**ENERGY IMBALANCE MARKET BUSINESS PRACTICE (“EIM BP”)**

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**ENERGY IMBALANCE MARKET BUSINESS PRACTICE (“EIM BP”)**

1. Introduction

This EIM BP sets forth the detailed processes and procedures necessary to comply with the provisions of Puget Sound Energy Inc.’s (“PSEI”) Open Access Transmission Tariff (“OATT”) to implement the EIM. Unless otherwise expressly indicated herein, terms used in this EIM BP have the same meaning as set forth in PSEI’s OATT. Any provision of the PSEI OATT that may have been summarized or repeated in this EIM BP is only to aid understanding. To the extent an inconsistency may exist between this EIM BP and the PSEI OATT, the PSEI OATT shall govern. This EIM BP will apply to all Transmission Customers and Interconnection Customers, as applicable with new and existing service agreements, as well as all transmission customers with legacy transmission agreements that expressly incorporate by reference the applicability of PSEI’s OATT.

1. Communication with the PSEI EIM Entity

All electronic communication with PSEI as the EIM Entity related to applications, registration, certification, and changes in information under the PSEI OATT and this EIM BP shall be sent to EIM@pse.com.

All physically delivered communications shall be sent to the following address:

Puget Sound Energy, Inc.

355 110th Avenue NE, EST-06E

Bellevue, WA 98009-9734

Attn: Manager, Transmission Policy and Contracts

1. PSEI EIM Participating Resource Application and Processing

3.1 Application Form and Deposit

To become a PSEI EIM Participating Resource, an applicant must submit a completed application along with a processing deposit of $1,500 to the PSEI EIM Entity. The application form is attached to this EIM BP as Appendix A. Applicants shall submit the completed application form by e-mail and mail a hard copy of the completed application along with a $1,500 non-refundable processing deposit as set forth in Section 3 of this EIM BP. Technical requirements relevant to PSEI EIM Participating Resources will be posted, and updated periodically, on the PSEI OASIS website.

3.2 Processing the Application

Upon receipt of the completed application and processing deposit, the PSEI EIM Entity will date-stamp and begin processing the application. The PSEI EIM Entity will make reasonable efforts to acknowledge, by e-mail, receipt of materials and information submitted by the applicant within five (5) business days of receipt. All notifications to the applicant will be sent to the contact designated in the application (“primary contact”) to receive notices. Within forty-five (45) calendar days of the PSEI EIM Entity’s application receipt date-stamp, absent any extensions to the processing period as set forth below, the PSEI EIM Entity will make a determination to accept or reject the application.

3.2.1 Technical Review

During the 45-calendar day processing period, the PSEI EIM Entity will schedule a meeting with the applicant to discuss and review the technical details provided in the application, including resource characteristics, metering and telemetry configuration, and network model representation as outlined in greater detail in the technical specifications available on the PSEI OASIS website.[[1]](#footnote-1) Additional meetings may be required to discuss specific characteristics of the applicant’s resource. During this process the PSEI EIM Entity will notify the applicant of modifications to the resource that may be required to meet the PSEI EIM Entity’s and Market Operator’s (“MO”) standards for certification as an EIM Participating Resource. The PSEI EIM Entity will also provide an initial assessment of the options for the applicant to provide meter data to the MO based on the meter and telecommunications configuration and ownership and the applicant’s election to perform the duties of either a Scheduling Coordinator Metered Entity (“SCME”) or a CAISO Metered Entity (“CAISOME”) as set forth by the MO.

If any of the applicant’s submitted information changes at any time during the application process, the applicant shall notify the PSEI EIM Entity of such changes by e-mail to EIM@pse.com as soon as possible. The PSEI EIM Entity may, in its discretion, extend the 45-day processing period as reasonably required to process any revised or updated information. If the PSEI EIM Entity determines a need to extend the 45-day processing period, the PSEI EIM Entity will make reasonable efforts to notify the applicant’s primary contact by e-mail of the extension prior to the end of the initial processing period. The PSEI EIM Entity will provide the length of the extension granted in this e-mail. Any additional processing period extensions will be communicated to the applicant’s primary contact by e-mail.

In addition, prior to the end of the 45-day processing period, the PSEI EIM Entity may request additional information in order to attempt to resolve either any minor deficiencies in the application or any technical issues related to the resource(s). If the PSEI EIM Entity requests additional information from the applicant, the PSEI EIM Entity may, in its discretion, extend the 45-day processing period to allow for deficiencies to be resolved before making a determination to accept or reject the application. Any additional processing period extensions will be communicated to the applicant.

Extensions of the 45-day processing period will not exceed six (6) months from the PSEI EIM Entity’s initial application receipt date-stamp. If the additional requested information is not provided or if the deficiencies are not resolved within that six (6) -month period, the PSEI EIM Entity will deem the application rejected and notify the applicant’s primary contact by e-mail.

3.2.2 Application Status Notification

The PSEI EIM Entity will notify the applicant’s primary contact of acceptance or rejection of the application by the e-mail specified in the application or as updated in accordance with Section 3.2.1 of this EIM BP. If the application is accepted, the PSEI EIM Entity will also notify the MO. If the application is rejected, the PSEI EIM Entity will, in its notice to the applicant’s primary contact, state the grounds for rejection. Upon the applicant’s request, the PSEI EIM Entity may provide guidance as to how the applicant may cure the grounds for rejection. Following a rejection that is not cured, an applicant may re-apply and begin a new application process by re-submitting its application and submitting a new $1,500 processing deposit.

1. PSEI EIM Participating Resource Certification

4.1 Verification and Certification Process

Upon the PSEI EIM Entity’s acceptance of an application for a PSEI EIM Participating Resource, the PSEI EIM Entity will begin its certification process, during which the PSEI EIM Entity will make a final determination on any modifications or upgrades to the resource that are required to meet PSEI’s standards for PSEI EIM Participating Resource certification as specified in PSEI’s OATT. If the resource requires modifications or upgrades as determined by the PSEI EIM Entity pursuant to the requirements specified in PSEI’s OATT, the PSEI EIM Entity will communicate its determination by e-mail to the resource’s contact provided in the application. The PSEI EIM Entity will meet with the applicant as necessary to discuss the details of any required modifications or upgrades to the resource. Upon mutual agreement between the parties of such modifications or upgrades, the PSEI EIM Entity will draft any necessary agreements to facilitate the implementation of the modifications or upgrades.

If the applicant has elected to perform the duties of a SCME and the PSEI EIM Entity owns the required revenue meters and related telecommunications equipment located at the resource, the applicant may elect to use the PSEI EIM Entity-owned infrastructure to facilitate the PSEI EIM Participating Resource Scheduling Coordinator’s provision of settlement quality meter data to the MO. The applicant will enter into a meter data services agreement with the PSEI EIM Entity, with such agreement defining the roles and responsibilities of the parties to facilitate the PSEI EIM Participating Resource Scheduling Coordinator’s provision of settlement quality meter data to the MO.

Upon the PSEI EIM Entity’s verification that the required resource modifications and upgrades are complete and meet its standards for PSEI EIM Participating Resource certification as specified in PSEI’s OATT, the PSEI EIM Entity will request confirmation from the MO that the resource has met the MO’s criteria to become a PSEI EIM Participating Resource as set forth in PSEI’s OATT. Upon receiving confirmation from the MO, the PSEI EIM Entity will certify that the applicant has demonstrated that it has met all the requirements to become a PSEI EIM Participating Resource and will notify both the MO and the applicant’s primary contact by e-mail that the applicant is certified. Upon certification, the applicant is eligible to participate in the EIM as a PSEI EIM Participating Resource.

4.2 Change in Applicant’s Information

If any of the applicant’s submitted information changes at any time during the certification process, the applicant shall notify the PSEI EIM Entity of such changes by e-mail to EIM@pse.com as soon as possible, consistent with the timing below. Upon certification and thereafter, pursuant to PSEI’s OATT, a certified PSEI EIM Participating Resource shall notify the PSEI EIM Entity of any changes in information submitted as part of the application and certification processes, consistent with the timing below. Within fifteen (15) calendar days of such change in any information, the applicant shall re-submit its application form along with a clear description of the information that has changed to the PSEI EIM Entity by e-mail to EIM@pse.com. The PSEI EIM Entity will make reasonable efforts to send a notice of receipt of the updated information to the applicant’s primary contact by e-mail within five (5) calendar days of receiving the information. The PSEI EIM Entity may schedule a meeting or conference call with the applicant to review the technical details provided in the updated application and discuss how any changed technical details affect the technical requirements originally agreed to by the parties. The PSE EIM Entity will endeavor to obtain further mutual agreement between the parties as necessary thereafter.

