



## Transmission Services

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### **Committed Scheduling for the 2014-15 Rate Period Business Practice, Version 5**

#### **Response to Customer Comments**

Posted:

This document contains the Transmission Customer comments and Transmission Services' response to those comments for the Committed Scheduling for the 2014-15 Rate Period Business Practice, Version 5 posted for review from August 8<sup>th</sup>, 2014 through September 15<sup>th</sup>, 2014

Thank you for your comments.

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## Puget Sound Energy

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Puget Sound Energy, Inc. (“PSE”) respectfully submits these comments on the Draft Committed Scheduling for the 2014-15 Rate Period, Version 5 (the “Draft Business Practice”). PSE appreciates the opportunity to comment on the Draft Business Practice and looks forward to working with BPA and others in the region with respect to the Draft Business Practice.

### **A. Committed Scheduling Signals During a DSO-216 Limit Generation Event or Transmission Schedule Curtailment**

Section E.1 of the Draft Business Practice states as follows:

During a DSO-216 limit generation event or transmission schedule curtailment, the persistence value in the participant’s committed scheduling signal will be replaced by a generation forecast value. For the subsequent scheduling interval, the participant is expected to schedule to the committed scheduling value provided. The metric performance requirements of the Committed Scheduling participant will be evaluated on the committed scheduling value provided in the signal, either persistence or forecast based.

Draft Business Practice at Section E.1. This Section E.1 provides that there will be two values provided by a signal—(i) persistent values for periods not affected by DSO-216 limit generation events or transmission schedule curtailments and (ii) generation forecast values for periods affected by DSO-216 limit generation events or transmission schedule curtailments.

The construct of Section E.1 suggests that the signal for the period immediately following a DSO-216 limit generation event or a transmission schedule curtailment will have a persistent value. The persistence value for the period immediately following a DSO-216 limit generation event or a transmission schedule curtailment, however, will necessarily be affected by the DSO-216 limit generation event or the transmission schedule curtailment. Therefore, PSE suggests that Section E.1 distinguish between “constrained generation forecast values” and “unconstrained generation forecast values.” A “constrained generation forecast value” would be a generator’s forecast value as provided by BPA and informed by a DSO-216 limit generation event or a transmission schedule curtailment, and an “unconstrained generation forecast value” would be a generator’s forecast value as provided by BPA and not informed by a DSO-216 limit generation event or a transmission schedule curtailment. This would allow generators to use unconstrained generation forecast values for the period immediately following a DSO-216 limit generation event or a transmission schedule curtailment, which should allow generators to achieve what would have been a persistence value for such immediately following period but for the DSO-216 limit generation event or a transmission schedule curtailment.

Consistent with these suggestions, PSE suggests the following revisions to Section E.1 of the Draft Business Practice:

During a DSO-216 limit generation event or transmission schedule curtailment, the persistence value (defined in Section F.1.i) in the participant’s committed scheduling signal will be replaced by a constrained generation forecast value (defined in Section F.1.ii). During each scheduling interval of a DSO-216 limit generation event or transmission schedule curtailment, the participant is expected to schedule to the

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constrained generation forecast value provided in the signal. For the period immediately following a DSO-216 limit generation event or transmission schedule curtailment, the persistence value (defined in Section F.1.i) in the participant's committed scheduling signal will be replaced by an unconstrained generation forecast value (defined in Section F.1.iii). For the subsequent scheduling interval, the participant is expected to schedule to the committed scheduling value provided. The metric performance requirements of the Committed Scheduling participant will be evaluated on the committed scheduling value provided in the signal, ~~either~~ whether based on a persistence value, a constrained generation forecast value, or an unconstrained generation forecast ~~based~~ value (defined in Section F.1.iii).

