puget's proposal differs in the following respects: (1) the election to rely on section 23 of the *pro forma* OATT (Sale or Assignment of Transmission Service) instead of language adopted by PacifiCorp related to its Interchange Rights Holder donations; (2) the requirement that transmission customers without load or generation in the Puget BAA submit a transmission customer base schedule containing intrachange forecast data;

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<sup>18</sup> Puget Transmittal Letter at 24-26.

<sup>19</sup> Puget provides energy imbalance service to customers that take service under its Washington Utilities and Transportation Commission (WUTC)-jurisdictional Schedules 448 and 449 – which customers are also OATT transmission customers – under Schedule 4R instead of Schedule 4. *Id.* at 30.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 14.

<sup>22</sup> See *Cal. Indep. Sys. Operator Corp.*, 153 FERC ¶ 61,305 (2015) (December 17 Order).

(3) the applicability of EIM-related scheduling requirements in section 4 of Attachment O to generation resources of 5 MW or more, rather than 3 MW; (4) the settlement of losses financially at the Load Aggregation Point price produced by the EIM, to the exclusion of in-kind replacement; and (5) the allocation of operating reserve charges related to EIM Transfers on the basis of Measured Demand rather than on the basis of customers' share of positive load imbalances relative to other customers with load imbalances during the operating hour.<sup>23</sup>

15. According to Puget, its proposed revisions are consistent with the measurable readiness criteria required for new BAAs participating in the EIM. Puget asserts that it is on track to complete all of the readiness requirements prior to its planned October 1, 2016 implementation date.<sup>24</sup>

### **B. Puget's Roles and Responsibilities as an EIM Entity**

16. Puget states that it has a variety of responsibilities as the EIM Entity that will serve as the direct link with CAISO on behalf of load, non-participating resources, balancing area interchange, and intrachange customers<sup>25</sup> in the Puget BAA.<sup>26</sup> Under the proposal, Puget must: (1) qualify as an EIM Entity Scheduling Coordinator or retain the services of a third-party to perform this role; (2) process applications for Puget EIM participating resources in Puget's BAA; (3) provide CAISO the required information

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<sup>23</sup> Puget Transmittal Letter at 11-13.

<sup>24</sup> *Id.* at 8-9.

<sup>25</sup> Puget defines intrachange as “[e]-Tagged energy transfers within the [Puget] BAA, not including real-time actual energy flows associated with EIM Dispatch Instructions.” Proposed OATT, § 1.15F. Intrachange customers are transmission customers who conduct transactions requiring e-Tags on energy transfers *within* Puget's BAA (not including real-time actual energy flows associated with EIM dispatch instructions).

<sup>26</sup> Puget includes references throughout its Transmittal Letter to the “[Puget] Energy EIM Entity,” defined in proposed section 1.30F of Puget's OATT as “[Puget] in performance of its role as an EIM Entity under the [CAISO tariff] and this Tariff, including, but not limited to, Attachment O.” Consistent with the PacifiCorp EIM Order and NV Energy EIM Order, we simply will refer to Puget in this order. Likewise, we will refer to CAISO in this order instead of the “Market Operator,” defined in proposed section 1.19C of Puget's OATT as “[t]he entity responsible for operation, administration, settlement, and oversight of the EIM,” as CAISO is currently performing these functions.

regarding modeling data and register all non-participating resources with CAISO; (4) provide data to CAISO regarding the day-to-day operation of the EIM, including the submission of EIM base schedules and resource plans and any changes to such plans; (5) provide CAISO with information regarding the reserved use of the transmission system and interties and any changes to transmission capacity; and (6) submit information regarding planned and unplanned outages and derates.<sup>27</sup>

17. Puget states that under section 29.4(b)(3)(F) of the CAISO tariff, the EIM Entity must identify its Load Aggregation Points used for settlement purposes.<sup>28</sup> Puget proposes to use a single Load Aggregation Point for its single BAA to simplify the process of market participation for its transmission customers and allow Puget to gain experience as to the LMPs created by the EIM.<sup>29</sup>

18. Puget states that it has elected to use the CAISO load forecast for the purpose of preparing its Resource Plan. Under CAISO's market design, an EIM Entity may choose to use its own load forecast or a load forecast produced by CAISO. Puget explains that it can minimize exposure to charges for under- or over-scheduling if it submits EIM base schedules using CAISO's load forecast. Puget notes that, even though it is electing to use the CAISO forecast, Puget is not precluded from using its own forecast in a given hour if it concludes it is appropriate to do so.<sup>30</sup>

19. Puget states that it has elected to become a Scheduling Coordinator Metered Entity in accordance with section 29.10 of the CAISO tariff, on behalf of its transmission customers, including transmission customers with non-participating resources. As such, Puget states that it will submit load, resource, and Interchange meter data to CAISO in accordance with the CAISO tariff's format and timeframes on behalf of transmission customers with non-participating resources, loads, and interchange. According to Puget,

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<sup>27</sup> Puget Transmittal Letter at 13-14; Proposed OATT Attachment O, § 4.1.

<sup>28</sup> A Load Aggregation Point is a set of pricing nodes used for the submission of bids and settlement of demand. The Load Aggregation Point price is the marginal price for a particular Load Aggregation Point, calculated as a weighted average of the nodal LMPs at the associated pricing nodes pursuant to CAISO tariff section 27.2.2. CAISO Tariff, Appendix A (Master Definitions Supplement).

<sup>29</sup> Puget Transmittal Letter at 14; Proposed OATT Attachment O, § 4.1.1.3(3).

<sup>30</sup> Puget Transmittal Letter at 15.

it must fulfill this role in order to meet the requirements of the CAISO tariff and provide CAISO timely and accurate meter data for EIM settlements.<sup>31</sup>

20. Under section 29.10(a) of the CAISO tariff, all generation resources within an EIM BAA with a rated capacity of 10 MW or greater are subject to mandatory telemetry requirements. Puget explains that telemetry provides CAISO or, in the case of non-participating resources, Puget the ability to settle any imbalance between the generator's transmission customer base schedule and its generation output. Puget states that each individual EIM Entity may decide whether to require smaller generators to submit transmission customer base schedules and to maintain telemetry meeting CAISO's requirements to facilitate settlement of imbalance. Unlike NV Energy and PacifiCorp, which both adopted three MW thresholds, Puget proposes a five MW threshold for generator base scheduling requirements because the administrative and cost burden would outweigh the benefits to Puget and the EIM. In addition, Puget states that five MW is well within the 10 MW minimum requirement set forth in CAISO's tariff.<sup>32</sup>

### **C. Transmission Customer Responsibilities**

21. In proposed section 4.2 of Attachment O, Puget outlines the responsibilities of customers with respect to the EIM. These responsibilities include providing: (1) initial registration data, including operational characteristics of generators; (2) updates to the initial registration data; (3) planned and forced outage and derate information; and (4) forecast data. Puget states that registration and outage information is necessary to comply with requirements established under CAISO tariff sections 29.4(c)(4)(C) and (D) (registration) and 29.9 (outages). Puget states that outage and derate data is needed to ensure that CAISO has accurate operational data to administer the EIM, produce accurate and appropriate dispatch instructions, and to mitigate the potential for congestion and imbalance on Puget's transmission system. With respect to forecast data, Puget asserts that this information is needed to enable the EIM to properly model and account for expected load, generation, imports, and exports during the operating hour. Additionally, Puget states that forecast data comprise the transmission customer base schedule that it uses as the baseline by which to measure imbalance energy for purposes of EIM settlement.<sup>33</sup> Puget also proposed requirements for transmission customers with

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<sup>31</sup> *Id.* at 16.

<sup>32</sup> In addition, Puget states that five MW is well within the 10 MW minimum requirement set forth in CAISO's tariff. Puget states that it will continue to evaluate whether a different threshold is warranted in the Puget BAA and would file OATT revisions to update this threshold if necessary. *Id.* at 16-17.

<sup>33</sup> *Id.* at 17; Proposed OATT Attachment O, § 4.2.

generating resources to participate in the EIM, including the process by which Puget will review the applications and the steps that transmission customers will follow to demonstrate to CAISO that they meet the criteria to become EIM participating resources.

**D. Transmission Service**

22. Puget proposes to require resources internal to Puget's BAA that wish to participate in the EIM to execute a transmission service agreement. Puget states that the execution of a service agreement is a reasonable requirement as it establishes the necessary contractual relationship with respect to performance of EIM-related responsibilities. Puget proposes to allow for a resource to seek CAISO certification to become a Puget EIM participating resource if: (1) the resource is a designated network resource of a network customer and the network customer elects to participate in the EIM through its Network Integration Transmission Service Agreement; or (2) the resource is associated with either (i) a Service Agreement for Firm Point-to-Point Transmission Service or (ii) a Service Agreement for Non-Firm Point-to-Point Transmission Service, and the transmission customer elects to participate in the EIM. Puget states that these provisions do not impose any transmission service charge related to EIM transactions.<sup>34</sup>

23. Puget proposes that a generating resource that is not physically located inside the Puget BAA will be eligible to become a Puget EIM participating resource if the transmission customer: (1) implements a pseudo-tie into the Puget BAA;<sup>35</sup> (2) has arranged firm transmission over any third-party transmission systems to the Puget BAA intertie boundary point equal to the amount of energy that will be dynamically transferred through a pseudo-tie into the Puget BAA; and (3) has entered into a transmission service agreement with Puget consistent with section 3.1 of Attachment O.<sup>36</sup>

24. Puget notes that, in the PacifiCorp EIM Order, the Commission rejected PacifiCorp's proposal to require EIM resources to pay for transmission service associated with EIM participation in addition to any transmission charges they incurred as a transmission customer under the OATT. Puget states that the Commission directed PacifiCorp to submit a compliance filing "to revise its OATT to eliminate the additional

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<sup>34</sup> Puget Transmittal Letter at 20; Proposed OATT Attachment O, § 3.1.

<sup>35</sup> Puget defines a pseudo-tie as "a functionality by which the output of a generating unit physically interconnected to the electric grid in a native BAA is telemetered to and deemed to be produced in an attaining BAA that provides BA services for and exercises BA jurisdiction over the generating unit." Proposed OATT, § 1.11C(2).

<sup>36</sup> Proposed OATT Attachment O, § 3.2.1.

transmission charge for EIM transactions for participating resources.”<sup>37</sup> Consistent with that guidance, Puget states that it proposes to include language in Attachment O, section 8.7 to provide that “[t]here shall be no incremental transmission charge assessed for transmission related to the EIM.” In addition, Puget states that proposed section 8.7 of Attachment O will provide that unreserved use penalties shall apply to any amount of actual metered generation in an operating hour which is in excess of the sum of both (1) the greatest positive dispatch operating point or manual dispatch of the Puget EIM participating resource received during the operating hour, and (2) the transmission customer’s reserved capacity.<sup>38</sup>

#### **E. Available Balancing Capacity**

25. To address certain pricing anomalies that occurred during the initial operation of the EIM, and following a technical conference, CAISO filed, and the Commission accepted, three measures to address the underlying causes of the price spike issues in the EIM and protect consumers from potential price anomalies that do not reflect actual market conditions. Specifically, CAISO has implemented tariff revisions that provide for: (1) requirements and criteria to assess a prospective EIM Entity’s readiness prior to commencing EIM operations;<sup>39</sup> (2) a six-month transition period during which a new EIM Entity is not subject to the pricing parameters that normally apply when the market optimization relaxes a transmission constraint or the power balance constraint in clearing the real-time market;<sup>40</sup> and (3) enhancements to the EIM functionality so that the EIM will automatically recognize and account for Available Balancing Capacity Solution.<sup>41</sup>

26. Puget proposes OATT revisions in order to implement CAISO’s Available Balancing Capacity Solution, which Puget states will ensure that the Puget BAA is shielded from problems associated with false scarcity. Puget proposes revisions to allow it to obtain default energy bids from CAISO for selected non-participating resources that may be used to supply EIM Available Balancing Capacity,<sup>42</sup> communicate CAISO EIM

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<sup>37</sup> Puget Transmittal Letter at 21 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 144).

<sup>38</sup> Puget Transmittal Letter at 21-22.

<sup>39</sup> *Cal. Indep. Sys. Operator Corp.*, 153 FERC ¶ 61,205 (2015).

<sup>40</sup> *Cal. Indep. Sys. Operator Corp.*, 153 FERC ¶ 61,104 (2015).

<sup>41</sup> December 17 Order, 153 FERC ¶ 61,305.

<sup>42</sup> Puget proposes to define “EIM Available Balancing Capacity” as “any upward

Available Balancing Capacity dispatch instructions to non-participating resources, and provide for settlement of energy output associated with EIM Available Balancing Capacity dispatches. Puget also proposes to adopt definitions to reflect the implementation of the Available Balancing Capacity Solution, including definitions of “Balancing Authority Area Resource,” “EIM Available Balancing Capacity,” “Resource Plan,” “Dispatch Instruction,” and “Dispatch Operating Point.”<sup>43</sup>

27. In addition, Puget proposes language in section 4.1.3.4 of Attachment O that will permit the EIM Entity to determine whether additional capacity dispatched from a non-participating resource in Puget’s BAA is needed for the BAA or whether the EIM Entity has already taken other actions to meet the capacity need. Puget states that it will follow all market requirements to notify the market as soon as possible if it must diverge from an Available Balancing Capacity dispatch instruction and states that it will comply with all North American Electric Reliability Corporation (NERC) or Western Electricity Coordinating Council (WECC) reliability requirements as a balancing authority.<sup>44</sup>

#### **F. Transmission Operations**

28. Puget proposes to make transmission capacity available for EIM Transfers using both Interchange Rights Holder donations and ATC.<sup>45</sup> At least 75 minutes before the operating hour, or T-75, a Puget Interchange Rights Holder can provide capacity for EIM Transfers by submitting an e-Tag including the OASIS identification reservation number(s) associated with the transmission rights available for EIM Transfers and other necessary information. Puget proposes that EIM Transfer capacity provided from ATC will be implemented through the submission of e-Tag(s) at least 40 minutes prior to the operating hour, or T-40, by Puget.<sup>46</sup> The amount of ATC indicated on the e-Tag will be

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or downward capacity from a Balancing Authority Area Resource that has not been bid into the EIM and is included in the P[uget] EIM Entity’s Resource Plan” (EIM Available Balancing Capacity). Proposed OATT, § 1.11F.

<sup>43</sup> Proposed OATT, § 1.

<sup>44</sup> Puget Transmittal Letter at 22-23.

<sup>45</sup> *Id.* at 24; Proposed OATT Attachment O, §§ 5.2 and 5.3.

<sup>46</sup> Puget’s proposed revisions specify that ATC shall be in addition to any amounts made available by Puget Interchange Rights Holders. Proposed OATT Attachment O, § 5.3.

based upon the lower of the amount of ATC calculated by each EIM Entity at that interface by T-40.