1. Registration Data Submission and Updates
	1. Initial Registration Data

5.1.1 PSEI EIM Participating Resource

A Transmission Customer with a PSEI EIM Participating Resource shall submit to the MO its initial registration data[[2]](#footnote-2) as required by the MO according to the MO’s process for EIM Participating Resource registration data submission. The Transmission Customer shall deliver to the PSEI EIM Entity by e-mail to EIM@pse.com a copy of its registration information submitted to the MO within five (5) calendar days of submitting the registration data to the MO.

5.1.2 Non-Participating Resource

A Transmission Customer with a Non-Participating Resource shall submit to the PSEI EIM Entity the information required by the MO. The Transmission Customer will complete the Non-Participating Resource Data Template (“NPRDT”), attached to this EIM BP as Appendix B, and submit the completed NPRDT to the PSEI EIM Entity by e-mail at EIM@pse.com. The Transmission Customer will also complete a SQMD Plan Template, as set forth in Appendix E to this EIM BP, and submit the completed SQMD Plan Template along with any required associated documentation to the PSE EIM Entity by e-mail at EIM@pse.com.

The PSEI EIM Entity will make reasonable efforts to acknowledge receipt of the data within five (5) calendar days by replying to the Transmission Customer’s e-mail address by which the data was submitted. The PSEI EIM Entity will endeavor to coordinate with Transmission Customers to complete the NPRDT and with the MO as applicable and appropriate concerning the MO’s technical requirements. The PSE EIM Entity will also endeavor to reach mutually agreeable solutions with Transmission Customers to resolve issues related to the information required on the NPRDT. The PSEI EIM Entity will be responsible for submitting the Transmission Customer’s registration data for all Non-Participating Resources to the MO consistent with PSEI’s OATT.

5.1.3 New Resources

New generation resources within the PSEI EIM Entity’s BAA capable of producing five (5) MW or greater, whether PSEI EIM Participating Resources or Non- Participating Resources, must be accurately modeled in both the PSEI EIM Entity’s and MO’s network models. All required operational characteristics data of the resource must be submitted in accordance with the MO’s network model deployment schedule a minimum of eight (8) months prior to energization. Generation Interconnection Customers with new generation resources interconnecting to PSEI’s transmission system will be notified of the operational characteristics required for modeling and the timing requirements during the generation interconnection process. Transmission Customers interconnecting to transmission systems not owned by PSEI, but within PSEI’s BAA shall a minimum of one (1) year prior to energization email the PSEI EIM Entity at EIM@pse.com and inquire as to the specific operational characteristics required for the new generation resource and as to the specific dates for which information must be submitted based on the MO’s deployment schedule.

* 1. Updates to Registration Data
		1. PSEI EIM Participating Resource

A Transmission Customer with a PSEI EIM Participating Resource shall submit any changes in the submitted registration data to the MO in accordance with the MO’s process for updating EIM Participating Resource registration data. The Transmission Customer shall deliver to the PSE EIM Entity by e-mail to EIM@pse.com a copy of its updated registration information submitted to the MO, within two (2) business days of submitting the updated registration data to the MO. Modifications to the operational characteristics of a Transmission Customer’s PSEI EIM Participating Resource must be accurately modeled in both the PSEI EIM Entity’s and the MO’s network models. Such modifications require a minimum of eight (8) months to implement network model updates prior to taking effect. Transmission Customers planning to make modifications to the operational characteristics of a PSEI EIM Participating Resource shall a minimum of eight (8) months prior to the planned implementation notify the PSEI EIM Entity of the modifications via e-mail to EIM@pse.com so that the PSEI EIM Entity may make a determination as to whether the modifications require network model updates. Transmission Customers unsure of what registration data would be considered an operational characteristic of the resource should inquire with the PSEI EIM Entity by contacting EIM@pse.com.

* + 1. Non-Participating Resource

A Transmission Customer with a Non-Participating Resource has an obligation to submit to the PSEI EIM Entity any change in the submitted registration data. Transmission Customers shall submit any changes in registration data which do not modify the operational characteristics (such as contact information) of the Non-Participating Resource to the PSEI EIM Entity by completing and submitting a new NPRDT by e-mail to EIM@pse.com within fifteen (15) calendar days of the occurrence of such change. The PSEI EIM Entity will make reasonable efforts to notify the Transmission Customer within five (5) calendar days of receipt of the change in registration data by replying to the Transmission Customer’s e-mail address by which the new NPRDT was submitted. The PSEI EIM Entity will be responsible for submitting the Transmission Customer’s change in its registration data for all Non-Participating Resources to the MO. Upon confirmation from the MO that the Transmission Customer’s data has been updated, the PSEI EIM Entity will notify the Transmission Customer by e-mail of the confirmed update. Modifications to the operational characteristics of a Transmission Customer’s Non-Participating Resource must be accurately modeled in both the PSEI EIM Entity’s and the MO’s network models. Such modifications require a minimum of eight (8) months to implement network model updates prior to taking effect. Transmission Customers planning to make modifications to the operational characteristics of a Non-Participating Resource shall notify the PSEI EIM Entity of the impending modifications via e-mail to EIM@pse.com a minimum of eight (8) months prior to the planned implementation so that the PSEI EIM Entity may make a determination as to whether the modifications require network model updates. Transmission Customers unsure of what information on the NPRDT would be considered an operational characteristic of the resource should inquire with the PSEI EIM Entity by contacting EIM@pse.com.

1. Outages

6.1 PSEI EIM Entity Transmission Outages

6.2 PSEI BAA Transmission Owner Outages

6.2.1 Planned Transmission Outages

Transmission owners or operators with facilities located within or adjacent to the PSEI BAA that are Transmission Customers (“Transmission Owners or Operators”) shall report information regarding planned transmission outages to the PSEI EIM Entity. Transmission Owners or Operators shall notify the PSEI EIM Entity’s outage coordination desk of the planned transmission outage by completing a PSE Transmission Outage Request form and by phone to 425-882-4640. The completed PSE Transmission Outage Request form shall be emailed to loadoffice@pse.com or communicated by phone to 425-882-4640 during the hours of 08:30 – 13:30 PPT Monday through Friday excluding holidays. The PSEI EIM Entity will then submit this information to the MO's Outage Management System (“OMS”). Transmission Owners or Operators shall update the planned transmission outage information if there are changes to the transmission outage plan as soon as such changes are known, but no later than two (2) business days before the planned outage day. The PSEI EIM Entity will submit the updates to the MO’s OMS. Notification of planned outages for facilities that are bypassed and have no potential system reliability impact shall be provided two (2) business days before the planned outage day. Notification of planned outages for facilities 115kV or below shall be provided by no later than 12:00 PM [noon] Pacific Prevailing Time (PPT) Monday the two (2) weeks prior to the planned outage week. Notification of planned outages for facilities above 115kV shall be provided at least forty-five (45) days in advance of the planned outage month.

Based on studies performed by the PSE EIM outage coordination team, the PSE EIM Entity will plan and coordinate with Transmission Customers regarding any adjustments or cancellations of transmission outages the PSE EIM Entity determines to be necessary for system reliability. The PSE EIM Entity will inform the Reliability Coordinator accordingly and will submit updates to the MO’s OMS.

6.2.2 Unplanned Transmission Outages

Transmission Owners or Operators shall notify the PSEI EIM Entity of unplanned transmission outages as soon as possible, but no later than thirty (30) minutes after the outage commences. Transmission Owners or Operators shall notify the PSEI EIM Entity’s outage coordination desk of the unplanned outage by telephone at 425-882-4650 Transmission Owners or Operators shall follow up such telephone notification by e-mail to loadoffice@pse.com within two (2) hours after telephone notification. The PSEI EIM Entity will then submit this information to the MO's OMS.