### Transmission Service's Response

The intent of this change is for BPA to provide a single scheduling value for committed scheduling participants to schedule to for all scheduling periods. The process for determining the schedule value provided in the signal is as follows:

- a. For periods where there is NO generation limit or schedule curtailment in effect (i.e. Unconstrained) a persistence value will be calculated and provided in the signal for the subsequent schedule interval.
- b. For periods where there IS a generation limit or schedule curtailment in effect that would impact the calculation of a persistence value (i.e. constrained) the generation forecast value provided in the signal will be;
  1. The Potential generation provided by the participant's wind plant in the telemetry data link, or if not available then;
  2. the forecast value from the Official BPA Wind Power Forecast.

BPA will update the business practice to reflect this process and to include the use of the Potential generation from the wind plant in the definition of the schedule value.

When the persistence value is replaced by the BPA generation forecast value due to DSO-216 limit generation event or transmission schedule curtailment, during those scheduling intervals BPA should not impose any generation imbalance penalty but rather should either waive Generation Imbalance Band 2 charges/credits (treating any imbalances as Band 1) or limit Generation Imbalance Band 2 charges/credits to BPA's incremental cost. Under normal scheduling conditions, the Generation Imbalance charges are based on the persistence forecast, which is free of any human intervention from the customer or BPA. However during DSO-216 limit generation events or transmission schedule curtailments the Generation Imbalance charges will be based on the accuracy of the BPA forecast, which the participant has no control over.

Version 4 of this Business Practice required participants to schedule "as accurately as possible" during the subsequent scheduling interval of a DSO-216 limit generation event or transmission schedule curtailment, and bore the Generation Imbalance costs of their schedules. Under this Draft Business Practice, to the extent the participant's internal forecast value and BPA's generation forecast value differ, participants must weigh the risk of additional Generation Imbalance charges if using the BPA generation forecast against the risk of incurring a scheduling metric failure if using their internal forecast. Given

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these conflicting risks and the fact the scheduling value in these periods will no longer be free of either the customer or BPA's inputs, BPA should waive Generation Imbalance Band II charges or limit them as described above.

### **Transmission Service's Response**

When the persistence value is replaced the replacement value will first be the potential generation value provided by the Wind Plant to BPA. In instances where the potential generation of a wind plant is not available the Official BPA Wind Power Forecast will be used to establish the BPA provided scheduling value for the subsequent schedule period from the generation limit or curtailment. Both the Potential generation from the wind plant and the Official BPA Wind Power Forecast are free from human intervention and should accurately reflect expected generation of the wind plant for the next schedule interval.

### **Committed Scheduling Signals During a Participant-Initiated Generation Limit**

Consistent with the acknowledgement in Section E.1 of the Draft Business Practice that the persistence-based value will be impacted during and following a DSO- 216 limit generation event or transmission schedule curtailment and an alternate forecast value should be used, PSE suggests that BPA make similar considerations for participant-initiated generation limits. Participants limiting generation at a resource is an occasional operational reality and should be accounted for in the committed scheduling metrics.

Specifically, the scheduling period following a participant-initiated generation limit presents the participant with inconsistent scheduling objectives, as the participant is aware the provided persistence value will not be accurate once the generation limit is lifted. If the participant schedules to the persistence signal then it will meet the scheduling accuracy metric for that interval but may negatively impact their generation imbalance or bring BPA closer to initiating a DSO-216 generation limit event. Conversely, if the participant schedules to its own internal generation forecast in an effort to reduce generation imbalance relative to the generation-limit-impacted persistence schedule but ends up over-scheduling for that interval, the participant may negatively impact its Accumulated Energy metric.

To the extent the scheduling interval following a participant-initiated generation limit results in a scheduling metric failure, BPA should account for the participant's effort to schedule as accurately as possible during that interval in the waiver process. Going forward, BPA should also consider allowing participants to schedule to the unconstrained generation forecast value following a participant-initiated generation limit.

### **Transmission Service's Response**

BPA will update the Committed Scheduling business practice to include a waiver from the performance metrics following a participant-initiated limit provided:

- a. the participant submits a waiver request for the performance metric failure, and;

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- b. BPA can verify through the telemetry data link that a participant-initiated limit was in effect, and;
  - c. the participant schedules to the Official BPA Wind Power Forecast for the subsequent schedule period, and;
  - d. BPA can verify the use of the Official BPA Wind Power Forecast for the subsequent schedule period.