29. Puget explains that, unlike PacifiCorp and NV Energy, Puget's BAA lacks direct transmission interconnections with any other EIM Entity's BAA. As such, Puget states that while it can use Interchange Rights Holder donations of transmission rights and e-Tagged ATC to effectuate transfers into and out of its BAA on Puget transmission facilities in response to CAISO dispatch instructions, Puget will require the use of intervening transmission facilities owned and operated by Bonneville to access other BAAs in the EIM. Specifically, Puget will require the use of these facilities to reach the PacifiCorp West BAA, which is the nearest BAA to the Puget BAA that is currently participating in the EIM.<sup>47</sup>

30. In order to effectuate EIM exports and imports across the Bonneville transmission system, Puget states that it submitted and Bonneville approved long-term firm redirect requests. Puget states that these redirect requests dependably provide 300 MW for EIM Transfers between Puget's BAA and the PacifiCorp West BAA in both directions.

31. According to Puget, the redirected Bonneville transmission reservations will allow for the use of some level of dynamic transfer capability. Puget states that the availability of dynamic transfer capability to accommodate five minute CAISO dispatches will be determined by Bonneville, in accordance with its *Dynamic Transfer Limits: Operating Procedures for Use of Upper and Lower Transfer Limits on BPA's Transmission System Business Practice*, based on the historical impact of dynamic transfer capability across Bonneville's system attributable to generation resources that are or will be dispatchable in the EIM. Puget notes that it continues to work with Bonneville, PacifiCorp, and CAISO to optimize transmission functionality in the EIM and that it is participating in discussions to increase flexibility on the Southern Intertie. Puget also notes that it is engaged in Bonneville's current stakeholder process regarding use of Bonneville transmission in the EIM by Puget and other EIM Entities.<sup>48</sup>

32. Puget states that it has chosen not to adopt a new section 23.4 in Part II of its OATT, as PacifiCorp has, stipulating that donations of transmission rights to the EIM by Interchange Rights Holders are not subject to the reassignment provisions of Section 23 of the OATT. According to Puget, in the PacifiCorp EIM Order, the Commission held

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<sup>47</sup> Puget Transmittal Letter at 25.

<sup>48</sup> Puget states that Bonneville is expected to complete relevant major milestones related to this stakeholder process prior to Puget's commencement of parallel and financially binding EIM operations. *Id.* at 26.

that PacifiCorp's interchange rights holder "proposal does not appear to be a sale, assignment, or transfer of transmission service that would fall under section 23 of the *pro forma* OATT."<sup>49</sup> Puget states that it has accordingly elected to rely on the existing provisions of section 23 of its OATT, which are consistent with the *pro forma* OATT, and which on their face do not apply to the provision of transmission capacity by an Interchange Rights Holder to the EIM as contemplated in proposed section 5.2 of Attachment O.

33. Under Puget's proposal, transmission customers will be required to submit base schedules, including forecast data on expected load, generation, interchange, and intrachange, seven days prior to each operating day (T-7 days). Consistent with CAISO and other EIM Entities' timelines, transmission customers will also be required to submit at least one update prior to 10 a.m. the day before the operating day and a final base schedule no later than 77 minutes prior to each operating hour (T-77). Puget states that customers are permitted to modify the final base schedule up to and until 57 minutes prior to the operating hour (T-57).<sup>50</sup> However, customers' base schedules will become financially binding for purposes of determining imbalance charges under Schedules 4, 4R, and 9 of the OATT at 55 minutes prior to the operating hour. Puget notes that some of its customers would prefer additional flexibility to submit base schedules closer to the start of the operating hour and within the operating hour, and Puget commits to working with CAISO, EIM Entities, and stakeholders toward refinements that may provide transmission customers more flexibility with scheduling.<sup>51</sup>

#### **G. EIM Operations**

34. Puget proposes section 6 of Attachment O to ensure that EIM operations are consistent with Puget's existing reliability responsibilities as a balancing authority. Puget states that participation in the EIM does not change the manner in which it must comply with the applicable NERC and WECC reliability standards. Puget states that it will remain responsible for (1) maintaining appropriate operating reserves and for its obligations under any reserve sharing group agreements; (2) NERC and WECC obligations; (3) processing e-Tags and managing schedule curtailments at the interties; and (4) monitoring and managing real-time flows within system operating limits on all transmission facilities within Puget's BAA.

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<sup>49</sup> *Id.* at 25 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 114).

<sup>50</sup> Proposed OATT Attachment O, § 4.2.4.5.

<sup>51</sup> Puget Transmittal Letter at 27.

35. In addition, Puget explains that it will remain responsible for real-time flow management and mitigation, including coordinated unscheduled flow mitigation consistent with WECC procedures. Puget notes that it is gaining an additional tool through EIM Security Constrained Economic Dispatch that will be useful to mitigate unscheduled flow, without losing any of its existing capabilities or responsibilities. Finally, Puget states that, pursuant to proposed section 7 of Attachment O, it will ensure timely and accurate submission of information on planned and unplanned outages and derates to CAISO.<sup>52</sup>

#### **H. EIM Settlements**

36. Puget proposes a new Schedule 1A under which it will sub-allocate to all transmission customers on the basis of Measured Demand<sup>53</sup> the EIM administrative charges incurred from CAISO. Puget states that its proposal is consistent with the Commission's determination in the PacifiCorp EIM Order that all transmission customers cause the EIM Entity to incur the CAISO's EIM administrative charges, and should pay according to their volumetric use of the EIM Entity system as determined by Measured Demand.<sup>54</sup>

37. Puget proposes to settle energy imbalance service for transmission customers serving load within Puget's BAA under Schedule 4 of the Puget OATT using the Load Aggregation Point price produced by the EIM. Specifically, transmission customers will be charged or paid for energy imbalance service measured as the deviation of the transmission customer's metered load from the load component from the transmission customer base schedules, at the price determined under CAISO tariff section 29.11(b)(3)(C), for the period of the deviation at the applicable Load Aggregation Point where the load is located.<sup>55</sup>

38. Puget's OATT contains a separate Schedule 4R under which its retail access customers currently pay for energy imbalance service, consistent with the terms of a 2001 settlement agreement that implemented retail choice for certain of Puget's large industrial customers in the state of Washington (Stipulation Agreement). Schedules 448 and 449,

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<sup>52</sup> *Id.* at 27-28.

<sup>53</sup> Measured Demand includes all metered demand plus e-Tagged export volumes from the Puget BAA, excluding EIM Transfers. Proposed OATT, § 1.19D.

<sup>54</sup> *Id.* at 30 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 170).

<sup>55</sup> *Id.* at 31.

which are on file with the WUTC, provide that retail access customers will pay Puget for energy imbalance service pursuant to OATT Schedule 4R. Puget proposes to settle energy imbalance service for Schedule 4R customers using the same Load Aggregation Point price used to settle service under Schedule 4.<sup>56</sup>

39. Puget proposes to settle generator imbalance service under Schedule 9 to customers with non-participating resources in the Puget BAA. Specifically, Puget states that, under Schedule 9, a transmission customer will be charged or paid for generator imbalance service when there is a difference between the output of a non-participating resource located in the Puget BAA and the resource component of the transmission customer base schedule. Unless a customer has received a manual dispatch or EIM Available Balancing Capacity dispatch instruction from Puget, or communicated to CAISO physical changes in the resource's output, any deviation between the transmission customer's metered generation and the resource component of the transmission customer's base schedule will be settled as energy imbalance at the uninstructed energy imbalance price as determined by CAISO under section 29.11(b)(3)(B) of the CAISO tariff for the period of the deviation at the applicable PNode price where the generator is located.<sup>57</sup>

40. For those transmission customers who have received a manual dispatch, EIM Available Balancing Capacity dispatch, or communicated physical changes in output to CAISO, Schedule 9 generator imbalance service will apply when: (1) the transmission customer's metered generation deviates from the manual dispatch or EIM Available Balancing Capacity amount, or the amount of physical changes in the output of resources incorporated by CAISO in the 15-minute market; (2) the transmission customer's metered generation deviates from the manual dispatch amount, EIM Available Balancing Capacity dispatch amount, or the amount of physical changes in the output of resources incorporated by CAISO in real-time dispatch; (3) the resource component of the transmission customer base schedule deviates from the manual dispatch amount, EIM Available Balancing Capacity amount, or amount of physical changes in resource output incorporated by CAISO in the fifteen-minute market; or (4) the manual dispatch amount, EIM Available Balancing Capacity dispatch amount, or amount of physical changes in the output of resources incorporated by CAISO in real-time dispatch deviates from the

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<sup>56</sup> Puget states that it has made a filing with the WUTC to modify its orders related to the Stipulation Agreement so that the pricing provisions for imbalance energy under Schedule 4R of the OATT and retail Schedules 448 and 449 are consistent. *Id.* at 7-8.

<sup>57</sup> *Id.* at 31.

fifteen-minute market schedule.<sup>58</sup> Puget notes that it proposes to remove the penalty tiers for scheduling behavior from Schedules 4, 4R, and 9, but states that it may seek to reinstate the tiers if it discovers intentional over or under-scheduling.<sup>59</sup>

41. Because Puget proposes to settle imbalance under Schedules 4, 4R, and 9 using the full aggregated Load Aggregation Point price (for Schedules 4 and 4R) or LMP (for Schedule 9)—both of which include an energy loss component—Puget states that it will only assess average system losses under Schedule 12 using the “balanced” component of the transmission customer base schedule, consistent with NV Energy’s accepted approach. Puget explains that this will ensure there is no duplicative charge for energy losses on energy imbalance.<sup>60</sup>

42. Upon participation in the EIM, Puget proposes to utilize the Load Aggregation Point price to financially settle losses in new Schedules 12 (Real Power Losses on the Washington Area System) and 12A (Real Power Losses on the Southern Intertie and Colstrip segments) to the exclusion of in-kind replacement. According to Puget, in-kind replacement is associated with a timing lag that could allow for mismatches of value between the energy at the time it was lost and the energy at the time it was replaced, including on-peak and off-peak pricing differences. Puget states that the Commission has previously found that requiring financial settlement of losses to the exclusion of in-kind replacement is just and reasonable and consistent with Order Nos. 888 and 890.<sup>61</sup>

43. Puget states that Washington area system customers will be assessed losses under Schedule 12 using the transmission customer base schedule and not the final e-Tag,

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<sup>58</sup> These deviations will be settled at the price determined by CAISO under sections 29.11(b)(3)(B), 29.11(b)(1)(A)(ii), and 29.11(b)(2)(A)(ii) of the CAISO tariff for the period of the deviation at the applicable PNode where the generator is located. Puget’s Transmittal Letter states that generator imbalance service that applies when the transmission customer’s metered generation deviates from the manual dispatch or EIM Available Balancing Capacity amount, or the amount of physical changes in the output of resources incorporated by CAISO in the fifteen-minute market will be settled as uninstructed imbalance energy at the applicable PNode *15-minute market* price. However, Puget’s redlined OATT states that generator imbalance service will be settled as uninstructed imbalance energy at the applicable PNode *real-time dispatch* price. *Id.*

<sup>59</sup> *Id.* at 32.

<sup>60</sup> *Id.*

<sup>61</sup> *Id.* at 33 (citing *Ariz. Pub. Serv. Co.*, 143 FERC ¶ 61,280, at P 28 (2013)).

because losses on the energy imbalance service and generator imbalance service Puget provides are reflected in the LMP or Load Aggregation Point price used to settle imbalance under Schedules 4, 4R, and 9. Under proposed Schedule 12A, Puget states that transmission customers taking service on the Colstrip and Southern Intertie transmission segments outside Puget's BAA will be assessed losses based on the actual transmission service provided, because these customers do not submit transmission customer base schedules given that they do not take energy or generator imbalance service from Puget.<sup>62</sup>

44. Puget proposes to settle instructed imbalance energy under section 8.1 of Attachment O at the real-time dispatch or fifteen-minute market price at the applicable PNode. Puget states that instructed imbalance energy may result from: (1) operational adjustments of any affected interchange or intrachange, including changes made by transmission customers after T-57; (2) resource imbalances created by manual dispatch or EIM Available Balancing Capacity dispatch; or (3) adjustment to resource imbalances created by adjustments to resource forecasts under section 11.5 of the CAISO tariff. Puget proposes to sub-allocate instructed imbalance energy directly to the transmission customer with the affected resource.

45. While Puget's proposal closely tracks NV Energy's and PacifiCorp's approaches, Puget has proposed one variation to the language of section 8.1. Unlike PacifiCorp and NV Energy, Puget proposes to require its transmission customers without load or generation in the Puget BAA to submit transmission customer base schedules forecasting expected intrachange under Attachment O, section 4.2.4.4. As noted earlier, Puget defines intrachange as "[e]-Tagged energy transfers *within* the [Puget] BAA, not including real-time actual energy flows associated with EIM Dispatch Instructions."<sup>63</sup> Intrachange differs from interchange, which Puget states consists of e-Tagged energy transfers *from, to or through* the Puget BAA or other BAAs, not including EIM Transfers. Puget asserts that customers submitting intrachange schedules can produce imbalances independent of any load or generation in the Puget BAA. According to Puget, this intrachange imbalance would not be reflected in the imbalance settled by Puget for customers with load or generation in the BAA, which submit their own base schedules and settle imbalance according to deviations between such schedules and metered output or demand.<sup>64</sup> Puget proposes to settle any imbalance resulting from a

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<sup>62</sup> Puget Transmittal Letter at 33.

<sup>63</sup> Proposed OATT, § 1.15F (emphasis added).

<sup>64</sup> For example, Puget explains, if a generator submits a base schedule of 9 MWh and a separate transmission customer submits an intrachange e-Tag for 10 MWh from the

transmission customer's intrachange e-Tag as instructed imbalance energy, because this will allow Puget to appropriately assign imbalance costs and payments associated with intrachange tags to the responsible transmission customers.<sup>65</sup>

46. Puget proposes that any charges or payments from uninstructed imbalance energy<sup>66</sup> under sections 29.11(b)(3)(B) and (C) of CAISO's tariff not otherwise recovered under Schedules 4, 4R or 9 will not be sub-allocated to transmission customers.<sup>67</sup> Puget explains that this type of imbalance energy can arise from differences between CAISO's projections and customers' individual expectations of their demand, even if each customer is 100 percent accurate, and asserts that its proposal will insulate its customers from bearing potential costs due to CAISO's load forecast. Similarly, Puget also proposes not to sub-allocate charges to Puget for unaccounted for energy pursuant to section 29.11(c) of the CAISO tariff.<sup>68</sup>

47. Puget proposes to assign charges for under- or over-scheduling to transmission customers subject to OATT Schedules 4 and 4R that contributed to the imbalance for the hour based on their respective under- and over-scheduling imbalance ratio share, and to allocate daily excess revenues from under- or over-scheduling charges to transmission customers on the basis of metered demand.<sup>69</sup> Additionally, consistent with NV Energy

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generator to a load (the load base schedule is deemed to be the e-Tag value of 10 MWh), and the generator metered value for the hour is 9 MWh and the load metered value is 10 MWh, then the generator and load have no uninstructed imbalance energy assessed but the intrachange e-Tag created the need for 1 MWh of instructed imbalance energy. Puget states that the EIM would provide this 1 MWh in this scenario. Puget Transmittal Letter at 34.