Transmission Owners or Operators shall update the PSEI EIM Entity on the duration of the reported outage as soon as known by contacting the PSEI EIM Entity’s outage coordination desk at 425-882-4640 during the hours of 08:30 – 13:30 PPT Monday through Friday excluding holidays or to 425-882-4650 outside of those days and/or times. Upon receipt of the update, the PSEI EIM Entity will submit the information to the MO’s OMS.

6.3 Generation Outages

Pursuant to PSEI’s OATT, Transmission Customers with PSEI EIM Participating Resources and Transmission Customers with Non-Participating Resources will be required to provide planned and unplanned outage information for their resources (e.g. outages, de-rates, ramp rates).

6.3.1 Planned Generation Outages

Generator owners or operators with facilities located within the PSEI BAA that are Transmission Customers with PSEI EIM Participating Resources and Non-Participating Resources (“Generator Owners or Operators”) shall submit planned generation outage information to the PSEI EIM Entity by no later than 12:00 PM [noon] Pacific Prevailing Time (PPT) Monday two (2) weeks prior to the planned outage week and preferably at least forty-five (45) days in advance of the planned outage month. Generation owners or operators shall notify the PSEI EIM Entity’s outage coordination desk of the planned generation outage by e-mail to generatoroutages@pse.com, using the Generator Outage Form, and by phone to 425-453-4918 during the hours of 08:30 – 13:30 PPT Monday through Friday excluding holidays. The PSEI EIM Entity will then submit this information to the MO’s OMS.

Generator Owners or Operators shall update the planned generation outage information if there are changes to the resource’s generation outage plan as soon as such changes are known by submitting a revised Generator Outage Form by e- mail to generatoroutages@pse.com and by phone to 425-453-4918 during the hours of 08:30 – 13:30 PPT Monday through Friday, but no later than 05:00 AM PPT two (2) days prior to the outage.

Based on studies performed by the PSEI EIM Entity, the PSEI EIM Entity will plan and coordinate with Generators and Transmission Customers regarding any adjustments or cancellations of generation outages the PSEI EIM Entity determines to be necessary for system reliability and will inform the reliability coordinator accordingly. The PSEI EIM Entity will submit updates to the MO’s OMS.

6.3.2 Unplanned Generation Outages

Generator Owners or Operators shall notify the PSEI EIM Entity’s generation operator desk of unplanned generation outages by telephone at 425-453-4981 as soon as possible but no later than thirty (30) minutes after the outage commences. Generator Owners or Operators will follow up such telephone notification by submitting the Generator Outage Request Form by e-mail notification to generatoroutages@pse.com within two (2) hours after telephone notification.

Upon receipt of notification of the unplanned generation outage, the PSEI EIM Entity will submit the outage information to the MO’s OMS. Generator Owners or Operators shall update the PSEI EIM Entity on the duration of the reported outage as soon as such information is known, by contacting the PSEI EIM Entity’s generation operator desk by telephone at 425-453-4981. Upon receipt of the update, the PSEI EIM Entity will submit the information to the MO’s OMS.

In accordance with PSEI’s OATT, Generator Owners or Operators shall notify the PSEI EIM Entity of de-rates equal to or greater than ten (10) MW or 5% of maximum capacity (“PMAX”) (whichever is greater) lasting fifteen (15) minutes or longer as soon as possible, but no later than thirty (30) minutes after the outage commences. Generator Owners or Operators shall notify the PSEI EIM Entity’s generation operator desk of de-rates as provided above by telephone at 425-453-4981. Upon receipt of the de-rate information, the PSEI EIM Entity will submit the de-rate information to the MO’s OMS.

1. Forecasting

No provision herein relieves a Transmission Customer from its forecasting obligations under Schedule 13 of the PSEI OATT.

7.1 Generation Forecast Data

Generation Forecast Data (which is a component of the “EIM Base Schedule” referred to in the MO Tariff) for resources for which Transmission Customers are required to submit such Forecast Data shall consist of an hourly schedule of anticipated generation. Generation Forecast Data shall be submitted for each resource facility or each individual generating unit of the resource based on how the resource is represented in the network model. Non-Participating Resources are represented in the network model based on the manner in which the Transmission Customer submitted the required information in the NPRDT for each resource, as described in Section 6 and Appendix B of this EIM BP. PSEI EIM Participating Resources are represented in the network model based on the Generator Resource Data Template (“GRDT”) submitted by the Transmission Customer to the MO.

7.1.1 Market Operator Generation Forecast Data Submission Tool

Generation Forecast Data will be submitted through the MO’s Base Schedule Aggregation Portal (“BSAP”). Transmission Customers with either PSEI EIM Participating Resources or Non-Participating Resources shall use BSAP to submit generation Forecast Data. Generation Forecast Data must contain the anticipated hourly output (in MW) of the resource facility or individual generating unit for the Operating Hour.

If a Transmission Customer submits changes to its registration data under Section 6.2 of this EIM BP, any generation Forecast Data submitted into BSAP prior to the change in registration information must be resubmitted into BSAP upon confirmation that the MO’s master file has been updated with the revised information.

Transmission Customers with resources or load in the PSE BAA shall submit the initial hourly generation Forecast Data for each hour of the Operating Day seven (7) days in advance. Transmission Customers must submit at least one update to the Transmission Customer Base Schedule by 1000 PPT the day before each Operating Day. Transmission Customers shall submit the proposed final Transmission Customer Base Schedule in BSAP for each resource no later than seventy-seven (77) minutes prior to each Operating Hour (“T-77”). Transmission Customers may modify generation Forecast Data in BSAP until fifty-seven (57) minutes prior to the Operating Hour (“T-57”). As of fifty-five (55) minutes prior to each Operating Hour (“T-55”), the generation Forecast Data for the Operating Hour in BSAP will be considered financially binding. Changes by Transmission Customers to their generation Forecast Data after “T-57” will be subject to imbalance charges. Submission of generation Forecast Data in BSAP by T-57 is required to align with the timing requirements of the Interchange and Intrachange components of the Transmission Customer Base Schedule. If the Transmission Customer fails to enter the expected output value of the resource in BSAP for any individual Operating Hour, BSAP will default to zero (0) MW for that Operating Hour.

Transmission Customers or their Designated Agent(s) must request access for all individual users it requires to have access to BSAP. Transmission Customers with one or more PSEI EIM Participating Resources shall request BSAP access directly from the MO. Transmission Customers with only Non-Participating Resources shall submit access requests to the PSEI EIM Entity by e-mail to EIM@pse.com. The BSAP access request shall include the names, e-mail addresses, and phone numbers for all representatives of Transmission Customers or their Designated Agent(s) that wish to be granted access to BSAP and receive BSAP-related notices.

New resources in the PSEI EIM Entity’s BAA required to submit generation Forecast Data shall submit initial requests for BSAP access no less than sixty (60) days prior to initial synchronization of the resource. All BSAP access requests for initial registration, future registration, or modifications to existing access should be submitted to the PSEI EIM Entity at EIM@pse.com. The PSEI EIM Entity will provide assistance, training, and coordination with the MO as necessary for representatives of Transmission Customers to gain access to and utilize BSAP.

In the event of a BSAP system failure that prohibits data exchange or communications on BSAP, the MO’s Business Practice Manual and PSEI’s OATT, provide for the actions to be taken in the case of a communication failure or other temporary contingency.

If the BSAP system failure lasts for longer than twenty-four (24) hours, Transmission Customers should make best efforts to complete and submit an “Hourly Generation Submittal Form” (Appendix D to this EIM BP) to the PSEI EIM Entity by e-mail to loadoffice@pse.com in order for the PSEI EIM Entity to effectively balance its BAA. The PSEI EIM Entity will notify Transmission Customers of such BSAP system failure by posting a notification to PSEI’s OASIS web site.

The PSEI EIM Entity will review settlements affected for the duration of the BSAP failure to determine settlement impacts and will submit formal settlement disputes to the MO as appropriate or as requested by Transmission Customers pursuant to PSEI’s OATT and Section 10 of this EIM BP.