## Scheduling Accuracy Metrics

Section F.1 of the Draft Business Practice

Section F.1 of the Draft Business Practice states as follows:

BPA's scheduling value will be updated every 5 minutes to meet the requirements of the various committed scheduling elections. The schedule value is either:

1. Persistence value: The generator's schedule for the next schedule interval is the generator's 1-minute average of the actual generation; or
2. Generation forecast value: The generator's schedule for the next schedule interval is the generator's forecast value as provided by BPA.

Draft Business Practice at Section F.1. As discussed above, PSE suggests that BPA distinguish between "constrained generation forecast values" and "unconstrained generation forecast values." Therefore, PSE suggests the following suggested revisions to Section F.1 of the Draft Business Practice to accommodate such differentiation:

BPA's scheduling value will be updated every 5 minutes to meet the requirements of the various committed scheduling elections. The schedule value is either:

1. Persistence value: The generator's schedule for the next schedule interval is the generator's 1-minute average of the actual generation; or
2. Constrained Generation forecast value: The generator's schedule for the next schedule interval is the generator's forecast value as provided by BPA and informed by a DSO-216 limit generation event, or a transmission schedule curtailment.; or
3. Unconstrained Generation forecast value: The generator's schedule for the next schedule interval is the generator's forecast value as provided by BPA and not informed by the DSO-216 limit generation event or a transmission schedule curtailment for then then-current schedule interval.

## Transmission Service's Response

Consistent with the above responses BPA will include the process for determining the schedule value to be provided in the signal as well as add the use of the wind plant's

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potential generation to the generation forecast value definition. For all schedule periods BPA will only be determining a single schedule value to be provided in the committed scheduling signal. That value, when there is no generation limit or schedule curtailment in place, will be a persistence value or for schedule periods following a generation limit or schedule curtailment it will be the potential generation from the wind plant, or the Official BPA Wind Power Forecast when the potential generation is not available to BPA.

## Section F of the Draft Business Practice

Within each definition of the three accuracy metrics (Capacity, Energy, and Accumulated Energy components) that will be applied to all committed scheduling practices (30/60, 30/30, 40/15, and 30/15), the metrics are defined as “over the last seven calendar days”. This period is ambiguous. BPA should clarify the frequency with which the metrics will be measured: (i) once every seven days for the prior seven days, (ii) once every day for the prior seven days, (iii) once every hour for the prior seven days, or (iv) some other defined period.

### Transmission Service’s Response

The accuracy metrics are evaluated for each scheduling period. The “last seven calendar days” is a rolling seven calendar days prior to the period under evaluation.

## Notification of Failure to Meet Scheduling Accuracy and Termination

### 1. Section H.3 of the Draft Business Practice

Section H.3.a of the Draft Business Practice includes the following:

- a. If BPA observes during the intervening period that a participant is missing the scheduling accuracy metrics more than once per week or appears to have stopped routinely scheduling to the BPA provided schedule value, BPA may notify the participant of the temporary suspension of the discount for Committed Scheduling by assessing any applicable Direct Assignment Costs as described in Section III.E. 6.2 of BPA’s ACS-14 Rate Schedule starting the first day of the following billing cycle and continue until the first day of the billing cycle after automated scheduling is successfully implemented.

The language “appears to have stopped routinely scheduling” is ambiguous and is not necessary given the preceding measure of “once per week”. PSE suggests the following revision to Section H.3.a:

- b. If BPA observes during the intervening period that a participant is missing the scheduling accuracy metrics more than once per week ~~or appears to have stopped routinely scheduling to the BPA provided schedule value~~, BPA may notify the participant of the temporary suspension of the discount for Committed Scheduling

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by assessing any applicable Direct Assignment Costs as described in Section III.E. 6.2 of BPA's ACS-14 Rate Schedule starting the first day of the following billing cycle and continue until the first day of the billing cycle after automated scheduling is successfully implemented.