<sup>65</sup> *Id.*

<sup>66</sup> Uninstructed imbalance energy is the portion of imbalance energy that does not result from dispatch instructions and 15-minute market schedules. *See* CAISO Tariff, Appendix A (Master Definitions Supplement).

<sup>67</sup> Proposed OATT Attachment O, § 8.2.

<sup>68</sup> Puget Transmittal Letter at 35; Proposed OATT Attachment O, § 8.3.

<sup>69</sup> Proposed OATT Attachment O, § 8.4.3.

and PacifiCorp's approach, Puget also proposes to sub-allocate charges for the flexible ramping constraint pursuant to section 29.11(g) of the CAISO tariff to transmission customers on the basis of Measured Demand. According to Puget, the use of a Measured Demand allocator for these costs is appropriate, as it ensures that the customers that benefit from the reliability of the transmission system contribute to the costs to maintain its reliability.<sup>70</sup> Puget notes that the Commission directed PacifiCorp and NV Energy to submit informational reports 15 months after the entry of each respective EIM Entity into the EIM addressing whether it remains appropriate to allocate flexible ramping constraint charges on the basis of Measured Demand. Puget states that PacifiCorp found that the

use of CAISO's 75/25 allocation<sup>71</sup> of flexible ramping constraint charges to scheduling coordinators was more complex, increased the risk of calculation errors, and required additional data, and that the benefits of changing the allocation would be "very small and insignificant."<sup>72</sup>

48. Puget explains that, under the EIM, each EIM Entity and CAISO will have its own real-time market BAA neutrality account, consisting of charges or credits due to, among other things, excessive rate mitigation measure in the pricing formula for Load Aggregation Points, load forecast deviations, and uninstructed imbalance energy. Puget states that CAISO will reallocate a portion of the amounts in each BAA's account to other BAAs' accounts based on a BAA's ratio of five-minute energy transfers to other BAAs to overall uninstructed imbalance energy in the BAA. Puget proposes to sub-allocate real-time imbalance energy offsets arising from section 29.11(e)(3) of the CAISO tariff to transmission customers on the basis of Measured Demand.

49. Puget also proposes to allocate any charges or payments pursuant to section 29.11(e)(20) of the CAISO tariff for the EIM real-time congestion offset to transmission customers, which arise when the CAISO has to re-dispatch generation

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<sup>70</sup> Puget Transmittal Letter at 35-36 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 117 FERC ¶ 61,237, at P 23 (2006)).

<sup>71</sup> CAISO allocates 75 percent of flexible ramping constraint charges to hourly Measured Demand (consisting of metered load and exports) and 25 percent to daily gross negative supply deviations by generators. CAISO Tariff, § 11.25.5.1.

<sup>72</sup> Puget Transmittal Letter at 36 (citing PacifiCorp, Letter Regarding Energy Imbalance Market, Docket No. ER14-1578-000, at 1 (filed Feb. 1, 2016)). Puget states that it will reevaluate the sub-allocation of flexible ramping constraint if the Commission issues an order in response to a report from PacifiCorp or NV Energy, or if CAISO proposes a new flexible ramping product that the Commission approves.

resources in real-time to manage congestion, on the basis of Measured Demand. Puget states that CAISO will allocate the costs of congestion attributable to transmission constraints located within each BAA to that EIM Entity's BAA real-time congestion balancing account. Puget states that because congestion management is an essential system-wide grid reliability function, all transmission customers should receive a *pro rata* share of these costs.<sup>73</sup>

50. Under its proposal, Puget states that it will sub-allocate charges and payments for the EIM real-time marginal cost of losses offset pursuant to section 29.11(e)(4) of the CAISO tariff on the basis of Measured Demand. Puget states that this approach is necessary in order to be consistent with its proposal to use the full LMP or Load Aggregation Point pricing in Schedules 4, 4R, 9, 12, and 12A and not to remove the marginal loss component of the LMP for settlement of imbalance or losses. Puget notes that this approach is consistent with NV Energy's approach.

51. Puget explains that the EIM makes bid cost recovery payments to generators when real-time market revenues over a day do not cover a resource's real-time commitment and dispatched bid costs. Puget states that these costs fall into two categories: (1) dispatched energy production deviation from a resource's transmission customer base schedule level, and (2) commitment costs, consisting of the costs to start a generator and operate it at its minimum operating level. Puget explains that CAISO will allocate bid cost recovery costs to each BAA, taking into account energy transfers between BAAs similar to the way it will for the real-time market BAA neutrality account. Puget proposes to sub-allocate real-time bid cost recovery charges assessed under section 29.11(f) of CAISO's tariff on the basis of Measured Demand.<sup>74</sup>

52. Puget proposes to adopt the same approach as CAISO with respect to revenue neutrality. Puget explains that CAISO imposes daily and monthly neutrality adjustments and rounding adjustments to collect any shortfalls due to rounding, and allocates these charges on the basis of Measured Demand.<sup>75</sup> Puget proposes to hold transmission customers harmless from certain charges related to the timing of payments and risk of market shortfalls that are under Puget's control.<sup>76</sup> Puget states that this is reasonable as these charges relate to timing of payments and risk of market shortfalls.

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<sup>73</sup> *Id.* at 38.

<sup>74</sup> *Id.* at 39.

<sup>75</sup> Proposed OATT Attachment O, §§ 8.5.4 and 8.5.8.

<sup>76</sup> These charges include: Invoice Deviation (distribution and allocation); Default

53. Puget explains that an EIM transfer from the Puget BAA to the CAISO BAA will result in Puget receiving a payment for operating reserves, while Puget will be charged for operating reserves for EIM Transfers into the Puget BAA from the CAISO BAA. Under proposed Attachment O, section 8.12, Puget proposes to sub-allocate to customers payments and charges for operating reserves. Similar to NV Energy, Puget proposes to sub-allocate operating reserves payments on a ratio-share basis,<sup>77</sup> because Puget EIM participating resources supply the energy for EIM Transfers out of the Puget BAA as well as the corresponding operating reserves. Puget proposes to allocate operating reserves charges on the basis of Measured Demand. Puget explains that it proposes this approach, which differs from that adopted by NV Energy,<sup>78</sup> because there are various factors that can cause EIM Transfers from the CAISO BAA into the Puget BAA that may be unrelated to a particular customer's load imbalance or to overall load imbalance in Puget's BAA.<sup>79</sup> Puget further states that it would not be appropriate or consistent with cost causation principles to identify all customers with a positive load imbalance and allocate the operating reserve charges to such customers on a *pro rata* basis, because in certain scenarios, import of CAISO energy is driven by economics and not by any positive load imbalance within the BAA.

54. Puget proposes to directly assign or sub-allocate three types of charges to the customers that cause the costs to be incurred: (1) penalties for inaccurate or late

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Invoice Interest Payment; Default Invoice Interest Charge; Invoice Late Payment Penalty; Financial Security Posting (Collateral) Late Payment Penalty; Shortfall Receipt Distribution; Shortfall Reversal; Shortfall Allocation; Default Loss Allocation; and Generator-Interconnection Process Forfeited Deposit Allocation. Puget Transmittal Letter at 40; Proposed OATT Attachment O, § 8.5.8.

<sup>77</sup> The ratio-share basis is defined as the proportion of the volume of operating reserves provided by a Puget EIM participating resource in the Puget BAA dispatched during the operating hour compared to the total volume of operating reserves provided by all Puget EIM participating resources dispatched in the Puget BAA for the operating hour. Proposed OATT Attachment O, § 8.12.1.

<sup>78</sup> Puget explains that under NV Energy's approach, operating reserves charges from CAISO are sub-allocated based on the transmission customer's positive load imbalance ratio share, which is the ratio of the transmission customer's positive load imbalance amount relative to the sum of the positive load imbalances of all other transmission customers with such load imbalance amounts for the operating hour. Puget Transmittal Letter at 41.

<sup>79</sup> *Id.* at 40-41.

settlement quality meter data; (2) tax liabilities; and (3) the variable energy resource forecast charge. According to Puget, each of these provisions appropriately matches cost payments with cost causation.<sup>80</sup>

55. Consistent with section 29.11(1) of the CAISO tariff, Puget states that it has included a provision in its OATT that it will be subject to CAISO's payment calendar for issuing settlement statements, exchanging invoice funds, submitting meter data, and submitting settlement disputes, but that Puget will follow its OATT for issuing invoices regarding the EIM.<sup>81</sup> Puget notes that as CAISO has the authority to correct prices and may modify settlement statements because of its dispute resolution process, Puget proposes to make corresponding changes to its sub-allocations to pass through CAISO's revisions to its settlements.

56. Puget states that proposed section 8.10 of Attachment O permits EIM-related charges or payments that are not captured elsewhere in the OATT to be placed in an EIM Residual Balancing Account pending Commission approval of a proposed allocation methodology pursuant to section 205 of the FPA, with interest accruing in accordance with the Commission's regulations. Puget compares the EIM Residual Balancing Account to formula rate true-ups and asserts that this methodology provides protection from over- or under-recovery of costs.<sup>82</sup>

### **I. Dispute Resolution**

57. Puget proposes to adopt a new OATT section 12.4A (EIM Disputes) to provide a dispute resolution process for EIM-related charges and payments. Under its proposal, disputes between Puget and a transmission customer regarding the manner in which Puget has sub-allocated EIM payments or charges from CAISO will be processed in accordance with Puget's existing dispute resolution procedures, but disputes between CAISO and a Puget EIM Participating Resource Scheduling Coordinator related to settlement statements provided to the EIM Participating Resource Scheduling Coordinator from CAISO will proceed according to the timeline in CAISO's tariff. Puget states that it may raise disputes with CAISO regarding the settlement statements it

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<sup>80</sup> *Id.* at 41.

<sup>81</sup> Proposed OATT Attachment O, § 8.9.

<sup>82</sup> As an example, Puget states that if CAISO implemented a new charge before Puget could make a corresponding OATT change, the charge amount would be placed in this account until Puget files a proposed cost allocation methodology with the Commission. Puget Transmittal Letter at 42.

receives from CAISO in accordance with the process specified in the CAISO tariff. If a dispute arises regarding a charge or payment from CAISO to Puget that is subsequently charged or paid by a transmission customer, and the transmission customer wishes to raise a dispute with CAISO, Puget states that it will file a dispute on behalf of the customer in accordance with the CAISO tariff and work with the customer to resolve the dispute through the process provided in the CAISO tariff.<sup>83</sup>

## **J. Compliance**

58. Puget proposes six general rules of conduct that customers must follow to facilitate an environment in which all parties can fairly participate in the EIM.<sup>84</sup> In general, these rules require customers to: (1) comply with dispatch instructions and Puget operating orders in accordance with Good Utility Practice; (2) submit bids for resources that are reasonably expected to be available and capable of performing at the levels specified in the bid; (3) notify CAISO and Puget of outages in accordance with section 7 of Attachment O; (4) provide complete, accurate, and timely meter data to Puget and maintain responsibility to ensure the accuracy of such data; (5) provide information to Puget, including the information requested in Attachment O, by applicable deadlines; and (6) use commercially-reasonable efforts to ensure that forecasts are accurate and based on all information that is known or should have been known at the time of submission. Finally, proposed section 9.3 provides that Puget may refer a violation of the rules of conduct to the Commission for enforcement. Puget asserts that these provisions are necessary and are designed to put customers on notice as to expected conduct.<sup>85</sup>

## **K. Market Contingencies**

59. Under proposed section 10 of Attachment O, Puget proposes to provide itself authority to invoke certain corrective actions to mitigate price exposure in the event of certain market contingencies related to the EIM. If Puget submits a notice to terminate its EIM participation to CAISO, Puget may mitigate price exposure during the 180-day period between submitting the notice and the effective date of termination. Specifically, Puget may ask that CAISO prevent EIM Transfers and separate the Puget BAA from operation of the EIM and suspend settlement of EIM charges with respect to Puget. Following implementation of these corrective actions, Puget would utilize its temporary

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<sup>83</sup> *Id.* at 43; Proposed OATT Attachment O, § 12.4A.

<sup>84</sup> Proposed OATT Attachment O, § 9.

<sup>85</sup> Puget Transmittal Letter at 44-45.

schedules.<sup>86</sup> In addition, proposed section 10 addresses corrective actions that Puget may invoke if it declares a temporary contingency. According to Puget, it must have this ability to take corrective actions as part of its balancing authority responsibilities.<sup>87</sup>

**L. Other Proposed Changes to Puget's OATT**

60. Puget proposes several OATT revisions necessary to implement its EIM participation, including, among other things, new definitions in section 1 of its OATT and changes to ensure the applicability of Attachment O to all transmission and interconnection customers (and thereby ensure that customers will provide Puget the requisite information to meet the registration, outage reporting, and forecast requirements included throughout Attachment O).<sup>88</sup>

61. In addition, Puget proposes revisions to its OATT provisions that require undesignation of network resources to make off-system sales, such that network customers will have the option to participate in the EIM without having to undesignate all or a portion of a resource. Puget states that these changes are reflected in new sections 28.7, 30.1, and 30.4.

62. Finally, Puget proposes that its new market responsibilities as an EIM Entity be subject to a gross negligence or intentional wrongdoing standard of liability, as opposed to its responsibilities as a transmission provider under the *pro forma* OATT, which are subject to the ordinary negligence standard of liability.<sup>89</sup> Puget explains that the Commission has permitted use of the gross negligence standard for CAISO and its participating transmission owners under the Transmission Control Agreement and the CAISO tariff, and for transmission providers in all other organized markets.

**M. Other Considerations Related to EIM Implementation**

63. Puget explains that it has market-based rate authority in its own BAA and has no affiliates participating in the EIM. According to Puget, the direction provided with respect to market power studies in the PacifiCorp EIM Order and NV Energy EIM Order

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<sup>86</sup> Puget notes that the temporary schedules in section 10.4 reflect the existing pre-EIM provisions of the Puget OATT, including penalty bands.

<sup>87</sup> *Id.* at 45-46; Proposed OATT Attachment O, § 10.

<sup>88</sup> Puget Transmittal Letter at 46-47.