In the event an individual Transmission Customer experiences an isolated BSAP system issue that prohibits input of data or conveyance of data or communications to the PSEI EIM Entity, the Transmission Customer shall immediately notify the PSEI EIM Entity’s Balancing Desk at 425-882-4650. Upon notification, the Transmission Customer shall make best efforts to complete and submit a new “Hourly Generation Submittal Form” (Appendix D to this EIM BP) to the PSEI EIM Entity by e-mail to loadoffice@pse.com. Upon receipt, the PSEI EIM Entity will make best efforts to timely submit the Transmission Customer’s schedule into BSAP on behalf of the Transmission Customer. This process will continue until the Transmission Customer is able to resume use of the BSAP system.

Should a Transmission Customer fail to enter the expected output value of a resource in BSAP for any individual Operating Hour, BSAP shall default to zero (0) MW for that Operating Hour. Should a Transmission Customer fail to e-Tag the expected value of its load for any individual Operating Hour, imbalance charges shall be applied.

* 1. Interchange Forecast Data

In order to most effectively balance its BAA, the PSEI EIM Entity requests that Transmission Customers engaging in Interchange transactions enter initial e-Tags by T-77 of each Operating Hour. Transmission Customers must submit e-Tags by T-57 of each Operating Hour in order for those transactions to be considered part of the Transmission Customer Base Schedule. *E-Tags in both approved and pending status will be forwarded into BSAP by the PSEI EIM Entity*. The PSEI EIM Entity must submit all forwarded e-Tag information into BSAP by T-55 in order for the e-Tags to be applied to the Transmission Customer Base Schedule. The PSEI EIM Entity requires a minimum of two (2) minutes following the submission of an e-Tag to forward e-Tag information into BSAP. This includes Interchange transactions by Transmission Customers that have no generation or load and are wheeling through PSEI’s BAA.

If, for any reason, e-Tag information is not submitted into the MO’s BSAP application by T- 55, the Interchange will not be included as part of the Transmission Customer Base Schedule.

* 1. Intrachange Forecast Data

Transmission Customers or their Designated Agent(s) are required to provide generation Forecast Data on Intrachange which balances to the Transmission Customer’s anticipated load. If the Transmission Customer has no load, then the Intrachange balances to zero (0) MW. Transmission Customers engaging in Intrachange must submit e-Tags for those transactions by T-57 of each Operating Hour in order for the transactions to be considered a part of the Transmission Customer Base Schedule.

Table 1 – Basic Timing Requirements for the Submission of Forecast Data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Forecast Data Type | Method of Supplying Forecast Data | Initial SubmissionDeadline | Update SubmissionDeadline | Proposed Final Submission Deadline | Final Submission Deadline |
| Generation Forecast Data | BSAP | T-7 days | 10 a.m. before Operating Day | T-77 minutes | T-57 minutes |
| Interchange & Intrachange Forecast Data(Transmission Customers *with* resources or load in PSE BAA) | E-Tags | T-7 days | 10 a.m. before Operating Day | T-77 minutes  | T-57 minutes |
| Interchange Forecast Data(Transmission Customers *without* resources or load in PSE BAA) | E-Tags | Not applicable | Not applicable | T-77 minutes | T-57 minutes |

* 1. Load Component of Base Schedule

PSEI calculates the load component of the Transmission Customer Base Schedule as the sum of the Transmission Customer’s forecast generation, Interchange, and Intrachange. Therefore, Transmission Customers with only load shall submit their Interchange and Intrachange via e-Tag, which is their Transmission Customer Base Schedule. For example, if a customer submits a forecast of ten (10) MW generation, and Interchange export e-tag of four (4) MW, the resulting load component would be six (6) MW (10 MW generation – 4 MW export = 6 MW load component). If a customer with load in the PSE BAA does not own any generation in PSE’s BAA, its resulting load component calculation (Transmission Customer Base Schedule) is the sum of the e-tags at 57 minutes prior to the Operating Hour (T-57) sinking at its load.

* 1. Transmission Customers with Wheels, Imports, or Exports

A transmission customer with a wheel, import or export shall submit Forecast Data, i.e., its e-Tag, including data on all generation and Intrachange within the BAA and data on all Interchange.

* 1. Variable Energy Resource Forecast Data

Transmission Customers or their Designated Agent(s) with Non-Participating Resources which are variable energy resources (“VERs”) shall submit additional generation Forecast Data for VER resources of, at a minimum, a rolling three-hour forecast of the anticipated resource output in MW with five-minute granularity updated every five (5) minutes; or, alternatively, a rolling three-hour forecast with fifteen-minute granularity updated every fifteen (15) minutes, which will be divided into equal five-minute intervals by the EIM Entity VER forecasting agent.

* + 1. Methods for Transmission Customers with Non-Participating Resources that are VERs to Submit Resource Forecast Data

A Transmission Customer shall elect one of the following methods to provide Forecast Data:

1. Use the PSEI EIM Entity’s VER reliability forecast service;
2. Self-supply the Forecast Data through its own capabilities or through the services of an independent forecast service provider; or
3. Use the forecast service offered by the MO.

The Forecast Data submission methods are described in more detail below.

1. Transmission Customer Elects to Use PSEI EIM Entity’s VER Reliability Forecast

The PSEI EIM Entity, through its designated VER forecasting agent, will produce VER reliability Forecast Data for all VERs in the PSEI EIM Entity’s BAA as part of the PSEI EIM Entity’s ongoing balancing authority responsibilities. Transmission Customers may elect to use the PSEI EIM Entity’s VER reliability forecast service. The PSEI EIM Entity’s designated VER forecasting agent administering this service will produce the Forecast Data and submit it to the MO on the Transmission Customer’s behalf. Following notification by a Transmission Customer that it has elected to use this method, the PSEI EIM Entity will make reasonable efforts to acknowledge such election within five (5) business days. The PSEI EIM Entity will also facilitate a meeting with the Transmission Customer and the VER forecasting agent to discuss the method by which the VER forecasting agent currently produces the Forecast Data and any potential modifications to the current method, should the Transmission Customer choose to provide additional information from its resource, such as meteorological data. The PSEI EIM Entity will make reasonable efforts to schedule the meeting within ten (10) calendar days after it receives notification of such election from the Transmission Customer. Transmission Customers desiring to contact the PSEI EIM Entity’s designated VER forecasting agent prior to making an election should send a request by e-mail to the PSEI EIM Entity at EIM@pse.com and contact information can be provided.

1. Transmission Customer Elects to Self-Supply Forecast Data

Transmission Customers may elect to self-supply VER Forecast Data by either of the following methods.

1. Transmission Customers with the capability to produce their own VER Forecast Data may submit such Forecast Data directly to the PSEI EIM Entity’s VER forecasting agent.
2. Transmission Customers may retain the services of an independent forecast service provider to produce the Forecast Data and then forward the Forecast Data to the PSEI EIM Entity’s forecasting agent. The election by a Transmission Customer to retain the services of an independent forecast provider will be completely independent of any relationship the Transmission Customer has with either the PSEI EIM Entity or its designated VER forecasting agent, including any contractual arrangements entered into between the Transmission Customer and the independent forecast provider.

Following notification by a Transmission Customer that it has elected to use this method, the PSEI EIM Entity will make reasonable efforts to acknowledge such election within five (5) business days. The PSEI EIM Entity will also facilitate a meeting with the Transmission Customer and the VER forecasting agent to discuss the Forecast Data submission method and timing requirements. The PSEI EIM Entity will make reasonable efforts to schedule the meeting within ten (10) calendar days after it receives notification of such election from the Transmission Customer.

Transmission Customers will submit updated Forecast Data for any interval a minimum of five (5) minutes prior to the start of that interval. If the Forecast Data is not submitted five (5) minutes prior to the start of the interval or if the Forecast Data fails to reach the PSEI EIM Entity’s designated VER forecasting agent for any reason, the Transmission Customer’s forecast election defaults to option (1) [Election to Use PSEI EIM Entity’s VER Reliability Forecast], and the VER forecasting agent will submit the VER reliability Forecast Data that it creates for all VERs in the PSEI EIM Entity’s BAA for that interval and will continue to do so until such time that the Transmission Customer’s self-supplied VER Forecast Data is provided as required.

Transmission Customers desiring to contact the PSEI EIM Entity’s designated VER forecasting agent prior to making an election should send a request by e-mail to the PSEI EIM Entity at EIM@pse.com and contact information can be provided.

1. Transmission Customer Elects to Use Market Operator’s Forecast Service

If a Transmission Customer elects to use the MO’s forecast service to produce and submit its Forecast Data, the Transmission Customer shall notify the PSEI EIM Entity of such election by e-mail to the PSEI EIM Entity at EIM@pse.com and contact information can be provided.