### Transmission Service's Response

BPA considered the edits proposed above in earlier versions of the business practice, however, maintained this version because of the additional flexibility it provides to customers that are operating under this provision.

#### Section H.4 of the Draft Business Practice

Section H.4 of the Draft Business Practice states as follows:

2. BPA may initiate billing a committed scheduling participant at its elected VERBS base rate plus any applicable Direct Assignment Costs as described in Section III.E. 6.2 of BPA's ACS-14 Rate Schedule, within 30 calendar days, starting the first day of the next billing cycle if:
  - a. the Participant fails to convert to automated scheduling of the BPA-provided schedule value within two weeks of receiving the new signal from BPA or;
  - b. on the third unwaived failure of a Committed 30/60 or Committed 30/30 schedule for the Energy or Capacity metric;
  - c. or on the sixth unwaived failure of a Committed 40/15 or Committed 30/15 schedule for the Energy or Capacity metric;
  - d. or on the third unwaived failure of the Accumulation metric

Draft Business Practice at Section F.4. The language in subsections b., c., and d. does not specify the period over which unwaived failures must occur before the section would trigger. BPA should clarify the language by stating that the failures must occur within a rolling thirty day period before the section triggers:

4. BPA may initiate billing a committed scheduling participant at its selected VERBS base rate plus any applicable Direct Assignment Costs as described in Section III.E. 6.2 of BPA's ACS-14 Rate Schedule, within 30 calendar days, starting the first day of the next billing cycle if:
  - a. the Participant fails to convert to automated scheduling of the BPA-provided schedule value within two weeks of receiving the new signal from BPA or;
  - b. on the third unwaived failure within a rolling thirty day period of a Committed 30/60 or Committed 30/30 schedule for the Energy or Capacity metric;
  - c. or on the sixth unwaived failure within a rolling thirty day period of a Committed 40/15 or Committed 30/15 schedule for the Energy or Capacity metric;
  - d. or on the third unwaived failure within a rolling thirty day period of the Accumulation metric

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### Transmission Service's Response

BPA will adopt the language provided.

#### 3. Section H.5 of the Draft Business Practice

Section H.5 of the Draft Business Practice states as follows:

4. A committed scheduling participant who has failed to perform at its elected schedule interval will be directly assigned the cost of acquisitions caused by the unplanned increase in the reserve requirements for the BPA BAA. See the Purchases Charge for Direct Assignment of Costs to a Customer in Section III.E.6.2 of the ACS-14 Rate Schedule.

Draft Business Practice at Section H.5. This provision is overly broad and ambiguous, particularly in light of the other mechanisms available in Section H to address failures of committed scheduling participants to perform at elected schedule intervals. Therefore, BPA should remove Section H.5 of the Draft Business Practice.

### Transmission Service's Response

A committed scheduling participant that does not meet the performance requirements as defined in the Committed Scheduling business practice for the participant's elected for scheduling paradigm will be subject to the Direct Assignment provisions of the Ancillary and Control Area Services Rate Schedule. "Elected schedule interval" in the first sentence will be changed to "elected scheduling paradigm".

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## BPA Power Services

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Please add a introductory section that describes the general purpose of the updated procedures, maybe something like the following:

Version 5 of this business practice changes the procedure during scheduling periods where there is a generation limit or schedule curtailment. During those times, to reduce the amount of SCE, this new update seeks to describe what the replacement values are, when those are to be used, how they were derived, and how transmission customers are to receive them.

Please include definitions/description of the following. It would be helpful to describe how these are determined (for example). These terms are used in the proposed draft. If there are other terms that are mentioned, it may be helpful to include a footnote or definition toward the beginning of the document (such as for ramp rates) .

- Persistence value
- Generation forecast value
- Scheduling value

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- Committed scheduling value

### Transmission Service's Response

BPA Transmission Service will evaluate incorporating the suggestions provided.