<sup>89</sup> *Id.* at 48; Proposed OATT, § 10.2.

gives rise to uncertainty about whether a market power study is needed prior to commencing financially binding participation in the EIM.<sup>90</sup> In addition, Puget asserts that the Commission's imposition of default energy bid bidding on PacifiCorp and NV Energy raises concerns about whether all of the benefits of EIM participation Puget anticipated will be available if concerns over market power and the sufficiency of CAISO market mitigation measures are not addressed. Puget states that it raised these and other comments in a request for rehearing and clarification of the Berkshire MBR Order.<sup>91</sup> However, Puget states that, out of an abundance of caution, it plans to submit in a future filing a change of status report including a market power analysis as soon as practicable. Puget states that it will conform its analysis, to the extent possible, on the guidance provided in the PacifiCorp EIM Order, the NV Energy EIM Order, and the Berkshire MBR Order.<sup>92</sup>

64. Lastly, Puget explains its decision regarding which information it plans to include in the Puget EIM Business Practice Manual. Puget states that the Puget EIM Business Practice Manual will contain details regarding how certain requirements specified in the OATT will be implemented, consistent with the Commission's "rule of reason" policy concerning the types of provisions that may be included in a business practice manual rather than the filed tariff. Specifically, Puget states that the EIM Business Practice Manual will include additional guidance on the following: (1) the application and certification process to become a Puget EIM participating resource; (2) the information required for initial registration with CAISO of Puget EIM participating resources and non-participating resources and the process for providing updates to the information; (3) the process used to report outage and derate information; (4) implementation details for customers to provide forecast data; (5) information matching the specific charge code numbers to the EIM cost allocations; and (6) the methodology for distributing over- and under-scheduling penalty proceeds authorized under the allocation in proposed section 8.4.3 of Attachment O.<sup>93</sup>

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<sup>90</sup> Puget Transmittal Letter at 49-50 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 206; NV Energy EIM Order, 151 FERC ¶ 61,131 at P 201).

<sup>91</sup> *Id.* at 50 (citing Puget Sound Energy, Inc., Motion to Intervene-Out-of-Time, Request for Clarification, and Request for Rehearing, Docket Nos. ER15-2281, *et al.* (filed Dec. 21, 2015)).

<sup>92</sup> On March 9, 2016, Puget submitted a Notice of Non-Material Change in Status in Docket No. ER10-2374-010.

<sup>93</sup> Puget Transmittal Letter at 48-49.

#### **N. Effective Date and Requests for Waiver**

65. Attachment C to Puget's filing contains Puget's requested effective dates for its proposed OATT revisions. Puget requests that revisions to the OATT cover page, table of contents, and Section 1, Definitions, be effective May 1, 2016.<sup>94</sup> Puget requests that OATT Sections 12.4A, 15.7, 16.1g, and 28.5; Attachment O Sections 4.1.5, 4.1.6, 8, and 10; and Schedules 1A, 4, 4R, 9, 10, 12, and 12A take effect the later of October 1, 2016, or the implementation date of Puget's participation in the EIM. Puget explains that these provisions should not take effect prior to the start of financially binding EIM operations, because these provisions relate to financial settlement of charges associated with the EIM and other aspects of EIM implementation. For all other proposed OATT changes, Puget requests an effective date that is no earlier than July 25, 2016, or seven days prior to the start of parallel operations. According to Puget, this intermediate effective date reflects the need to have information supporting EIM operation in place several business days prior to the initiation of non-financially binding, parallel operations which is currently scheduled for August 1, 2016.

66. Puget seeks waiver of the Commission's notice requirements set forth in Section 35.3(a)(1) of the Commission's regulations, 18 C.F.R. § 35.3(a)(1), because the requested effective date of certain provisions will be more than 120 days after Puget's filing. Puget states that granting of waiver will allow Puget's OATT amendments to be in place in a timeframe necessary to support final design, testing, and startup and provide operational and regulatory certainty.<sup>95</sup>

67. Puget also requests waiver of Part 35 of the Commission's regulations to the extent they are not satisfied by Puget's filing.<sup>96</sup>

#### **III. Notice and Responsive Filings**

68. Notice of Puget's February 10 Filing was published in the *Federal Register*, 81 Fed. Reg. 8193 (2016), with interventions and protests due on or before March 2, 2016. Arizona Public Service Company (APS); NV Energy; PacifiCorp; Western Power

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<sup>94</sup> On March 2, 2016, Puget submitted an errata to amend the requested effective date in eTariff for certain existing provisions of section 28 of its OATT. Specifically, Puget requests that the unrevised OATT subsections 28.2-28.4 and 28.6 be accepted effective May 1, 2016.

<sup>95</sup> Puget Transmittal Letter at 51.

<sup>96</sup> *Id.* at 52.

Trading Forum; Industrial Customers of Northwest Utilities (ICNU); Portland General Electric Company; Public Utility District No. 1 of Snohomish County, Washington; the Transmission Agency of Northern California; the City of Los Angeles Department of Water and Power; the Cities of Santa Clara, California and Redding California and the M-S-R Public Power Agency; and the Modesto Irrigation District filed timely motions to intervene. CAISO, Bonneville, and Powerex Corp (Powerex) each filed timely motions to intervene and comments. ICNU filed a timely protest. Puget filed an answer to comments and protests on March 17, 2016. APS filed comments in support of Puget's answer to comments and protests on March 22, 2016. On April 1, 2016, Powerex filed an answer in response to Puget's answer. On April 5, 2016, ICNU filed an answer in response to Puget's answer.

69. Notice of Puget's March 2 Errata was published in the *Federal Register*, 81 Fed. Reg. 12,726-12,727 (2016), with interventions and protests due on or before March 9, 2016. None was filed.

#### **IV. Discussion**

##### **A. Procedural Matters**

70. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2015), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

71. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2015), prohibits an answer to a protest and/or answer unless otherwise ordered by the decisional authority. We will accept Puget's answer and APS's comments in support of Puget's answer because they have provided information that assisted us in our decision-making process. We are not persuaded to accept Powerex's and ICNU's answers and will, therefore, reject them.

##### **B. Substantive Matters**

###### **1. Overview of Puget's EIM Proposal**

72. Puget's proposal sets forth the rules for Puget and its customers to participate in CAISO's EIM. Puget asserts that its filing is the product of an extensive stakeholder process, spanning from July 2015 through December 31, 2015 and involving two stakeholder meetings and several opportunities for stakeholders to submit comments on the proposed OATT revisions.<sup>97</sup> Puget states that its proposed OATT changes

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<sup>97</sup> *Id.* at 7-8.

accommodate the Puget BAA's particular circumstances and, for the most part, closely track those OATT provisions already accepted as just and reasonable for PacifiCorp and NV Energy.

73. Puget asserts that its proposed OATT revisions are just and reasonable, including the provisions that differ from those adopted by PacifiCorp and NV Energy in their respective OATTs.<sup>98</sup> As noted above, Puget's proposal differs in the following respects: (1) the election to rely on section 23 of the *pro forma* OATT (Sale or Assignment of Transmission Service) instead of language adopted by PacifiCorp related to its Interchange Rights Holder donations; (2) the requirement that transmission customers without load or generation in the Puget BAA submit a transmission customer base schedule containing intrachange forecast data; (3) the applicability of EIM-related scheduling requirements in section 4 of Attachment O to generation resources of 5 MW or more, rather than 3 MW; (4) the settlement of losses financially at the Load Aggregation Point price produced by the EIM, to the exclusion of in-kind replacement; and (5) the allocation of operating reserve charges related to EIM Transfers on the basis of Measured Demand rather than on the basis of customers' share of positive load imbalances relative to other customers with load imbalances during the operating hour.<sup>99</sup>

**a. Comments**

74. CAISO supports the OATT amendments proposed in Puget's February 10 Filing.<sup>100</sup> CAISO argues that the proposed OATT amendments are necessary for Puget to implement its participation in the EIM.<sup>101</sup> CAISO states that Puget's OATT amendments are generally parallel amendments that other entities have made to their OATTs to facilitate their participation in the EIM, which the Commission approved. CAISO also states that the amendments appropriately enable the operation of CAISO's real-time market in Puget's BAA,<sup>102</sup> account for the transmission that would be available to operate the EIM,<sup>103</sup> and provide for safeguards that allow Puget to implement corrective

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<sup>98</sup> *Id.* at 11-13.

<sup>99</sup> *Id.*

<sup>100</sup> CAISO Comments at 2.

<sup>101</sup> *Id.* at 3.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.* at 6.

measures in the event of unintended or unforeseen consequences under certain limited conditions.<sup>104</sup>

75. No intervenors object to Puget's participation in the EIM. However, Bonneville and Powerex submit comments regarding – and ICNU protests – certain aspects of Puget's proposal, including: (1) Puget's proposals regarding allocation of operating reserves charges, EIM Administrative charges, flexible ramping constraint charges, and Power Balance Infeasibility pricing; (2) Puget's discretion regarding the dispatch of EIM Available Balancing Capacity; (3) Puget's proposal to require intrachange forecast data from wheeling customers; (4) Puget's proposed mechanisms for making transmission capacity available for EIM Transfers; (5) Puget's proposal to require financial settlement of losses; and (6) Puget's proposal not to allow external resource participation at this time.

**b. Commission Determination**

76. We accept Puget's proposed OATT revisions, subject to condition, as discussed further below.<sup>105</sup> We also grant the effective dates as set forth in Attachment C to the filing. We find that Puget's proposed OATT revisions are just and reasonable and will facilitate Puget's participation in the EIM as well as the operation of the EIM as a whole by providing a framework that is consistent with the EIM provisions in CAISO's tariff and PacifiCorp's and NV Energy's OATTs. We find that Puget has independently supported its proposal to adopt these revisions where appropriate, and explained how its proposed revisions that differ from previous EIM Entities' proposals are tailored to accommodate the unique nature of Puget's system and the needs of its customers. However, we note that the actual implementation of Puget's participation in the EIM is subject to Puget's compliance with the readiness requirements set forth in section 29 of CAISO's tariff.

77. With respect to Puget's proposal regarding Puget's responsibilities as an EIM Entity, we find that Puget has clearly explained how it will satisfy the requirements of EIM Entities set forth in section 29 of CAISO's tariff. Specifically, Puget's revisions will enable it to, among other things, provide data to CAISO regarding the day-to-day operation of the EIM through the submissions of EIM base schedules and resource plans,

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<sup>104</sup> *Id.* at 8.

<sup>105</sup> The Commission can revise a proposal filed under section 205 of the FPA as long as the filing utility accepts the change. *See City of Winnfield v. FERC*, 744 F.2d 871, 875-77 (D.C. Cir. 1984). The filing utility is free to indicate that it is unwilling to accede to the Commission's conditions by withdrawing its filing.

provide CAISO information regarding the reserved use of the transmission system and interties and any changes to transmission capacity, and communicate information regarding planned and unplanned outages and derates. With the exception of matters addressed further below, we also find that Puget has described and justified the responsibilities of transmission customers with respect to the EIM, such as the requirements to provide outage and derate data and initial registration data to the EIM Entity. Such information is necessary to ensure that CAISO has the most accurate information possible and thereby support the reliable operation of the EIM. We find that Puget's revisions will allow it to receive the information it needs to manage EIM operations and conduct accurate settlements for its customers.

78. With respect to transmission operations, Puget's proposed revisions governing transmission operations provide sufficient explanation as to how Puget will facilitate the provision of transmission capacity needed to effectuate EIM Transfers on Puget's system. Further, with respect to EIM operations, we find that Puget's proposed revisions will work to ensure that EIM operations do not infringe upon Puget's reliability obligations as a balancing authority. These proposed revisions will ensure that Puget will remain responsible for its NERC and WECC obligations, maintaining appropriate operating reserves and sufficient reserves for its obligations under its reserve sharing group agreements, processing e-Tags and managing schedule curtailments at the interties, in addition to managing real-time flows within system operating limits on all transmission facilities within its BAA.

79. We will address certain aspects of Puget's proposal that have been contested by various intervenors and accept certain provisions, subject to condition, as discussed further below. We find the aspects of Puget's proposal that are not contested or specifically discussed herein are considered just and reasonable and therefore accepted for filing, effective as requested by Puget.

80. We find good cause to grant waiver of the Commission's maximum 120-day notice requirement, 18 C.F.R. § 35.3(a)(1) (2015), to permit Puget's requested effective dates. Accordingly, we grant Puget the effective dates requested in Attachment C, including the requested effective date of May 1, 2016, the requested effective date of July 25, 2016 or seven days prior to the start of parallel operations for the proposed revisions related to actual implementation of the EIM, and the requested effective date of October 1, 2016 or the implementation date of Puget's participation in the EIM, whichever is later. We also grant Puget's request for waiver of the requirements of Part 35 of the Commission's regulations, 18 C.F.R. Part 35 (2015). EIM charges are market-driven, and are based on EIM provisions in section 29 of CAISO's tariff, which

the Commission has accepted. This waiver is consistent with the Commission's waiver of the requirements of Part 35 in the PacifiCorp and NV Energy EIM orders.<sup>106</sup>

## **2. Operating Reserves Charges and Payments**

### **a. Puget's Proposal**

81. Puget states that an EIM Transfer out of the Puget BAA to the CAISO BAA will result in Puget receiving a payment for operating reserves, while an EIM transfer into the Puget BAA from the CAISO BAA will result in a charge to Puget for operating reserves. Puget proposes to sub-allocate to customers both payments and charges for operating reserves.<sup>107</sup>

82. Specifically, Puget proposes to sub-allocate operating reserves payments to Puget EIM participating resources on a ratio share of the volume of energy from the resources that support exports because, according to Puget, Puget EIM participating resources supply the energy for EIM Transfers out of the Puget BAA, as well as the corresponding operating reserves. Puget states that this proposal is consistent with NV Energy's OATT. In contrast, Puget proposes to sub-allocate charges for operating reserves to transmission customers on the basis of Measured Demand. Puget explains that this approach differs from the sub-allocation method used in NV Energy's OATT, which sub-allocates operating reserve charges based on a transmission customer's positive load imbalance ratio-share, which is the ratio of the transmission customer's positive load imbalance amount relative to the sum of the positive load imbalances of all other transmission customers with such load imbalance amounts for the operating hour.<sup>108</sup>

83. Puget asserts that its proposal to sub-allocate operating reserves charges based on Measured Demand is appropriate because there are various factors that can cause EIM Transfers from the CAISO BAA into the Puget BAA that may be unrelated to a particular customer's load imbalance or to overall load imbalance in Puget's BAA. For example, Puget explains that in a circumstance where locational prices in the CAISO BAA are lower than those in the Puget BAA, an EIM participating resource could receive a dispatch instruction from CAISO to reduce output such that, even if Puget's BAA is perfectly in balance, an EIM transfer out of the CAISO BAA into the Puget BAA would

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<sup>106</sup> PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 83; NV Energy EIM Order, 151 FERC ¶ 61,131 at P 87.

<sup>107</sup> Puget Transmittal Letter at 40 (citing Proposed OATT Attachment O § 8.12).