Initial Notification - New Resources

Transmission Customers with a VER that meets the requirements for the submission of VER Forecast Data shall notify the PSEI EIM Entity of its elected method of providing the VER Forecast Data no less than ninety (90) days prior to the VER’s initial synchronization date. Transmission Customers shall notify the PSEI EIM Entity of its elected method by e-mail to EIM@pse.com.

Changes to VER Forecast Data Submission Election

Transmission Customers may change the method by which they submit their VER Forecast Data by notifying the PSEI EIM Entity no less than ninety (90) days prior to the change becoming effective. Transmission Customers shall notify the PSEI EIM Entity of such change by e-mail to EIM@pse.com.

Failure to Notify PSEI of Election of Method to Provide VER Forecast Data

Transmission Customers that have not notified the PSEI EIM Entity of their elected method of providing the VER Forecast Data by the requisite deadline shall be deemed to have elected to use the PSEI EIM Entity’s VER Reliability Forecast and shall be settled as such pursuant to PSEI’s OATT.

1. Settlements and Billing

PSEI’s OATT Attachment O, Section 8 sets forth the sub-allocation of EIM charges and payments to Transmission Customers with Non-Participating Resources, load in PSEI’s BAA, Interchange, and Intrachange. Each charge or payment will be identified by a charge code name and will be sub-allocated by the PSEI EIM Entity using one of the following methods:

1. Direct assignment to Transmission Customers in accordance with PSEI’s OATT Schedules 4, 4R, and 9;
2. On the basis of Measured Demand or Metered Demand;
3. Retention of any payment or charge by the PSEI EIM Entity (i.e., not sub-allocated to Transmission Customers); or
4. On such other basis as established in PSEI’s OATT.

For generators and loads that are physically located in PSE’s BAA but that are pseudo-tied out of PSEI’s BAA, the Measured Demand and Metered Demand will equal zero.

Specific charge codes and allocation methods are described in the following sub-sections of this Section 9.

8.1 Instructed Imbalance Energy (IIE)

The PSEI EIM Entity will sub-allocate IIE based on: operational adjustments of a Transmission Customer’s affected Interchange or Intrachange, including any adjustments made to an e-tag after T-57; resource imbalances created by a Manual Dispatch or an EIM Available Balancing Capacity (ABC) dispatch; or an adjustment to resource imbalances resulting from adjustments to resource forecasts pursuant to the MO Tariff.

IIE will be sub-allocated directly to Transmission Customers in accordance with Schedule 9 and Attachment O, Section 8.1, of PSEI’s OATT. Non-Participating Resources’ IIE will be settled under Schedule 9. All other Transmission Customers’ IIE will be settled under Attachment O, Section 8.1.

Charge Code 64600 – 15-Minute Market (“FMM”) IIE

Charge Code 64700 – Real-Time Dispatch (“RTD”) IIE

* 1. Uninstructed Imbalance Energy (UIE)

The PSEI EIM Entity will sub-allocate UIE directly to Transmission Customers in accordance with PSEI’s OATT Schedules 4, 4R, and 9. Any UIE charges or payments received by the PSEI EIM Entity not otherwise recovered under Schedules 4, 4R, and 9 of PSEI’s OATT will not be sub-allocated to Transmission Customers.

Charge Code 64750 – Real-Time UIE

Calculation of Real-Time Load UIE: A Transmission Customer will be assessed load UIE charges and payments in accordance with Schedule 4 or Schedule 4R based on the Transmission Customer’s hourly metered load compared to the Transmission Customer’s Base Schedule. The Transmission Customer Base Schedule is calculated based on Resource Forecast Data (entered in BSAP), Interchange Forecast Data (e-tags), and Intrachange Forecast Data (e-tags) submitted under Section 8 of this EIM BP.

Calculation of Real-Time Resource UIE: A Transmission Customer responsible for submitting Transmission Customer Base Schedules for a resource will be assessed resource UIE charges and payments in accordance with Schedule 9.

* 1. Under-Scheduling and Over-Scheduling Load Charges and Proceeds

8.3.1 Charges for Under-Scheduling and Over-Scheduling Load

Charge Code 6045 – Under-Scheduling and Over-Scheduling Load Charges

The PSEI EIM Entity will sub-allocate charges for under-scheduling and over- scheduling load to Transmission Customers subject to Schedule 4 and 4R of PSEI’s OATT that contributed to the under- or over-scheduling imbalance. The allocation will be based on that Transmission Customer’s respective over-scheduling or under-scheduling imbalance ratio share, as compared to all other Transmission Customers who had over-scheduled or under-scheduled for the operating hour the charge was assessed.

8.3.2 Proceeds for Under-Scheduling and Over-Scheduling Load

Charge Code 6046 – Under-Scheduling and Over-Scheduling Load Proceeds

The PSEI EIM Entity will sub-allocate proceeds for under-scheduling and over- scheduling load to Transmission Customers that were not subject to under scheduling or over scheduling during the trading day based on Metered Demand.

* 1. EIM Uplifts
		1. EIM BAA Real-Time Market Neutrality (Real-Time Imbalance Energy Offset – BAA)

The PSEI EIM Entity will sub-allocate the EIM BAA real-time imbalance energy offset charges to Transmission Customers on the basis of Measured Demand.

Charge Code 64770 – Real-Time Imbalance Energy Offset

Calculation of Real-Time Imbalance Energy Offset: Transmission Customers will be allocated a share of Real-Time Imbalance Energy Offset based on a Transmission Customer’s hourly metered loads plus a Transmission Customer’s e-Tag exports compared to the total BAA hourly load plus total BAA e-Tag exports.

* + 1. EIM Entity Real-Time Congestion Offset

The PSEI EIM Entity will sub-allocate charges for the EIM Entity real-time congestion offset to Transmission Customers on the basis of Measured Demand.

Charge Code 67740 –Real-Time Congestion Offset

Calculation of Real-Time Congestion Offset: Transmission Customers will be allocated a share of Real-Time Congestion Offset based on a Transmission Customer’s hourly metered loads plus a Transmission Customer’s e-Tag exports compared to the total BAA hourly load plus total BAA e-Tag exports.

* + 1. EIM Entity Real-Time Marginal Cost of Losses Offset

The PSEI EIM Entity will sub-allocate charges for EIM Entity real-time marginal cost of losses offset to Transmission Customers on the basis of Measured Demand.

Charge Code 69850 – EIM Entity Real-Time Marginal Cost of Losses Offset

Calculation of Real-Time Marginal Cost of Losses Offset: Transmission Customers will be allocated a share of Real-Time Marginal Cost of Losses Offset based on a Transmission Customer’s hourly metered loads plus a Transmission Customer’s e-Tag exports compared to the total BAA hourly load plus total BAA e-Tag exports.

* + 1. EIM Neutrality Settlement

The PSEI EIM Entity will sub-allocate charges for EIM neutrality settlement to Transmission Customers on the basis of Measured Demand.

Charge Code 8989 – Daily Neutrality Adjustment

Calculation of Daily Neutrality Adjustment: Transmission Customers will be allocated a share of Daily Neutrality Adjustment based on a Transmission Customer’s total hourly metered loads for the day plus a Transmission Customer’s total e-Tag exports for the day compared to the total BAA total hourly load for the day plus total BAA e-Tag exports for the day.

Charge Code 8999 – Monthly Neutrality Adjustment

Calculation of Monthly Neutrality Adjustment: Transmission Customers will be allocated a share of Monthly Neutrality Adjustment based on a Transmission Customer’s total hourly metered loads for the month plus a Transmission Customer’s total e-Tag exports for the month compared to the total BAA hourly load for the month plus total BAA e-Tag exports for the month.

Charge Code 4989 – Daily Rounding Adjustment

Calculation of Daily Rounding Adjustment: Transmission Customers will be allocated a share of Daily Rounding Adjustment based on a Transmission Customer’s total hourly metered loads for the day plus a Transmission Customer’s total e-Tag exports for the day compared to the total BAA hourly load for the day plus total BAA e-Tag exports for the day.