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## PGE

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- 1) If BPA intends to use a forecast that committed scheduling participants are required to adhere to, BPA should create a business practice to address the following:
  - a. Describe the methodology for creating such a forecast, and the necessary customer verification process to ensure accuracy.

### Transmission Service's Response

BPA will update the business practice to include the use of the potential generation value provided by the wind plant through the telemetry data link as required by the BPA Technical Requirements for Interconnection to the BPA Transmission Grid in the definition of the BPA provided schedule value used in the business practice.

A presentation of the Official BPA Wind Power Forecasting methodology can be found on the BPA website under Workshops for Generation Inputs on June 25, 2014. Here is the link to the presentation:

<http://www.bpa.gov/Finance/RateCases/BP-16/Meetings%20Workshops/Gen%20Inputs%20Workshop%2025%20June%202014.pdf>

- b. Indicate the specific circumstances when BPA would substitute the generation forecast value for the persistence value.

### Transmission Service's Response

BPA will expand the Committed Scheduling business practice to include the process for selecting the BPA provided schedule value to be used for scheduling periods following a generation limit or schedule curtailment. The process for determining the BPA provided schedule value used in the signal is as follows:

- a. For periods where NO generation limit or schedule curtailment is in effect a persistence value will be calculated and provided in the signal for the subsequent schedule interval.
- b. For periods where a generation limit or schedule curtailment IS in effect the generation forecast value provided in the signal will be;
  1. The Potential generation provided by the participant's wind plant in the telemetry data link, or if not available then;
  2. the forecast value from the Official BPA Wind Power Forecast.

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- c. Provide Generator Operators an indication through iCRS and/or a mutually agreed upon data link, when BPA has substituted the persistence value for the generation forecast value.

#### **Transmission Service's Response**

Changes to iCRS will be submitted for consideration by the iCRS technical team.

- d. Describe BPA's use of forecasted values to solve non-wind volatility issues on BPA's system.

#### **Transmission Service's Response**

The use of a generation forecast value as defined in the Committed Scheduling business practice is to provide a more accurate committed scheduling value for schedule periods following a generation limit or schedule curtailment because the accuracy of the persistence value has been impacted by the limit or curtailment.

BPA is open to discuss the use of forecasting and other scheduling accuracy tools for non-committed scheduling participants.

- 2) Absent a business practice containing a verification process for the proposed methodology including public input, BPA should waive all generation imbalance charges for wind facilities.

#### **Transmission Service's Response**

Potential generation is provided by the wind plant to BPA. Only in low likelihood events, i.e. when there is a generation limit or a schedule curtailment and the potential generation value is not available, will the Official BPA Wind Power Forecast be used. Generation Imbalance charges will be applied in accordance with the Ancillary and Control Area Services rate schedule and the Generation Imbalance business practice.

- 3) BPA should only provide the appropriate signal for each wind resource based on their elected scheduling paradigm, both through the agreed upon data link and on iCRS. Alternatively, BPA could provide all signals through separate independent data points on the agreed upon data link and on iCRS.

#### **Transmission Service's Response**

An updated BPA provided schedule value will be published every 5 minutes to iCRS, BPA Customer Portal, and the participants telemetry data link. Each committed scheduling participant is to pick up the appropriate value for their elected scheduling paradigm. The

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table in Section F.1 provides the posting time for each schedule period to assist participants in identifying the timing of their data pull.

4) Absent #4, BPA should provide a grace period prior to implementation of Version 5 of the business practice to allow upgrades to automated scheduling systems currently in operation. This could take a significant amount of time if the system requires RFP and or outside contract labor. This could take a significant amount of time if the system requires RFP and or outside contract labor.

### **Transmission Service's Response**

BPA does not anticipate significant, if any, system programming needs on behalf of the participant. All programming logic for determining the BPA provided scheduling value are occurring within the BPA systems and only one BPA provided schedule value per scheduling period will be published for each participant. The BPA provided schedule value will be located in the same data field that is used today. Participants, however, are encouraged to check the timing of their data pull to ensure it is picking up the appropriate BPA provided scheduling value for their elected scheduling paradigm.