<sup>108</sup> *Id.* at 40-41 (citing NV Energy OATT Attachment P, § 8.12.2).

occur and result in charges for operating reserves. Puget asserts that, in such an instance, it would not be appropriate or consistent with cost causation principles to identify all customers with a positive load imbalance and allocate the operating reserve charges to such customers on a *pro rata* basis because the import of CAISO energy was driven entirely by economics and not by any positive load imbalance within the BAA.<sup>109</sup>

**b. Comments**

84. Powerex asserts that Puget's proposed sub-allocation of Operating Reserve *payments* mirrors the methodology approved by the Commission in NV Energy's EIM Attachment P, and therefore has no objection to this payment sub-allocation methodology. However, Powerex states that Puget's proposed methodology for the sub-allocation of operating reserves *charges* differs from that in NV Energy's OATT in that Puget proposes to sub-allocate these charges to all Puget transmission customers on the basis of Measured Demand, which includes metered load plus exports, in the Puget BAA.<sup>110</sup>

85. Powerex believes that proposed section 8.12.2 of Attachment O will result in duplicative charges for operating reserves under Puget's existing OATT and is therefore not just and reasonable. Powerex states that Puget's proposal to sub-allocate operating reserves charges on the basis of Measured Demand is identical to PacifiCorp's original proposal, which the Commission rejected. There, Powerex explains, the Commission ordered PacifiCorp to remove the provision sub-allocating operating reserves charges until PacifiCorp could determine a just and reasonable methodology.<sup>111</sup> Powerex further notes that PacifiCorp has not yet proposed a revised methodology, and does not currently sub-allocate these charges.

86. Powerex identifies three problems with Puget's proposed sub-allocation. First, Powerex argues that Puget's transmission customers will face duplicative charges for operating reserves because transmission customers already are subject to charges for operating reserves under Puget's existing Schedules 5 and 6, and Puget does not propose any changes to these existing schedules. Second, Powerex states that EIM Transfers into the Puget BAA reduce the required operating reserves that must be carried in the Puget BAA, and therefore may reduce Puget's cost of meeting its operating reserves

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<sup>109</sup> *Id.* at 41.

<sup>110</sup> Powerex Comments at 6 (citing *PacifiCorp*, 148 FERC ¶ 61,240, at PP 8, 32-34 (2014)).

<sup>111</sup> *Id.* at 9 (citing *PacifiCorp*, 148 FERC ¶ 61,240 at PP 32-34).

requirements. According to Powerex, it is improper for Puget to pass on to Puget load and exports all of the costs of the increased operating reserves carried in the CAISO BAA associated with EIM Transfers from the CAISO BAA, while the savings of reduced operating reserves carried in the Puget BAA will not be passed through.<sup>112</sup> Third, Powerex states that Puget's proposed section 8.12.2 of Attachment O is flawed and inconsistent with Commission precedent in that it makes no provision to exempt self-supply customers from the allocation of CAISO-imposed operating reserves charges, in contrast with Puget OATT Schedules 5 and 6, which permit transmission customers to self-supply all or a portion of their reserve requirements and thereby avoid paying Schedules 5 and 6 charges.<sup>113</sup> Powerex asserts that Commission Order Nos. 888 and 890 require that transmission providers permit their customers to self-supply operating reserves or purchase from a third party.<sup>114</sup> Accordingly, Powerex argues, any structure that Puget proposes that would preclude self-supply of Schedules 5 and 6 services is inconsistent with Commission precedent.<sup>115</sup>

87. Bonneville also objects to Puget's proposal to sub-allocate operating reserves charges incurred under section 29.11(n)(2) of CAISO's tariff based on Measured Demand. Bonneville asserts that Puget should be required to sub-allocate operating reserve charges based on a transmission customer's relative load imbalance compared to other customers with load imbalance during the hour.<sup>116</sup> According to Bonneville, Puget is attempting to equate the costs and benefits of decremental capacity with operating

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<sup>112</sup> *Id.* at 10.

<sup>113</sup> *Id.* at 11.

<sup>114</sup> *Id.* (citing Order No. 888 at 31,716; *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, at P 888 (Order No. 890), *order on reh'g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009); *NorthWestern Corp.*, 137 FERC ¶ 61,248, at PP 28, 29 (2011), *reh'g denied*, 140 FERC ¶ 61,020, at P 16 (2012); *Portland Gen. Elec. Co.*, 96 FERC ¶ 61,247, at 61,980-81 (2001); *ISO New England, Inc.*, 91 FERC ¶ 61,311, at 62,068-69 (2000), *order on reh'g*, 95 FERC ¶ 61,384 (2001), *order on reh'g and clarification*, 96 FERC ¶ 61,228 (2001), *order on clarification*, 98 FERC ¶ 61,173 (2002)).

<sup>115</sup> *Id.* at 12.

<sup>116</sup> Bonneville Comments at 3-4.

reserves in order to socialize the cost of operating reserves, even though only transmission customers with positive load imbalances benefit from such reserves. Bonneville states that transmission customers whose loads are in balance do not benefit from increased operating reserves under CAISO's tariff, and are not responsible for the costs of increased operating reserves. Therefore, Bonneville argues, those customers should not pay the costs of such reserves. Bonneville points out that NV Energy's tariff recognizes this and allocates the costs of operating reserves to those customers with a positive load imbalance. Bonneville asserts that the Commission should require Puget's tariff to do the same.<sup>117</sup>

**c. Puget's Answer**

88. Puget states that CAISO's operating reserves charges are designed to assign the cost of any incremental reserves that must be carried by CAISO to backstop generation that is dispatched for EIM Transfers out of CAISO to the sink BAA. Puget explains that the various EIM Entities have not developed a consistent approach to sub-allocating these reserve charges and payments from CAISO. According to Puget, the fact that all four current and future EIM Entities have developed different approaches to sub-allocating CAISO operating reserve charges and payments illustrates that there can be more than one just and reasonable rate and indicates that this issue raises difficult questions.<sup>118</sup>

89. Puget asserts that sub-allocating operating reserves charges on the basis of Measured Demand will allocate costs in a manner that is at least roughly commensurate with benefits, noting that Bonneville acknowledges that all transmission customers may benefit from Puget EIM participating resources decrementing capacity in favor of lower priced energy from another BAA in the event of an EIM Transfer into the Puget BAA for economic reasons. However, Puget notes, Bonneville would prefer that Puget assign the full cost of operating reserves associated with that lower priced energy solely to those transmission customers that have a positive load imbalance during the hour—even if the EIM Transfer occurs only for economic reasons and not because the Puget BAA in aggregate has a positive load imbalance. Thus, Puget argues Bonneville's comments are not in line with the cost allocation principle that the beneficiary should pay.<sup>119</sup>

90. In response to Powerex's argument that an EIM Entity should not be permitted to sub-allocate operating reserves charges at all without passing along the corresponding

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<sup>117</sup> *Id.* at 4.

<sup>118</sup> Puget Answer at 6-7.

<sup>119</sup> *Id.* at 7.

“savings,” Puget states that Powerex’s argument relies on the faulty premise that EIM Transfers into the Puget BAA reduce the Puget’s cost to comply with its obligation to maintain reserves under Reliability Standard BAL-002-WECC-2.<sup>120</sup> Puget argues that the cost of spinning and supplemental reserves is the cost of the generation capacity needed for these capacity products during peak conditions. Puget explains that the demand charges for OATT Schedules 5 and 6 reflect this by requiring transmission customers to purchase an amount of spinning reserves under Schedule 5 equal to a percentage of the customer’s reserved transmission capacity (for point-to-point service), or a percentage of the customer’s monthly coincident peak network load (for network service customers), plus a percentage of the installed capacity of a generating resource (including designated network resources) identified as the “source” in the transmission customer’s transmission schedule. Puget states that these billing determinants reflect peak usage scenarios. Accordingly, Puget states that it will not realize any long-term savings from intra-hour EIM energy transfers during select hours that temporarily reduce the amount of generation in the Puget BAA because Puget must still bear the full fixed cost of the generation capacity Puget maintains to supply contingency reserves during peak conditions. Therefore, Puget states that the Commission should permit Puget to sub-allocate operating reserve charges to customers in a manner that reflects the benefits all customers receive from lower-priced energy imports from CAISO during periods when participating resources in the Puget BAA are more expensive.<sup>121</sup>

**d. Commission Determination**

91. We accept Puget’s proposal for sub-allocation of operating reserves payments. The operating reserves payments are a result of energy being exported from Puget into CAISO under the EIM; therefore, it is just and reasonable that those resources that are providing the energy to be exported, namely, Puget EIM participating resources, share proportionally in the receipt of operating reserves payments that reflect *pro rata* allocation.

92. However, with respect to Puget’s proposal for sub-allocation of operating reserves charges, we find that Puget has not shown its proposal to sub-allocate operating reserves charges based on Measured Demand to be just and reasonable. Puget has not adequately demonstrated that Measured Demand would either benefit from or cause imbalance energy transfers from California to Puget under the EIM, such that sub-allocating operating reserves charges to Measured Demand is appropriate. We are not convinced by Puget’s claim that “all customers benefit from reduction of locational prices that will

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<sup>120</sup> *Id.* at 8.

<sup>121</sup> *Id.* at 8-9.

result from the CAISO imports.” Puget has not explained in any detail how the benefits of EIM Transfers from CAISO will flow to Measured Demand, in scenarios where EIM Transfers from CAISO to Puget are needed for non-economic reasons (e.g., the EIM Transfer is needed to serve the positive load imbalance of one or more customers).<sup>122</sup> Accordingly, we find that Puget has not shown its proposal to sub-allocate operating reserves charges based on Measured Demand to be just and reasonable. As such, our acceptance of Puget’s filing is subject to the condition that Puget submit a compliance filing, within 30 days of the date of this order, removing its proposal to sub-allocate operating reserves charges to Measured Demand. We note that Puget may propose an alternate method of sub-allocating operating reserves charges in its compliance filing or at a later date. As we are directing Puget to remove this aspect of its proposal, we need not address Powerex’s arguments on this issue.

### **3. EIM Administrative Charges**

#### **a. Puget’s Proposal**

93. Puget states that it will incur administrative charges from CAISO, and proposes a new Schedule 1A to sub-allocate the EIM administrative charges to all transmission customers on the basis of Measured Demand. Puget states that its proposal is consistent with the Commission’s approval of a similar schedule for NV Energy, and also consistent with the Commission’s determination in the PacifiCorp EIM Order that all transmission customers cause an EIM Entity to incur CAISO’s EIM administrative charges and should pay according to their volumetric use of the EIM Entity’s system as determined by Measured Demand.<sup>123</sup>

#### **b. Comments**

94. Bonneville asserts that loads and resources that are telemetered out of Puget’s BAA should not be subject to EIM Administrative charges under Puget’s proposed new Schedule 1A. According to Bonneville, these loads and resources are not taking imbalance service from Puget, so they should not be exposed to EIM Administrative charges. Bonneville also argues that telemetered resources and loads are not part of the basis for the EIM Administrative charge to Puget because they are not considered a part of the EIM Entity BAA, and consequently they should not receive a sub-allocation of such charges.<sup>124</sup> Accordingly, Bonneville requests that the Commission require Puget to

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<sup>122</sup> Puget Transmittal Letter at 41.

<sup>123</sup> *Id.* at 30 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 170).

<sup>124</sup> Bonneville Comments at 3.

revise Schedule 1A of its OATT to exempt telemetered loads from EIM administrative charges.

**c. Puget's Answer**

95. In response to Bonneville's argument, Puget states that it agrees with the principle that loads and resources telemetered out of Puget's BAA should not be charged for EIM administrative charges under Schedule 1A of the Puget OATT, or any other EIM charges sub-allocated on the basis of Measured Demand. Puget states that it plans to clarify this in its pending EIM Business Practice Manual, as this is a topic appropriately reserved for the EIM Business Practice Manual under the Commission's "rule or reason" and is consistent with PacifiCorp and NV Energy's OATT revisions.<sup>125</sup>

**d. Commission Determination**

96. We find that Puget's proposal to create a new Schedule 1A to sub-allocate the EIM administrative charges to all transmission customers on the basis of Measured Demand is just and reasonable, as well as consistent with previously accepted OATT provisions filed by PacifiCorp and NV Energy.<sup>126</sup> Given that all transmission customers cause Puget to incur CAISO's EIM administrative charges, it is reasonable that these customers will contribute to the payment of these charges commensurate with their use of Puget's system on the basis of Measured Demand. We generally agree with Bonneville that loads and resources telemetered out of Puget's BAA should be exempt from EIM Administrative charges, as these loads and resources are physically located in Puget's BAA, but do not take imbalance service from Puget and are operated by other BAAs through agreements setting forth the dynamic transfer arrangements. However, we do not find it necessary for Puget to revise Schedule 1A to explicitly provide for this exemption.

97. In its answer, Puget notes that it plans to clarify in its EIM Business Practice Manual that it will not charge loads and resources telemetered out of Puget's BAA for EIM administrative charges assessed under Schedule 1A of the Puget OATT and will not sub-allocate to these loads and resources any EIM charges that are sub-allocated on the basis of Measured Demand. Puget is not proposing to set forth a charge or rate for loads and resources telemetered out of Puget's BAA, but rather is seeking to provide further clarity and explanation regarding the treatment of these loads and resources. It would not be reasonable to require Puget to set forth in its OATT a list of all parties who are not

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<sup>125</sup> Puget Answer at 13 (citing *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 16 (2008)).

<sup>126</sup> See PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 170.

subject to each specific provision. Thus, we find that Puget's EIM Business Practice Manual is an appropriate place for Puget to include information on the treatment of resources and loads telemetered out of its BAA for purposes of EIM administrative charges.

98. Furthermore, we note that the transferring of a load or resource out of a BAA and into another BAA is implemented through an independent agreement, with negotiated rates, terms, and conditions, between all the involved BAAs, which is filed with the Commission. Because of the unique, customer-specific nature of transferring loads or resources, which are arranged by negotiation between the relevant parties, there may be instances in which the parties make certain arrangements under the agreements with respect to various charges or rates that would not be possible for Puget to capture in its OATT without losing the flexibility these parties may need to tailor their individualized agreements.

**4. Allocation of Flexible Ramping Constraint Charges and Power Balance Infeasibility Pricing**

**a. Puget's Proposal**

**i. Flexible Ramping Constraint Charges**

99. According to Puget, CAISO determines the flexible ramping requirement for each EIM Entity BAA based on the demand forecast change across consecutive intervals, demand forecast error, and energy production variability.<sup>127</sup> CAISO enforces this requirement, when necessary, as a constraint within the market optimization. This ensures that the commitment and dispatch of resources provide sufficient ramping capability for dispatch in the subsequent dispatch interval.