Charge Code 4999 – Monthly Rounding Adjustment

Calculation of Monthly Rounding Adjustment: Transmission Customers will be allocated a share of Monthly Rounding Adjustment based on a Transmission Customer’s total hourly metered loads for the month plus a Transmission Customer’s total e-Tag exports for the month compared to the total BAA hourly load for the month plus total BAA e-Tag exports for the month.

* + 1. Real-Time Bid Cost Recovery

The PSEI EIM Entity will sub-allocate charges for real-time bid cost recovery to Transmission Customers on the basis of Measured Demand.

Charge Code 66780 – Real-Time Bid Cost Recovery

Calculation of Real-Time Bid Cost Recovery: Transmission Customers will be allocated a share of Real-Time Bid Cost Recovery based on a Transmission Customer’s hourly metered loads plus a Transmission Customer’s e-Tag exports compared to the total BAA hourly load plus total BAA e-Tag exports.

* + 1. Flexible Ramping Product

The PSEI EIM Entity will sub-allocate charges and payments for the Flexible Ramping Product as follows:

|  |  |  |
| --- | --- | --- |
| Charge Code | Description | Allocation |
| 7070 | Flexible Ramping Forecasted Movement resource settlement | Measured Demand |
| 7076 | Flexible Ramping Forecasted Movement demand allocation | Metered Demand |
| 7077 & 7087 | Daily Flexible Ramping Uncertainty Award (both upward and downward) | Measured Demand |
| 7078 & 7088 | Monthly Flexible Ramping Uncertainty Award (both upward and downward) | Measured Demand |
| 7071 & 7081 | Any other Flexible Ramping Product charges or payments | Measured Demand |

* + 1. Inaccurate or Late Actual Settlement Quality Meter Data Penalty

Charge Code 1591 – Enforcement Protocol Penalty Charge

Any charges incurred by the PSEI EIM Entity for inaccurate or late actual settlement quality meter data penalty, pursuant to the MO Tariff, will be directly assigned to the Transmission Customer responsible for such inaccurate or late actual settlement quality meter data.

* + 1. Other EIM Settlements

Any charges or payments to the PSEI EIM Entity for the following EIM settlement provisions will not be sub-allocated to Transmission Customers:

1. Invoice Deviation (distribution and allocation)
2. Generator Interconnection Process Forfeited deposit Allocation
3. Default Invoice Interest Payment
4. Default Invoice Interest Charge
5. Invoice Late Payment Penalty
6. Financial Security Posting (Collateral) Late Payment Penalty
7. Shortfall Receipt Distribution
8. Shortfall Reversal
9. Shortfall Allocation
10. Default Loss Allocation
11. Unaccounted For Energy (UFE)
12. Operating Reserves Obligations
	1. MO Tax Liabilities

The PSEI EIM Entity will sub-allocate charges for MO tax liability as a result of the EIM to the Transmission Customer(s) triggering the tax liability.

* 1. Unreserved Use Penalties

Unreserved Use Penalties shall apply to any amount of actual metered generation in an Operating Hour, if any, which is in excess of the sum of both: (1) the greatest positive Dispatch Operating Point or Manual Dispatch of the PSE EIM Participating Resource received during the Operating Hour, and (2) the Transmission Customer’s Reserved Capacity. Any ancillary service charges that are applicable to Unreserved Use Penalty charges shall apply.

* 1. Variable Energy Resource Forecast Charge

 8.7.1 PSEI or Self-Supply Forecast Charges

The PSEI EIM Entity will allocate forecast charges incurred as a result of the preparation and submission of resource Forecast Data to the Transmission Customer(s) triggering the charges. Such charges are deemed a direct assignment consistent with the PSEI OATT.

 8.7.2 MO Forecast Charges

The PSEI EIM Entity will sub-allocate forecast charges from the MO as a result of the Transmission Customer’s election to use the MO’s Forecast Data to the Transmission Customer(s) triggering the charges.

1. Dispute Resolution

9.1 Disputes between the PSEI EIM Entity and a Transmission Customer or Interconnection Customer Related to the PSEI EIM Entity’s Allocation of Charges or Payments from the MO

Disputes involving settlement statements between the PSEI EIM Entity and a Transmission Customer or Interconnection Customer will be resolved in accordance with the dispute resolution process set forth in PSEI’s OATT. The PSEI EIM Entity will provide notice by OASIS posting to all Transmission Customers within five (5) business days of initiation of the dispute by a Transmission Customer or Interconnection Customer. Such notice will include detailed information about the nature of the dispute and disputed charges. Upon resolution of the dispute, the PSEI EIM Entity will provide notice by OASIS posting to all Transmission Customers within five (5) business days of resolution, including the nature of the resolution and any settlement-related effects of the resolution on other Transmission Customers.

To evaluate disputes, the PSEI EIM Entity must be able to identify the item that is being questioned in the settlement statement. Thus, such notice of the dispute must include detailed information about the nature of the dispute, including but not limited to: (a) trading day; (b) settlement period or trading hour(s); (c) settlement statement (type) being disputed; (d) charge group (or parent charge group) and charge code; (e) dispute type (e.g., schedule, meter value, pricing); (f) detailed description of the dispute; (g) reason for the dispute; and (h) transaction support details.

9.2 Disputes between the MO and EIM Participating Resource Scheduling Coordinators Related to EIM Charges and Payments Directly From the MO

Disputes involving settlement statements between the MO and EIM Participating Resource Scheduling Coordinators must be initiated and resolved in accordance with the dispute resolution process of the MO Tariff. A Transmission Customer with an EIM Participating Resource shall provide notice to the PSEI EIM Entity if it raises a dispute with the MO. Such Transmission Customer shall provide within five (5) business days of initiating a dispute with the MO notice to the PSEI EIM Entity by e-mail to Trans.Settlements@pse.com. Upon resolution of the dispute, the EIM Participating Resource will notify the PSEI EIM Entity within five (5) business days of the final resolution and inform the PSEI EIM Entity of whether the resolution will have any effect on the PSEI EIM Entity’s settlement statement(s).

* 1. Disputes Between the MO and the PSEI EIM Entity

The PSEI EIM Entity may raise disputes with the MO regarding the settlement statements it receives from the MO in accordance with the process specified in the MO Tariff. If the PSEI EIM Entity raises such a dispute with the MO, it will provide notice by OASIS posting to Transmission Customers within five (5) business days of initiating the dispute pursuant to the MO’s dispute resolution process. Such notice will include detailed information about the nature of the dispute and disputed charges. Upon resolution of the dispute with the MO, the PSEI EIM Entity will provide notice by OASIS posting to Transmission Customers within five (5) business days of resolution, including the nature of the resolution and any settlement-related effects of the resolution on Transmission Customers.

9.4 Disputes Regarding MO Charges or Payments to the PSEI EIM Entity Raised by Transmission Customers or Interconnection Customers

If a dispute arises regarding an MO charge or an MO payment to the PSEI EIM Entity that is subsequently allocated by the PSEI EIM Entity to a Transmission Customer or an Interconnection Customer, and such Transmission Customer or Interconnection Customer wishes to raise a dispute with the MO, the PSEI EIM Entity must file a dispute on behalf of such Transmission Customer or Interconnection Customer in accordance with the MO Tariff. Pursuant to the MO’s dispute resolution process, the PSEI EIM Entity has until the 77th business day (T+77B) following the Operating Day which contains the disputed settlement to raise a dispute with the MO on behalf of Transmission Customers and Interconnection Customers.

In order to provide sufficient time for the PSEI EIM Entity to raise a dispute with the MO on behalf of Transmission Customers and Interconnection Customers, the PSEI EIM Entity requires Transmission Customers and Interconnection Customers to provide notice to the PSEI EIM Entity of its desire to initiate a dispute with the MO by e-mail to Trans.Settlements@pse.com. Such notice must be sent at least seven (7) business days prior to the MO’s T+77B deadline. To evaluate disputes, the PSEI EIM Entity must be able to identify the item that is being questioned in the settlement statement. Thus, such notice of the dispute must include detailed information about the nature of the dispute, including but not limited to: (a) trading day; (b) settlement period or trading hour(s); (c) settlement statement (type) being disputed; (d) charge group (or parent charge group) and charge code; (e) dispute type (e.g., schedule, meter value, pricing); (f) detailed description of the dispute; (g) reason for the dispute; and (h) transaction support details. The PSEI EIM Entity will work with the Transmission Customer or the Interconnection Customer to resolve the dispute pursuant to the process specified in the MO Tariff.