100. Puget proposes to sub-allocate any charges from CAISO for the flexible ramping constraint costs to transmission customers on the basis of Measured Demand.<sup>128</sup> Puget argues that its use of a Measured Demand allocator for flexible ramping constraint costs ensures that those customers benefitting from the reliability of the transmission system also are responsible for sharing the costs incurred in maintaining that level of reliability.<sup>129</sup>

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<sup>127</sup> See CAISO Tariff, § 29.34(m).

<sup>128</sup> Puget Transmittal Letter at 35.

<sup>129</sup> *Id.* at 35-36 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*,

(continued...)

101. Puget contends that this approach is consistent with the approach authorized by the Commission for PacifiCorp and NV Energy.<sup>130</sup> Puget also notes that the Commission directed PacifiCorp and NV Energy to submit reports to the Commission within 15 months after their entry into the EIM analyzing whether continued use of the Measured Demand allocation is appropriate for the flexible ramping constraint charge and whether those entities would have sufficient operational data to use the 75/25 allocation factor used by CAISO.<sup>131</sup> Puget states that, on February 1, 2016, PacifiCorp submitted its report and analysis of the flexible ramping constraint cost allocation, and concluded that the use of its current Measured Demand allocation continues to be appropriate for the flexible ramping constraint allocations.<sup>132</sup> According to Puget, PacifiCorp found that the 75/25 allocation used by CAISO was more complex, required additional data, increased the risk of calculation errors, and lengthened invoice processing if PacifiCorp were to sub-allocate flexible ramping constraint charges to individual generators with daily gross negative supply deviations. Puget states that PacifiCorp's analysis indicated that the increased benefits of changing the flexible ramping constraint charge allocation were very small and insignificant.<sup>133</sup>

102. Puget proposes to track PacifiCorp's and NV Energy's OATT language by sub-allocating flexible ramping constraint charges on the basis of Measured Demand, explaining that it believes there is value in maintaining a consistent approach to sub-allocation of flexible ramping constraint charges. Puget asserts that it will reevaluate the sub-allocation of flexible ramping constraint charges if the Commission issues an order in response to the PacifiCorp Flexible Ramping Constraint Report, a future similar

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117 FERC ¶ 61,237, at P 23 (2006)).

<sup>130</sup> *Id.* at 36 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at P 184; NV Energy EIM Order, 151 FERC ¶ 61,131 at P 213).

<sup>131</sup> CAISO allocates flexible ramping constraint 75 percent to hourly Measured Demand (which consists of metered load and exports), and 25 percent to daily gross negative supply deviations by generators as a result of a settlement accepted by the Commission. *See Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,012 (2012).

<sup>132</sup> Puget Transmittal Letter at 36 (citing PacifiCorp, Letter Regarding Energy Imbalance Market, Docket No. ER14-1578-000, at 1 (filed Feb. 1, 2016) (PacifiCorp Flexible Ramping Constraint Report)).

<sup>133</sup> *Id.* (citing PacifiCorp Flexible Ramping Constraint Report at 3).

report from NV Energy, or if the Commission approves a new flexible ramping product proposed by CAISO.<sup>134</sup>

**ii. Power Balance Infeasibility Pricing**

103. In CAISO's real-time market, if energy offers are insufficient to match demand, CAISO's software will relax the power balance constraint.<sup>135</sup> In such cases, the software utilizes a pricing parameter set to the maximum energy bid price specified in CAISO tariff section 39.6.1.1 of \$1,000/MWh for price-setting purposes. That is, market participants and their customers are exposed to the prices derived in this manner either through LMPs or Load Aggregation Point pricing, as appropriate.<sup>136</sup>

**b. Comments**

104. Bonneville asserts that transmission customers should not be allocated the costs of penalties that Puget incurs, including power balance infeasibility penalties and flexible ramping constraint penalties. Bonneville argues that Puget is the only entity that has control over whether power balance infeasibilities and flexible ramping constraint infeasibilities occur in its portion of the EIM. Furthermore, Bonneville asserts, Puget owns, controls, or has contractual rights to the majority of the generation in its BAA and can elect to offer this generation into the EIM.<sup>137</sup> Bonneville argues that transmission customers have no control over Puget's resource decisions and cannot designate EIM Available Balancing Capacity. According to Bonneville, the EIM has decreased the ability of transmission customers to manage their imbalance by requiring load and resource data much further in advance of the operating hour than was required prior to

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<sup>134</sup> *Id.* at 37.

<sup>135</sup> CAISO Tariff, § 27.4.3.4 (providing that “[i]n the R[eal] T[ime] M[arket], in the event that [e]nergy offers are insufficient to meet the CAISO Forecast of CAISO Demand, the S[ecurity] C[onstrained] U[nit] C[ommitment] and S[ecurity] C[onstrained] E[conomic] D[ispatch] software will relax the system energy-balance constraint. In such cases the software utilizes a pricing parameter set to the maximum Energy Bid price specified in Section 39.6.1.1 for *price-setting* purposes.” (emphasis added)).

<sup>136</sup> As discussed above, Puget proposes to settle imbalance energy under Schedules 4 and 4R using the Load Aggregation Point price, and generator imbalance energy under Schedule 9 using LMP prices.

<sup>137</sup> Bonneville Comments at 5.

implementation of the EIM.<sup>138</sup> In addition, Bonneville notes that transmission customers pay Puget to hold sufficient resources by purchasing regulation and frequency response service under OATT Schedule 3, and that Puget should thus pay the penalty rate if it is not fulfilling its obligation to provide the necessary resources under the service.<sup>139</sup>

105. Bonneville claims that Puget has several opportunities to remedy a power balance infeasibility by correcting its EIM base schedule resource plan.<sup>140</sup> Bonneville notes that increases in Measured Demand from forecasted demand do not cause a power balance infeasibility penalty because the CAISO's validations test supply balance against the demand forecast, not Measured Demand.<sup>141</sup> Bonneville further contends that transmission customers cannot deviate from the EIM base schedule because the operating hour for the base schedule is in the future, not real time. Accordingly, Bonneville asserts that transmission customers should not be subject to penalties resulting from Puget's actions with respect to power balance infeasibilities. With respect to the flexible ramping constraint penalty, Bonneville states that a transmission customer's base schedule and uninstructed deviation from the base schedule is not an input to the flexible ramping constraint capacity requirement and is not considered in the EIM Entity's flexible ramping capacity test. Thus, Bonneville claims that Puget is in control of whether it meets this requirement, not transmission customers.<sup>142</sup>

106. Bonneville states that effective penalties promote healthy and efficient markets. However, Bonneville argues, it is not just and reasonable for Puget to pass these penalties on to its transmission customers. Bonneville asserts that penalizing Puget's transmission customers violates the basic tenet of cost causation, because the transmission customers have no control over whether the penalty is incurred. Furthermore, Bonneville asserts that an effective penalty must be borne by the entity in control of the behavior a penalty

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<sup>138</sup> *Id.* at 6.

<sup>139</sup> *Id.* at 8.

<sup>140</sup> Specifically, Bonneville explains, CAISO will validate the sufficiency of Puget's EIM base schedule resource plan three times (after the close of the Day Ahead Market at 10:00 AM the day prior to the trading day, upon initial submission of the EIM base schedules at T-75, and after interim revisions to the EIM base schedules at T-55), each time providing notice to Puget as to whether the EIM base schedule is sufficient. *Id.* at 6.

<sup>141</sup> *Id.* at 7.

<sup>142</sup> *Id.*

is intended to incentivize, in order for the penalty to be effective. According to Bonneville, a more effective penalty structure would support a better-functioning market. Instead of charging customers these penalties, Bonneville argues that transmission customers should be charged the last market bid price prior to the penalty being imposed.<sup>143</sup>

107. Bonneville states that it has not argued in any of the EIM Available Balancing Capacity dockets that the transmission customer should be exempt from paying LMPs or imbalance charges under Schedules 4 and 9. According to Bonneville, if a transmission customer schedules poorly, imbalance charges under Schedules 4 and 9 should apply to the transmission customer. Bonneville asserts that the transmission customer has control over that behavior and it makes sense for the transmission customer to incur those charges. Bonneville clarifies that it is only the penalties themselves, over which Bonneville asserts the transmission customer has no control, that Bonneville believes should be borne by the EIM Entity alone and not its transmission customers.<sup>144</sup>

**c. Puget's Answer**

108. Puget asserts that Bonneville's arguments ignore both the relevant Commission precedent and the basic market principles underlying it. Puget states that, in the February 10 Filing, Puget specifically noted that both PacifiCorp and NV Energy also sub-allocate any flexible ramping constraint charges from CAISO to their transmission customers based on Measured Demand and that it would revise this methodology if the Commission instructs PacifiCorp and NV Energy to revise their approach or if CAISO changes its flexible ramping constraint charge allocation.<sup>145</sup>

109. Puget asserts that the Commission has considered variations of Bonneville's comment in other cases and found them without merit.<sup>146</sup> Puget notes that the Commission previously found that the charges CAISO will assess to PacifiCorp were an integral part of CAISO's Security-Constrained Economic Dispatch and that it would be reasonable to allocate those charges on the basis of Measured Demand, as CAISO does. Further, Puget states that the Commission indicated in its order accepting CAISO's Available Balancing Capacity proposal that the tariff changes approved in that

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<sup>143</sup> *Id.* at 9.

<sup>144</sup> *Id.*

<sup>145</sup> Puget Answer at 14.

<sup>146</sup> *Id.*

proceeding would assess appropriate charges for actual scarcity situations, while at the same time significantly reducing the number of power balance infeasibilities.<sup>147</sup>

**d. Commission Determination**

110. As an initial matter, we disagree with Bonneville that transmission customers should not be allocated the costs of penalties that Puget incurs, including power balance infeasibility penalties and flexible ramping constraint penalties. What Bonneville characterizes as “penalties,” distinct from the EIM product, are actually charges associated with integral parts of the EIM product. Although we understand Bonneville’s concern that transmission customers are not fully responsible for Puget’s actions that may lead to power balance infeasibilities, the combined actions of both load and generation contribute to the needs of the system; thus, the resulting charges and pricing stemming from these actions are appropriately reflected in LMP and Load Aggregation Point pricing to market participants and transmission customers, as applicable.

111. We accept Puget’s proposal for allocating flexible ramping constraint charges. We find that the power balance infeasibility pricing and the flexible ramping constraint charges are integral elements of the EIM design and therefore integral to the pricing of the EIM product. The power balance infeasibility pricing comes into effect when there are not enough bids to serve the demand for imbalance and creates the incentives for resources to bid into the market and, thus, attract enough bids to meet demand. The flexible ramping constraint helps ensure that there is enough ramping to serve expected imbalance needs in the next relevant market interval, therefore supporting the reliability of the system.

112. Moreover, in the time that has passed since the previous orders accepting PacifiCorp and NV Energy’s similar method for allocating these charges, the Commission has seen evidence<sup>148</sup> that allocating flexible ramping constraint charges in the manner proposed here is not significantly different from the way that CAISO allocates these charges in its own BAA, and thus presents a simplified alternative to allocating these charges to those that benefit from the additional reliability that the flexible ramping constraint provides to the system.

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<sup>147</sup> *Id.*

<sup>148</sup> PacifiCorp concludes that its analysis (based on two sample months from 2015) shows that the benefits of changing flexible ramping constraint charge allocation methodologies are insignificant. *Id.* (citing PacifiCorp Flexible Ramping Constraint Report at 3).

113. We note, however, that the EIM is still a relatively new and developing market and thus expect that Puget will continue to review its method of allocation as it gains experience with the EIM and examines information from other EIM Entities, and CAISO makes refinements to its market processes and products. Accordingly, we direct Puget to submit an informational report to the Commission within 15 months after Puget's entry into the EIM, addressing: (1) whether continuing to allocate flexible ramping constraint charges on the basis of Measured Demand remains appropriate; (2) whether Puget has sufficient operational data to use the 75/25 allocation factor used by CAISO; and (3) if Puget contends that it does not have sufficient operational data at such time to use the 75/25 allocation factor, whether it would be feasible for Puget to collect that data.

## 5. Dispatch of Available Balancing Capacity

### a. Puget's Proposal

114. Puget proposes language in its OATT to implement CAISO's EIM Available Balancing Capacity solution, which the Commission accepted in the December 17 Order in Docket No. ER15-861-006.<sup>149</sup> Puget states that its proposal is virtually identical to that proposed by PacifiCorp and NV Energy.<sup>150</sup> Puget explains that, consistent with PacifiCorp and NV Energy, it has proposed language in section 4.1.3.4 of Attachment O to its OATT that specifically permits Puget to determine whether additional capacity dispatched from a Non-Participating Resource in Puget's BAA is needed for the BAA or whether Puget has already taken (or will take) other actions to meet capacity needs. As an example, Puget describes a scenario where, following a contingent event, it may deploy contingency reserves rather than relaying a CAISO Dispatch Instruction to deploy EIM Available Balancing Capacity from a resource. Puget specifies that, in exercising its discretion, it will follow all market requirements to notify the market as soon as possible when diverging from an EIM Available Balancing Capacity dispatch instruction and will continue to comply with all NERC and WECC reliability requirements as a balancing authority.<sup>151</sup>

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<sup>149</sup> December 17 Order, 153 FERC ¶ 61,305.

<sup>150</sup> The Commission accepted PacifiCorp's and NV Energy's filings to implement CAISO's Available Balancing Capacity Solution on March 4, 2016. *PacifiCorp*, 154 FERC ¶ 61,171 (2016); *Nevada Power Co.*, 154 FERC ¶ 61,170 (2016).

<sup>151</sup> Puget Transmittal Letter at 23; *see* Proposed OATT Attachment O, § 4.1.3.4.

**b. Comments**

115. Bonneville argues that the Commission should require Puget to provide more clarity regarding the specific circumstances in which Puget is not required to follow CAISO's dispatch instruction.<sup>152</sup> According to Bonneville, Puget's proposed OATT language provides no guidance as to when there may be legitimate circumstances where Puget decides to not deploy EIM Available Balancing Capacity. Bonneville asserts that allowing Puget to ignore CAISO's dispatch instructions anytime it believes it has a reason, even if that reason has nothing to do with reliability, is far too open-ended. Bonneville further argues that Puget does not require the unlimited ability not to dispatch EIM Available Balancing Capacity because it already has discretion to include capacity from a resource as EIM Available Balancing Capacity by designating the capacity as EIM Available Balancing Capacity in the EIM Entity Resource Plan. Accordingly, Bonneville asserts that if Puget believes it may need more flexibility to determine how to deploy a resource, it should not designate it as EIM Available Balancing Capacity.<sup>153</sup>

**c. Puget's Answer**

116. Puget states that, while it appreciates Bonneville's concerns, recently issued orders from the Commission on PacifiCorp and NV Energy's proposals on this issue—upon which Bonneville provided nearly identical comments—offer clarity on this issue. Puget also notes that CAISO made clear in its Available Balancing Capacity Solution filing that the EIM Entity retains dispatch authority over the resources providing Available Balancing Capacity, and the Commission acknowledged this in its December 17 Order. Thus, Puget argues that Bonneville's concerns are misplaced, and are contrary to Commission precedent.<sup>154</sup>

**d. Commission Determination**

117. We are not persuaded by Bonneville's assertions that Puget should provide additional specificity regarding the circumstances in which it has discretion to decline to follow EIM Available Balancing Capacity instructions from CAISO. We also disagree with Bonneville's argument that such discretion is unnecessary. As the balancing authority, Puget is responsible for maintaining reliability in its BAA, regardless of Puget's participation in the EIM. Accordingly, Puget may need to take an alternative

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<sup>152</sup> Bonneville Comments at 9-10.