The settlement and dispute timeline regarding MO charges or payments to the PSE EIM Entity raised by Transmission Customers or Interconnection Customers is outlined below:

|  |  |  |  |
| --- | --- | --- | --- |
| Statement Published by MO | Settlement Dispute Deadline [with MO] | Deadline for Notice to PSE EIM Entity | Settlement Dispute Data |
| T+12B | T+26B | 7 business days before T+26B | All but estimated meter data |
| T+55B | T+77B | 7 business days before T+77B | All |
| T+9M (T+194B) | T+10M (T+216B) | 7 business days beforeT+10M (T+216B) | Incremental changes only |

10. Notice of EIM Suspension or Need to Take Corrective Actions

* 1. Notice of Corrective Actions for Temporary Contingencies

In the event that the PSEI EIM Entity must declare a temporary contingency and invoke corrective actions pursuant to the PSEI OATT, the PSEI EIM Entity will provide notice to Transmission Customers of such declaration and corrective actions as immediately as practicable by OASIS posting. The PSEI EIM Entity will update the notice with additional information on the nature and duration of the contingency and on the corrective measures in place, as promptly as practicable after such information becomes available during and after the contingency.

**Appendix A**

**PSEI EIM Participating Resource Application Form**

**Preamble and Instructions**

Transmission Customers applying for eligibility to participate in PSEI’s EIM must submit this form in both electronic and hard copy. Please submit the application to:

Email: EIM@pse.com

And

Mail: Puget Sound Energy

355 110th Avenue NE, EST-06E

Bellevue, WA 98009-9734

Attn: Manager, Transmission Policy & Contracts

For this application to be considered complete, the Transmission Customer must accurately provide all applicable information required below.

**Application Fee:**

Transmission Customers must submit a $1,500 processing deposit along with the mailed hard copy of the application. The application will be considered submitted upon PSEI’s receipt of the hard copy application form and processing deposit. PSEI will make best efforts to notify the applicant by email within two days following the receipt of the application and deposit.

**Transmission Customer Primary Contact Information**

Company Name:

Contact Person:

Title:

Mailing Address:

City: State: Zip:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

**Resource Information**

Resource Name:

Resource Location (State, County):

If Transmission Customer is not the Resource owner, please indicate;

1. contractual output rights, including contractual duration of rights
2. whether the purchase power contract allows the Transmission Customer to offer output rights into the EIM
3. whether Transmission Customer is aware of any other entities with output rights from the Resource

Resource Fuel Type (Hydro, Coal, etc.):

Maximum output of the Resource (MW):

Number of Resource units:

Maximum output of each unit (MW): (1)

(2)

(3)

(4)

(5)

(List any additional and max output)

If multiple units how will the Resource be participating (Plant/Unit/Unknown):

Balancing Authority Area in which the Resource is physically located

(PSEI or Other):

If ‘Other’ has the resource been pseudo-tied into either PSEI (Y/N):

Resources located outside PSEI’s Balancing Authority Areas must be pseudo-tied into PSEI’s BAA to participate in the EIM. Additional information concerning pseudo ties may be found on PSEI’s OASIS website in the PSEI Business Practice covering the requirements and process for pseudo ties.

 Is the Resource currently modeled in PSEI’s network model (Y/N/Unknown):

EIM Scheduling Coordinator for the Resource if known:

Interconnection Customer for the resource:

**Transmission Information**

Please indicate all currently effective transmission service agreements or rate schedules with PSEI:

**Metering & Communications Information**

Will Resource metering for EIM purposes be provided through a Scheduling Coordinator Metered Entity (SCME) or a CAISO Metered Entity (CAISOME):

If multiple units, is the Resource metered at the plant or unit level:

Are the meters capable of 5-minute configuration (Y/N/Unknown):

If already in place, who owns the following metering equipment that would potentially be used for EIM purposes:

Meter(s):

Associated Communications Equipment:

Current Transformers:

Voltage Transformers:

Is the Transmission Customer currently accessing the meter data (Y/N):

If ‘Yes’ by what method (land line, cell signal, etc.):

Can a detailed one-line drawing of the resource facility be provided (Y/N):

Please provide additional information regarding the resource that may be valuable for its potential participation in the EIM:

**Additional Contact Information**

**Transmission Customer**

Please provide additional contact information as applicable if different from that supplied above:

**Resource Technical Information Contact**

Primary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

Secondary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

**EIM Participation Contact**

Primary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

Secondary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

**Billing/Invoice Contact**

Primary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

Secondary Contact Name:

Title:

Address:

Telephone (Desk): Telephone (Cell):

Fax: E-Mail Address:

**PSEI Contact Information**

Questions can be submitted to the PSEI EIM Entity via e-mail to EIM@pse.com.

**Appendix B**

**Non-Participating Resource Data Template**

**Preamble and Instructions**

Transmission Customers with Non-Participating Resources inside PSEI’s Balancing Authority Areas which are modeled in PSEI’s network model shall submit basic generator information to the PSEI EIM Entity which will then be submitted to CAISO for use in its network model. The data provided allows CAISO to accurately model generator capability and transmission congestion in PSEI’s BAAs.

The Non-Participating Resource Data Template (“NPRDT”) can be found on PSEI’s OASIS site via the following link: [PSEI OASIS](http://www.oatioasis.com/psei/index.html)

For the data template to be considered complete, the Transmission Customer shall accurately provide all applicable information in the required fields.

Completed forms shall be sent by e-mail to EIM@pse.com.

**Initial Submission:**

Transmission Customers shall initially submit a completed NPRDT for each Resource in PSEI’s network model concurrently with the applicable interconnection agreement.

**Updating Information:**

If any of the Resource data supplied by the Transmission Customer on the NPRDT changes, the Transmission Customer shall complete an updated NPRDT and submit it to the PSEI EIM Entity at EIM@pse.com within fifteen (15) days of the occurrence of the change.

**PSEI Contact Information**

Any questions regarding the NPRDT can be submitted to EIM@pse.com.

**Appendix C**

**Glossary of Common Terms**

**Preamble**

The purpose of this Glossary is to aid understanding and is not intended to be an exhaustive list of all terms defined in the PSEI OATT or otherwise. Unless otherwise expressly indicated herein, terms used in this EIM BP have the same meaning as set forth in PSEI’s OATT. To the extent an inconsistency may exist between this Glossary and the PSEI OATT, the PSEI OATT shall govern.

**Balancing Authority (“BA”)**

The responsible entity that integrates resource plans ahead of time, maintains load-Interchange-generation balance within a BAA, and supports interconnection frequency in real time.

**Balancing Authority Area (“BAA”)**

The collection of generation, transmission, and loads within the metered boundaries of the BA. The BA maintains load-resource balance within this area.

**CAISO Metered Entity (“CAISOME”)**

As defined by the California Independent System Operator.

**Designated Agent**

Any entity that performs actions or functions on behalf of the Transmission Provider, an Interconnection Customer, an Eligible Customer, or the Transmission Customer required under the PSEI OATT.

**Dispatch Operating Point**

The expected operating point, in MW, of a PSE EIM Participating Resource that has received a Dispatch Instruction from the Market Operator or a Balancing Authority Area Resource to which the PSE EIM Entity has relayed a Dispatch Instruction received from the Market Operator. The Dispatch Operating Point means the change, in MW output, of (i) a PSE EIM Participating Resource due to an EIM bid being accepted and the PSE EIM Participating Resource receiving a Dispatch Instruction; or (ii) a Balancing Authority Area Resource for which a Dispatch Instruction has been issued by the CAISO with respect to EIM Available Balancing Capacity. The Dispatch Operating Point is expressed either as a negative MW quantity for the downward movement of generation, or a positive MW quantity for the upward movement of generation.

**EIM Transfer**

The transfer of real-time energy resulting from an EIM Dispatch Instruction: (1) between a PSE BAA and the CAISO BAA; (2) between the PSE BAA and an EIM Entity BAA; or (3) between the CAISO BAA and an EIM Entity BAA using transmission capacity available in the EIM.