<sup>153</sup> *Id.* at 10.

<sup>154</sup> Puget Answer at 15-16.

action to maintain reliability in its BAA independent of a Dispatch Operating Point it may receive from CAISO. Furthermore, the Commission recognized that the EIM Entity retains dispatch authority over the resources providing Available Balancing Capacity<sup>155</sup> in the December 17 Order.<sup>156</sup> We find that this discretion is appropriate given the voluntary nature of the EIM market design and Puget's reliability responsibilities in its BAA.

**6. Forecast Data from Transmission Customers**

**a. Puget's Proposal**

118. Unlike PacifiCorp and NV Energy, Puget explains that it proposes to require its transmission customers without load or generation in the Puget BAA to submit transmission customer base schedules forecasting expected intrachange under Attachment O, section 4.2.4.4.<sup>157</sup> Puget explains that intrachange is an e-Tagged energy transfer that is entirely within the Puget BAA. According to Puget, customers submitting intrachange schedules could produce an imbalance independent of any load or generation within the Puget BAA. Puget states that such imbalance would not be reflected in the imbalance settled by Puget with load or generation in the BAA, which submit their own base schedules and settle imbalance according to deviations between such schedule and metered output or demand. Puget proposes to settle as instructed imbalance energy any imbalance that results from a transmission customer's intrachange e-Tag. Puget avers that this deviation from the previously accepted tariff language appropriately assigns the imbalance costs and payments associated with intrachange tag changes to the responsible transmission customers, consistent with cost causation.<sup>158</sup>

**b. Comments**

119. Powerex seeks clarification regarding why it is necessary for Puget to require intrachange forecast data from wheeling customers as part of the base schedule, whereas such data is not needed in the PacifiCorp or NV Energy BAAs.<sup>159</sup> Powerex explains that

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<sup>155</sup> CAISO, Tariff Amendment in Compliance with July 20, 2015, Order, Docket No. ER15-861-003, at 22 and Attachment C at 30 (filed Aug. 19, 2015).

<sup>156</sup> December 17 Order, 153 FERC ¶ 61,305 at P 72.

<sup>157</sup> Puget Transmittal Letter at 34; Proposed OATT Attachment O, §§ 8.1, 4.2.4.4.

<sup>158</sup> Puget Transmittal Letter at 34.

<sup>159</sup> Powerex Comments at 14.

in PacifiCorp and NV Energy, wheeling customers are required to submit interchange forecast data to the EIM Entity that includes data on import interchange which balances to the transmission customers export interchange.<sup>160</sup> Powerex asserts that neither PacifiCorp nor NV Energy require the provision of intrachange forecast data. Powerex states that Puget's proposal would make a fundamental change to the data submission requirement the Commission has previously reviewed and approved for transmission customers that submit schedules in the external portion of the CAISO's EIM footprint. Powerex states that this departure from the data submission requirements imposed by other EIM Entities has the potential to affect all entities that seek to wheel power across multiple BAAs in the EIM footprint, and it is unclear why it is necessary. Powerex also notes that Puget proposes to define interchange more expansively than the other two EIM Entities, to include "[e]-[T]agged energy transfers from, to or *through* the [Puget] BAA or other BAAs, not including EIM Transfers."<sup>161</sup> In contrast, Powerex asserts, neither PacifiCorp nor NV Energy include energy transfers *through* the BAA in their definitions of interchange.

120. Powerex states that Puget's wheeling customers should have a full understanding of the possible sources of imbalance charges applied to their wheel-through schedules after EIM implementation, and the differences between those charges and ones imposed by other EIM Entities. Powerex therefore requests that the Commission direct Puget to provide additional information on these deviations from the established EIM framework.<sup>162</sup>

**c. Puget's Answer**

121. Puget explains that this deviation from the previously accepted tariff provisions of NV Energy and PacifiCorp is designed to address a relatively narrow circumstance that exists in Puget's BAA and may or may not exist in other EIM Entity BAAs. Puget states that when a power marketer acting as a purchasing selling entity acquires power at the bus-bar of a generator located in Puget's BAA and acquires Puget transmission to deliver power to a customer within the Puget BAA, imbalance associated with that transaction

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<sup>160</sup> *Id.* at 12 (citing PacifiCorp OATT Attachment T § 4.2.4.4; NV Energy OATT Attachment P § 4.2.4.4).

<sup>161</sup> *Id.* at 14 (citing Proposed OATT § 1.15E (emphasis added)).

<sup>162</sup> *Id.*

should be settled as instructed imbalance energy with the power marketer responsible for creating the e-Tagged intrachange transfer.<sup>163</sup>

122. With respect to Powerex's request for clarification about Puget's proposed definition of interchange, Puget states that the addition of the word 'through' is intended to signal that interchange includes wheel-through transactions, in addition to imports to serve load in the Puget BAA or exports of generation in the Puget BAA. Puget states that wheel-through customers will only be subject to imbalance charges when changes are made to the interchange e-Tag after T-57 minutes prior to the start of the operating hour.<sup>164</sup>

**d. Commission Determination**

123. As an initial matter, we accept Puget's proposed definition of interchange, which includes the word "through." We find that Puget has sufficiently justified its rationale for proposing this definition, and that it is consistent with industry usage of the term "interchange."<sup>165</sup> While this definition differs from those definitions used by NV Energy and PacifiCorp, we find that Puget has supported its use of this definition, which will provide additional clarity to transmission customers importing, exporting, and wheeling through Puget's BAA as to what their data submission requirements are and how their specific types of transactions will be settled.

124. We recognize that transmission customers can submit intrachange transactions that could produce imbalances under certain circumstances that are not caused by a generator or a load, i.e. even when the generator or load has submitted an accurate transmission customer base schedule.<sup>166</sup> Since any imbalance energy associated with these intrachange transactions would be supplied by the EIM, we accept Puget's proposal to settle any imbalance associated with intrachange transactions as instructed imbalance energy.<sup>167</sup>

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<sup>163</sup> Puget Answer at 9-10.

<sup>164</sup> *Id.* at 11.

<sup>165</sup> The NERC Glossary defines interchange as energy transfers that cross Balancing Authority boundaries. Glossary of Terms Used in NERC Reliability Standards, [http://www.nerc.com/files/glossary\\_of\\_terms.pdf](http://www.nerc.com/files/glossary_of_terms.pdf) (Updated March 18, 2016).

<sup>166</sup> In its answer, Puget provides an example of such a scenario. Puget Answer at 10.

<sup>167</sup> Puget proposes to settle instructed imbalance energy as the real-time dispatch

125. However, while we support Puget's desire to have as much data as possible to aid in EIM operations, we find it unreasonably burdensome to require that forecast data be provided in the form of a base schedule from transmission customers without load or generation in the Puget BAA. Under Puget's proposal, wheeling transmission customers without load or generation in the Puget BAA are required to comply with all the requirements of section 4.2 of Attachment O to Puget's OATT, including the requirement that such customers submit base schedules at T-7 days, in the same manner as transmission customers with or without Puget EIM participating resources and transmission customers with load in the Puget BAA.<sup>168</sup> Given the nature of market participation by wheeling customers and power marketers, the submittal of base schedules at T-7 days may not be feasible. For example, certain transmission customers without load or generation in the Puget BAA, such as wheeling customers or power marketers, may make the decision to transact based on CAISO's day-ahead market results. These transmission customers would not be able to reasonably anticipate their schedules as far as seven days in advance. Accordingly, we direct Puget to submit a compliance filing, within 30 days of the date of this order, revising its OATT to allow transmission customers without load or generation in Puget's BAA to submit forecast data after the seven-day initial base schedule submission deadline.

126. We also note that there is an inconsistency between Puget's representation in its transmittal letter as to how its proposal will capture intrachange imbalances caused by customers who are not wheeling through the Puget BAA and do not have load or generation, and the revisions Puget proposes in its OATT. In its transmittal letter and the examples provided in its answer, Puget represents that it proposes to require transmission customers without load or resources in Puget's BAA to submit forecast data on expected intrachange transactions to capture possible imbalances on transactions conducted by power marketers entirely within the Puget BAA.<sup>169</sup> However, under proposed section 4.2

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or 15-minute market price at the applicable PNode depending on the nature and timing of the imbalance. Proposed OATT, § 1.15D.

<sup>168</sup> Proposed OATT Attachment O, section 4.2 describes the types of transmission customers that must comply with the information requirements listed in Attachment O, section 4. Based on this provision, wheeling transmission customers must comply with proposed OATT Attachment O, section 4.2.4.5.1, which requires transmission customers to submit base schedules at T-7 days.

<sup>169</sup> See, e.g., Puget Answer at 10 ("Where a power marketer is acting as a purchasing-selling entity and (i) acquires power at the bus-bar of a generator located in the P[uget] BAA (i.e., the March Point generation facility); and (ii) acquires P[uget] transmission to deliver that power to, for example, one of P[uget's] 449 Customers, also

(continued...)

of Attachment O to Puget's OATT (Transmission Customer Responsibilities), the following customers must comply with the information requirements set forth in section 4.2: (1) transmission customers with Puget EIM participating resources; (2) transmission customers with a non-participating resource; (3) transmission customers with load within Puget's BAA; and (4) transmission customers wheeling *through* Puget's BAA (emphasis added). In proposed section 4.2.4.4, Puget states that it will require base schedules, including intrachange and interchange data, from its customers without load and generation in the Puget BAA. Based on the language of section 4.2, the only customers without load or generation in the Puget BAA that will be subject to this requirement are those transmission customers wheeling *through* Puget's BAA. Accordingly, in accepting Puget's proposal subject to condition, we emphasize that the tariff language on file would not require intrachange forecast data from all customers without load or generation who are making intrachange transactions (i.e., not wheeling *through* the Puget BAA, but making transactions on power that is sourced and sunk *within* the Puget BAA). To the extent Puget seeks to gather intrachange forecast data from transmission customers other than those listed under section 4.2, such as non-wheeling customers making intrachange transactions, it must submit a filing under FPA section 205 to modify its OATT.

7. **Mechanisms for Making Transmission Capacity Available for EIM Transfers**

a. **Puget's Proposal**

127. Puget's proposed OATT revisions include provisions addressing transfer capability on Puget's transmission system. Puget describes in its transmittal letter its plan for use of external transmission systems to effectuate EIM Transfers.

128. With regard to transfer capability on Puget's transmission system, Puget proposes to make transmission capacity available for EIM Transfers using both Interchange Rights Holder donations and ATC.<sup>170</sup> Puget states that the Commission has previously accepted each of these mechanisms. However, Puget explains that its proposal differs slightly from PacifiCorp's in that Puget has added non-substantive clarifying language to section 5.3 of Attachment O, which clarifies that amounts made available using ATC shall be in addition to any amounts made available by Puget Interchange Rights Holders

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within the P[uget] BAA, then any imbalance associated with that transaction should be settled as [i]nstructed [i]mbalance [e]nergy with the power marketer responsible for creating the e-[T]agged intrachange transfer.”).

<sup>170</sup> Puget Transmittal Letter at 24; Proposed OATT Attachment O, §§ 5.2, 5.3.

pursuant to Attachment O, section 5.2.<sup>171</sup> Puget states that it has also chosen not to adopt the language PacifiCorp included in section 23.4 of its OATT stipulating that donations of transmission rights to the EIM by Interchange Rights Holders are not subject to the reassignment provisions of section 23 of the OATT. Instead, Puget has elected to rely on the existing provisions of section 23 of the OATT, which on their face do not apply to the provision of transmission capacity by an Interchange Rights Holder to the EIM.<sup>172</sup>

129. With regard to transfer capability on external systems, Puget explains that, unlike PacifiCorp and NV Energy, Puget's BAA lacks direct transmission interconnections with any other EIM Entity's BAA. Accordingly, while Puget can use Interchange Rights Holder donations and e-Tagged ATC to effectuate transfers into and out of its BAA on Puget transmission facilities in response to CAISO dispatch instructions, it will require the use of intervening transmission facilities owned by Bonneville to access other BAAs in the EIM. Puget explains that, to effectuate EIM exports across the Bonneville transmission system to and from the PacifiCorp West BAA, Puget submitted and Bonneville approved long-term firm redirect requests on the Bonneville system to redirect 300 MW of capacity from existing reservations. Puget states that collectively, these redirect requests dependably provide 300 MW for EIM Transfers between Puget's BAA and the PacifiCorp West BAA in both directions. According to Puget, these redirected reservations will also allow for the use of some level of dynamic transfer capability.<sup>173</sup>

130. Puget states that the availability of dynamic transfer capability to accommodate five-minute CAISO dispatches will be determined by Bonneville. Puget explains that it is working with Bonneville, PacifiCorp, and CAISO to optimize transmission functionality and flexibility in the EIM consistent with Bonneville's other obligations as a transmission owner and operator, including five-minute market dynamic transfer capability. In the meantime, Puget asserts that its planned use of transmission on Bonneville's system in accordance with its rights under the Bonneville transmission tariff and business practices, including its use of 300 MW of bi-directional firm transmission across Bonneville's system, will be sufficient to enable Puget to realize the benefits identified in its Benefits Analysis' low transfer assumption test case.<sup>174</sup>

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<sup>171</sup> Puget Transmittal Letter at 25; Proposed OATT Attachment O, § 5.2.

<sup>172</sup> Puget Transmittal Letter at 25.

<sup>173</sup> *Id.*

<sup>174</sup> *Id.* at 26.

**b. Comments**

131. CAISO states that transmission service is essential for operation of the EIM and that Puget has accounted for this under its proposed OATT amendments. CAISO notes that Puget's OATT amendments include a non-firm transmission service option, which ensures that any resource within Puget's BAA will have the opportunity to participate if it maintains a transmission service agreement as a condition of participation.<sup>175</sup> According to CAISO, participating resources must meet Puget's transmission eligibility requirements, and Puget has committed to provide CAISO all the information associated with its transmission system to allow CAISO to accurately model Puget's transmission system and perform its market operator function.<sup>176</sup> CAISO further notes that Puget's proposal not to assess incremental transmission charges for transmission use related to the EIM is the same as that approved by the Commission for PacifiCorp and NV Energy's participation in the EIM. CAISO states that it supports both the use of ATC and Interchange Rights for EIM Transfers between BAAs included in the EIM area, and that Puget's proposed OATT revisions appropriately reflect and implement the provisions of CAISO's tariff that address such transfers.<sup>177</sup>

132. Powerex states that Puget's proposal alone is not sufficient to enable Puget's full participation in the EIM. Powerex states that Puget's described arrangement to use reservation on a third party's transmission system for EIM Transfers between EIM Entity BAAs will represent something very different from the previously approved Interchange Rights Holder and ATC approaches that Puget currently seeks Commission approval to use on its own facilities. According to Powerex, by necessity, any Commission order regarding revisions to Puget's OATT to facilitate its participation in the EIM should not address transmission rights on a third party's system, which must be consistent with applicable third party tariff provisions. Therefore, Powerex states that it is premature for the Commission to make any findings that could conflict with future tariff revisions that may arise out of the ongoing Bonneville stakeholder process or other related efforts. Powerex requests that the Commission make explicit in its order on Puget's February 10 Filing that its findings apply only to transmission availability mechanisms on Puget's transmission facilities, and reserve any findings regarding use of third party systems until such time as, and to the extent that, those issues are directly before the Commission.<sup>178</sup>

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<sup>175</sup> CAISO Comments at 5.

<sup>176</sup> *Id.* at 6-7.

<sup>177</sup> *Id.* at 7.

<sup>178</sup> Powerex Comments at 17.

**c. Puget's Answer**

133. According to Puget, it is unclear why Powerex's requested clarification is necessary, because its OATT revisions, including those related to transmission capacity for EIM Transfers, are limited to the use of capacity on Puget's system. Puget explains that it does not offer transmission service under its OATT on the facilities of Bonneville or any other transmission owner and notes that it does not claim to do so in its February 10 Filing. Puget thus states that issues related to third party transmission systems are outside the scope of this proceeding.<sup>179</sup>

**d. Commission Determination**

134. We accept Puget's proposed OATT revisions allowing for the use of ATC and Interchange Rights Holders' donations to make transmission capacity on Puget's transmission system available for EIM Transfers. Puget's proposed revisions set forth the process by which ATC on Puget's system may be made available for EIM Transfers, including the timing associated with the submission of e-Tags describing the ATC available for EIM Transfers, the information required on the e-Tags, and clarify that ATC is in addition to any amounts of capacity donated by Interchange Rights Holders. The revisions also sufficiently detail the process by which Interchange Rights Holders may notify Puget of capacity they are willing to donate to the EIM, including the timing of the submission of e-Tags and the information Interchange Rights Holders must include on the e-Tags.<sup>180</sup>

135. With respect to Powerex's comment that the Commission should not make any findings that may conflict with a third party's tariff, we note that our findings here are limited to the mechanisms to utilize ATC and Interchange Rights Holder donations on Puget's system, which are appropriately set forth in Puget's OATT revisions. While we find that Puget's plan to use 300 bi-directional MW of long-term firm transmission from its redirect requests approved by Bonneville appears to provide Puget a necessary means of exporting and importing EIM Transfers into other EIM Entity BAAs, and thus is reasonable in concept and provides for Puget's ability to participate in the EIM, we are not addressing any proposals to effectuate those requests under Puget's OATT or making any judgments as to other third-party tariffs.

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<sup>179</sup> Puget Answer at 12.

<sup>180</sup> Proposed Tariff Attachment O, §§ 5.2, 5.3.

## 8. Financial Settlement of Losses

### a. Puget's Proposal

136. Puget proposes to use the Load Aggregation Point price to financially settle transmission losses, pursuant to new OATT Schedules 12 and 12A.<sup>181</sup> Puget proposes to require transmission customers to settle losses financially to the exclusion of in-kind replacement. According to Puget, the timing lag associated with in-kind replacement inherently allows for mismatches in value between the energy at the time it was lost and energy at the time it was replaced, including on-peak and off-peak pricing differences. Puget asserts that the Commission has determined that requiring financial settlement of losses to the exclusion of in-kind replacement is just and reasonable and consistent with Order Nos. 888 and 890.<sup>182</sup>

### b. Comments

137. ICNU requests that the Commission require Puget to continue to provide Schedule 449 customers with the option to purchase losses as a component of their energy contracts with third-party suppliers, in addition to financial settlement at EIM Load Aggregation Point price.<sup>183</sup> ICNU argues that it is not just and reasonable to remove the option to purchase losses through third-party contracts because this is inconsistent with previous Commission orders for other EIM Entities, and Puget cannot demonstrate any potential harm from allowing such an option. In response to Puget's argument that providing this option would give customers the opportunity to exploit on-peak and off-peak pricing, ICNU states that there is no reason to believe that customers subject to Schedule 449 would do so. ICNU argues that because the customers under Schedule 449 are retail customers, as opposed to load serving entities or generators, they do not have the same opportunity to exploit temporal pricing differences to the detriment of Puget or its transmission customers.<sup>184</sup> ICNU concludes that even if the Commission agrees with Puget that it is reasonable not to provide an option for settling losses through third-party contracts, there is a rational basis for treating customers subject to Schedule 449 differently from other customers, and that Puget

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<sup>181</sup> Puget Transmittal Letter at 32-33.

<sup>182</sup> *Id.* at 33 (citing *Ariz. Pub. Serv. Co.*, 143 FERC ¶ 61,280 at P 28).

<sup>183</sup> ICNU Protest at 4.

<sup>184</sup> *Id.* at 5-6.

should be required to revise Sections 15.7 and 28.5 of Puget's OATT to provide this option to Schedule 449 customers.<sup>185</sup>

**c. Puget's Answer**

138. Puget states that ICNU does not explain whether the losses that ICNU seeks to purchase from its competitive retail energy suppliers to return to Puget as an in-kind replacement would be returned in real time or during a later period. Puget asserts that ICNU disregards Puget's concerns about temporal pricing differences by claiming that Schedule 449 customers do not have the capability or desire to modify energy deliveries to strategically return losses during lower priced periods. Puget states that its concern about this timing lag is grounded in operational experience and the timing lag leads to inconsistent and unpredictable results for transmission providers. According to Puget, this is why the Commission has previously permitted transmission providers to require financial settlement to the exclusion of in-kind replacement. Puget states that its election to require financial settlement is firmly grounded in Commission precedent and should be accepted as just and reasonable.<sup>186</sup>

139. Given that the Commission has long held that there can be more than one just and reasonable rate, Puget argues that ICNU's observation that PacifiCorp and NV Energy permit in-kind replacement of losses under their OATTs is not controlling. With respect to ICNU's argument that there is a rational basis for treating Schedule 449 customers differently, Puget argues that one of the precepts of open access transmission service is that similarly situated customers must be treated the same on a comparable, nondiscriminatory basis. Puget claims that ICNU has not provided any reason why Schedule 449 customers are not similarly situated to Puget's wholesale OATT customers. Accordingly, Puget asserts that the Commission should accept Puget's proposal to require the financial settlement of losses to the exclusion of in-kind replacement and reject ICNU's request.<sup>187</sup>

**d. Comments in Support of Puget's Answer**

140. APS supports Puget's proposal to settle losses financially to the exclusion of in-kind replacement. APS states that it submitted its own EIM-related OATT revisions on February 12, 2016, in which it also proposes to require financial settlement of losses

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<sup>185</sup> *Id.* at 6.

<sup>186</sup> Puget Answer at 4.

<sup>187</sup> *Id.* at 5-6.

to the exclusion of in-kind replacement.<sup>188</sup> APS states that it agrees with Puget that the timing lag associated with in-kind replacement allows for mismatches in value between the energy at the time it was lost and energy at the time it was replaced. APS asserts that this timing lag can be exploited to take advantage of pricing differences or other temporal variations in the price of energy. Further, APS asserts, the Commission has previously found requiring financial settlement of losses to the exclusion of in-kind replacement to

be just and reasonable and consistent with Order Nos. 888 and 890.<sup>189</sup> Finally, APS notes that even though PacifiCorp and NV Energy allow for physical replacement of losses, the Commission has long held that there can be more than one just and reasonable rate.<sup>190</sup>

**e. Commission Determination**

141. We accept Puget's proposed revisions addressing the settlement of losses. The use of the Load Aggregation Point or LMP pricing, as appropriate, is a just and reasonable charge for such losses as it represents the real-time cost of the energy needed to meet those losses. Further, we agree with Puget that it is reasonable to remove the option to settle losses by in-kind replacement, i.e., where losses in one delivery period are accounted for by supplying additional energy during another period. Furthermore, the Commission has previously found that Order Nos. 888 and 890<sup>191</sup> do not preclude the use of financial settlement of losses to the exclusion of in-kind replacement of losses. The Commission has also stated that the specific means of accounting for losses is left to the transmission provider to propose.<sup>192</sup>

142. In regard to ICNU's argument that an option for in-kind replacement of losses should be made available only to Schedule 449 customers, we find that there is no

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<sup>188</sup> APS Comments at 2 (citing *Ariz. Pub. Serv. Co.*, EIM OATT Filing, Docket No. ER16-938-000 (filed Feb. 12, 2016), at proposed Schedule 12 (“The Transmission Customer must financially settle for Real Power Losses by reimbursement...”).

<sup>189</sup> *Ariz. Pub. Serv. Co.*, 143 FERC ¶ 61,280 at P 28 (“We find that Order Nos. 888 and 890 do not preclude the use of a financial settlement mechanism to the exclusion of in-kind replacement.”).

<sup>190</sup> APS Comments at 2.

<sup>191</sup> See Order No. 888, FERC Stats. & Regs. ¶ 31,036 at PP 217-218; see also section 15.7 of the Order No. 890 *pro forma* OATT.

<sup>192</sup> *Ariz. Pub. Serv. Co.*, 143 FERC ¶ 61,280 at P 28.

meaningful distinction between those customers and other Puget transmission customers with respect to transmission losses. Regardless of whether a customer intends to take advantage of temporal differences in the price of losses, replacement in-kind will likely result in losses from one period at a given price being replaced by losses in a different period at a different price.

## **9. External Resource Participation**

### **a. Puget's Proposal**

143. Puget proposes to use the same EIM eligibility requirements for external resources as approved by the Commission for PacifiCorp and NV Energy.<sup>193</sup> Specifically, under Puget's proposed Attachment O, section 3.2.1, a resource that is not physically located inside the metered boundaries of the Puget BAA is eligible to become an Puget EIM Participating Resource, if it implements a pseudo-tie into the Puget BAA, arranges for transmission service over any third-party system to transfer the power to a Puget BAA intertie boundary point, and secures transmission service on Puget's transmission system.<sup>194</sup>

144. Puget does not propose to permit external resources to participate in the EIM through intertie bidding in its BAA. Puget requests that the Commission defer the issue of intertie bidding to the ongoing CAISO stakeholder process. Puget states that it is involved in the CAISO stakeholder process, and recognizes the broader market complexities that make this issue better suited for CAISO's stakeholder process, rather than Puget's own stakeholder process or independently proposed tariff revisions. Puget states that it is currently focused on satisfying the readiness criteria and managing a smooth entry into the existing market construct. According to Puget, adding the complexity of intertie bidding prior to Puget's targeted go-live date may create unnecessary difficulties.<sup>195</sup>

### **b. Comments**

145. CAISO supports Puget's request to defer further consideration of intertie bidding to CAISO's stakeholder process because this issue involves broader market design

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<sup>193</sup> Puget Transmittal Letter at 20 (citing PacifiCorp EIM Order, 147 FERC ¶ 61,227 at PP 130-131; NV Energy EIM Order, 151 FERC ¶ 61,131 at P 185).

<sup>194</sup> *Id.*

<sup>195</sup> *Id.* at 21.

considerations that CAISO will address through its policy development stakeholder process in the future. CAISO states that it plans to clarify this condition in its upcoming EIM Year 1 Enhancements Phase II tariff filing with the Commission.<sup>196</sup>

146. Bonneville states that Puget and CAISO have expressed willingness to explore allowing resources from other BAAs to participate in the EIM 15-minute market, and notes that Puget has asked the Commission to defer this issue to CAISO's stakeholder process.<sup>197</sup> While Bonneville states that this is an acceptable approach for the time being, it asks the Commission to strongly encourage Puget, CAISO, and other EIM Entities to increase participation in the EIM through intertie bidding as soon as possible. According to Bonneville, greater participation in the EIM will increase competition that will lead to a better functioning market. Bonneville further asserts that allowing intertie bidding will also make the EIM 15-minute market consistent with the CAISO 15-minute market, which already allows for such bidding.<sup>198</sup>

**c. Commission Determination**

147. We find that Puget's proposal to require that external resources use a pseudo-tie arrangement to electrically move from the external BAA to Puget's BAA is a reasonable means of allowing external resources to participate in the EIM at this time. Through pseudo-ties, resources physically located outside of the Puget BAA may be transferred and operated as though they are located within the BAA.<sup>199</sup> Importantly, in a pseudo-tie arrangement, the attaining BAA—in this case, Puget—obtains responsibility for the load or resource, including operational control of a resource and is able to dispatch it as though the resource is physically located within Puget's BAA. Further, this proposal is similar to arrangements in PacifiCorp's and NV Energy's EIM tariffs that the Commission has previously accepted.<sup>200</sup> We therefore accept Puget's proposal. We continue to believe that allowing external resources to participate in CAISO's 15-minute

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<sup>196</sup> CAISO Comments at 5.

<sup>197</sup> Bonneville Comments at 10-11.

<sup>198</sup> *Id.* at 11.

<sup>199</sup> While this is true of many pseudo-tie arrangements, we note that arrangements may differ as transfer agreements are independent, unique agreements, with negotiated rates, terms, and conditions, between all the involved BAAs.

<sup>200</sup> See PacifiCorp EIM Order, 147 FERC ¶ 61,227 at PP 130-131; NV Energy EIM Order, 151 FERC ¶ 61,131 at P 185.

market is an expansion of the scope of the EIM and is not necessary for Puget's proposal to be found just and reasonable and not unduly discriminatory. However, we believe that permitting external resources to participate has the potential to expand the benefits of the EIM for all customers, and we encourage Puget to explore this issue with CAISO, the other EIM Entities, and stakeholders.

The Commission orders:

(A) Puget's proposed tariff revisions are hereby accepted for filing, subject to condition, to be effective as of the dates requested, as discussed in the body of this order.

(B) Puget is hereby directed to submit a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

(C) Puget is hereby directed to submit an informational report to the Commission regarding flexible ramping constraint costs within 15 months after Puget's entry into the EIM, as discussed in the body of this order.

(D) Puget is directed to notify the Commission of the actual effective date of the OATT revisions within five business days of their implementation, in an eTariff submittal using Type of Filing Code 150 – Report.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.