**E-Tag**

An electronic tag associated with a schedule in accordance with the requirements of the North American Electric Reliability Corporation (NERC), the Western Electricity Coordinating Council (WECC), or the North American Energy Standards Board (NAESB).

**Forecast Data**

Information provided by Transmission Customers regarding expected load, generation, Intrachange, and Interchange. The Transmission Customer Base Schedule includes Forecast Data that is used by the PSE EIM Entity as the baseline by which to measure Imbalance Energy for purposes of EIM settlement.

**Imbalance Energy**

The deviation of supply or demand from the Transmission Customer Base Schedule, positive or negative, as measured by metered generation, metered load, or real-time Interchange or Intrachange schedules.

**Interconnection Customer**

Any Eligible Customer (or its Designated Agent) that executes an agreement to receive generation interconnection service pursuant to Annexes A or B of the PSEI OATT.

**Instructed Imbalance Energy (“IIE”)**

The result of: (1) an operational adjustment of a Transmission Customer’s affected Interchange or Intrachange, which includes changes by the Transmission Customer after T-57, (2) resource imbalances created by Manual Dispatch or an EIM Available Balancing Capacity dispatch, or (3) an adjustment to resource imbalances created by adjustments to resource forecasts pursuant applicable provisions of the CAISO Tariff currently in effect.

**Interchange**

E-Tagged energy transfers from, to, or through the PSE BAA or other BAAs, not including EIM Transfers.

**Intrachange**

E-Tagged energy transfers within the PSE BAA, not including real-time actual energy flows associated with EIM Dispatch Instructions.

**Load Aggregation Point (“LAP”)**

A set of Pricing Nodes that is used for the submission of bids and settlement of demand in the EIM.

**Manual Dispatch**

An operating order issued by the PSE EIM Entity to a Transmission Customer with a PSE EIM Participating Resource or a Non-Participating Resource in PSE’s BAA outside of the EIM optimization, when necessary to address reliability or operational issues in PSE’s BAA that the EIM is not able to address through economic dispatch and congestion management.

**Market Operator (“MO”)**

The entity responsible for operation, administration, settlement, and oversight of the EIM.

**Measured Demand**

Includes (1) Metered Demand, plus (2) e-Tagged export volumes from the PSE BAA (excluding EIM Transfers).

**Metered Demand**

Metered load volumes in PSE’s BAA.

**Non-Participating Resource**

A resource in PSE’s BAA that is not a PSE EIM Participating Resource.

**Operating Day**

As defined by the California Independent System Operator.

**Operating Hour**

The hour during the day when the EIM runs and energy is supplied to load.

**Pricing Node**

As defined by the California Independent System Operator.

**PSEI EIM Entity**

The Transmission Provider in performance of its role as an EIM Entity under the CAISO Tariff and the PSEI OATT.

**PSEI Open Access Transmission Tariff (“OATT”)**

PSEI OATT.

**PSEI EIM Participating Resource**

A resource or a portion of a resource: (1) that has been certified in accordance with the PSEI OATT by the PSEI EIM Entity as eligible to participate in the EIM; and (2) for which the generation owner and/or operator enters into the MO’s *pro forma* EIM Participating Resource Agreement.

**PSEI EIM Participating Resource Scheduling Coordinator**

A Transmission Customer with one or more PSE EIM Participating Resource(s) or a third-party designated by the Transmission Customer with one or more PSE EIM Participating Resource(s), that is certified by the MO and enters into the MO’s pro forma EIM Participating Resource Scheduling Coordinator Agreement.

**Scheduling Coordinator Metered Entity (“SCME”)**

As defined by the California Independent System Operator.

**Service Agreement**

The initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the PSEI OATT.

**Transmission Customer**

Any Eligible Customer (or its Designated Agent) that (1) executes a Service Agreement, or (2) requests in writing that the Transmission Provider file with the Commission, a proposed unexecuted Service Agreement to receive transmission service under the PSEI OATT.

**Transmission Provider**

The public utility (or its Designated Agent) that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the PSEI OATT.

**Transmission Customer Base Schedule**

An energy schedule that provides Transmission Customer hourly-level Forecast Data and other information that is used by the PSE EIM Entity as the baseline by which to measure Imbalance Energy for the purposes of EIM settlement. The Transmission Customer Base Schedule may refer *collectively* to the *components* of such schedule (resource, Interchange, Intrachange, and load) *or* any *individual* *components* of such schedule.

**Uninstructed Imbalance Energy (“UIE”)**

For Non-Participating Resources in an EIM Entity BAA, the MO shall calculate UIE as either (1) the algebraic difference between the resource’s 5-minute meter data and the resource component of the Transmission Customer Base Schedule, or, if applicable, (2) the 5-minute meter data and any Manual Dispatch or EIM Available Balancing Capacity dispatch.

For Transmission Customers with load in the PSE EIM Entity’s BAA, the PSE EIM Entity shall calculate UIE as the algebraic difference between the Transmission Customer’s actual hourly load and the Transmission Customer Base Schedule.

**Variable Energy Resource (“VER”)**

A device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

**Appendix D**

**Hourly Generation Submittal Form**

Resource Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Today’s Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date that the Base Schedule is Submitted For: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Submitter Contact Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone (Desk): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Telephone (Cell): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Primary Contact Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone (Desk): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Telephone (Cell): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reason for Submitting a Paper Copy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- |
| **BASE SUBMITTAL FOR RESOURCE: (NAME) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (MM/DD/YY): \_\_\_\_\_\_\_\_\_\_\_** |
|  |
| **Hour Ending** | **Energy Base Schedule (MW)** |
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| 02 |  |
| 03 |  |
| 04 |  |
| 05 |  |
| 06 |  |
| 07 |  |
| 08 |  |
| 09 |  |
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| 11 |  |
| 12 |  |
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| 18 |  |
| 19 |  |
| 20 |  |
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| 22 |  |
| 23 |  |
| 24 |  |

\*Once completed, e-Mail this Form to loadoffice@pse.com **and** call the Load Office Real-Time desk and communicate the base schedule plan at **425-882-4630**.

**Appendix E**

**EIM Metering Information & Requirements**

**(for PSEI EIM Participating & Non-Participating Resources)**

Metering information and requirements for the EIM can be found on the MO’s website, available at <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=edab66d6-3e4f-44f3-83d7-8359953da557> (and subject to periodic updates).

PSEI EIM Participating & Non-Participating Resources shall meet all MO metering requirements, which include, at a minimum, the satisfactory completion of a **SQMD Plan Template**.

**PSEI EIM Participating Resources**

As required by the PSEI OATT and this EIM BP, a Transmission Customer with a PSEI Participating Resource shall deliver to the PSE EIM Entity by e-mail to EIM@pse.com a copy of the registration data (and subsequent changes/updates thereto) submitted to the MO within five (5) calendar days of submitting the registration data to the MO. This registration data includes, at a minimum, a copy of the SQMD Plan Template that is submitted to the MO.

**PSEI Non-Participating Resources**

As required by the PSEI OATT and this EIM BP, a Transmission Customer with a PSEI Non-Participating Resource shall deliver to the PSE EIM Entity by e-mail to EIM@pse.com all required registration data (and subsequent changes/updates thereto). This registration data includes, at a minimum, a copy of the SQMD Plan Template that is available on the MO’s website.

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| **Revision Log** |
| v0 | 6-1-2016 | Pre Market Requirements posting of business practice  |  |
| v1 | 9-1-2016 | Addition of revision log  |  |
| v2 | 6-14-2017 | Various – including changes to Section 5 (Registration Data); changes to Section 6 (Outages); changes to Section 8.4.6 (Settlements) for Flexible Ramping Product; addition of Appendix D – Hourly Generation Submittal Form and Appendix E-Metering Information & Requirements. |  |
|  |  |  |  |
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|  |  |  |  |

1. Technical Specifications and Operating Protocols and Procedures for Interconnection of Large Generation Facilities, Technical Specifications and Operating Protocols and Procedures for Interconnection of Small Generation Facilities, Technical Specifications and Operating Protocols and Procedures for Interconnection of Generation Facilities Not Subject to FERC Jurisdiction, Technical Specifications and Operating Protocols and Procedures for Interconnection of Transmission Facilities or End-User Facilities. [↑](#footnote-ref-1)
2. This registration data includes the metering information set forth in Appendix E to this EIM BP. [↑](#footnote-ref-2)