Uncommitted Scheduling

BPA Transmission Business Practice

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This Business Practice describes Uncommitted Scheduling and the options that are available for wind and solar generator election in accordance with the scheduling requirements for implementation of the BP-20 Generation Inputs Settlement and the BPA Ancillary and Control Area Services Rates Schedule.

Uncommitted Scheduling for a Wind Generator is when the wind resource schedules in a way that meets or exceeds the accuracy of schedules that use BPA's Official Wind Power forecast for a 60 minute schedule.

Uncommitted Scheduling for a Solar Generator is one of the following elections:

- Solar Matrix Scheduling: Solar Matrix must schedule in a way that meets or exceeds the accuracy of schedules that use the BPA-provided schedule value from the Solar Matrix for a 60 minute hourly schedule. The Solar Matrix will be provided by BPA Transmission Operations to the Solar Generator annually, at a minimum.
- Solar Power Forecast Scheduling: Solar Power Forecast must schedule in a way that meets or exceeds the accuracy of schedules that use the BPA-provided schedule value from the customer supplied Solar Power Forecast for a 60 minute hourly schedule. See B.3 below for special provisions for this service.

BPA will provide participants with the schedule value that meets the accuracy standard for each schedule interval. BPA strongly encourages participants to automate scheduling to the BPA-provided schedule value.

For more information, visit the BPA Transmission Business Practices webpage or submit questions to techforum@bpa.gov.

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A. Eligible Uncommitted Scheduling Participants & Resources

1. Any wind or solar generator taking VERBS service from BPA that has not elected Committed Scheduling must comply with this Business Practice and use Uncommitted Scheduling.
2. Each phase of a wind or solar facility being developed in phases may participate in Uncommitted Scheduling so long as each phase is metered and scheduled independently and is not otherwise interdependent with any other phase.
3. The wind or solar generator must comply with BPA's Technical Requirements for Interconnection to the BPA Transmission Grid, specifically section 12.2.2, Data Requirements for Balancing Authority Area Services.

B. Eligibility Information Required

1. Uncommitted Participants are subject to the Intentional Deviation Penalty Charge.
2. Potential participants are required to:
    a. Elect to take Variable Energy Resource Balancing Service from BPA in accordance with the Balancing Service Election for Dispatchable Energy Resource Balancing Service (DERBS) and Variable Energy Resource Balancing Service (VERBS) business practice.
    b. Provide any other pertinent information requested by BPA Transmission Services.
3. Solar resources that elect to use Solar Power Forecast Scheduling must provide their own vendor-produced Solar Power Forecast to BPA one hour prior to the applicable scheduling period for verification by BPA.
    a. BPA will work with solar resources that elect this scheduling option to implement the necessary communications between the parties.
    b. The schedule value produced by the forecast will be sent back to the resource as the BPA-provided Schedule Value defined in Section E, below.

C. Generation Imbalance

1. Uncommitted Scheduling Resources are subject to Generation Imbalance.
2. Generation Imbalance for Uncommitted Scheduling Resources is calculated on the shortest schedule interval submitted within the hour: each hour would be calculated on 15 minute, 30 minute, or 60 minute interval, but would not be calculated on a combination of time intervals. (See the Generation Imbalance Business Practice).

D. Compliance with Dispatch Orders

1. Uncommitted Scheduling participants are subject to Dispatch Orders, including curtailments, generation limits and directives issued under Operational Controls for Balancing Reserves, the BPA's reliability tool.

2. An Uncommitted Scheduling Participant that does not respond appropriately to a Dispatch Order is subject to a Failure to Comply Penalty (See the Failure to Comply Business Practice).

E. BPA-Provided Schedule Value (Intentional Deviation Measurement Value)

1. Through a mutually agreed-to data link (signal), BPA will provide to the Uncommitted–Scheduling Participant the scheduling value for the participant to use in its hourly schedule. The mutually agreed-to data link will be the System of Record for the application of the Intentional Deviation Penalty Charge.
2. The BPA-provided scheduling value is the Intentional Deviation Measurement Value in the Ancillary and Control Area Service (ACS) Rate Schedules.
3. For the Uncommitted-Scheduling Participant, the BPA-provided scheduling value will be updated every 5 minutes.
    a. The following table identifies the timeframes to utilize the BPA-provided scheduling value. The posting period is used to determine the applicable BPA-provided scheduling value when determining scheduling accuracy performance.

Period Start	**xx:00**		
Scheduling Election	**Calculated**	**Posted**	**Schedule Period**
Wind Uncommitted (40/60) from Super Forecast Methodology	xx:10 - xx:15	xx:15 - xx:20	x1:00-x2:00
Solar Matrix	Monthly, Hour of Day	NA	x1:00-x2:00
Solar Forecast	xx:10 - xx:15	xx:15 - xx:20	x1:00-x2:00

    b. BPA will update the BPA-provided scheduling value within 1 minute after the start of the posting period for the applicable scheduling election. In the event BPA does not update the BPA-provided scheduling value prior to the close of the posting period, BPA will deem this a BPA system failure in accordance with Section F.4 of this business practice.
    c. For Solar Generators, who elect the Solar Matrix, the hourly value will be provided to each solar generator at least once annually and will be used to determine the applicable BPA-provided scheduling value when determining scheduling accuracy performance.

F. Uncommitted Resource Scheduling for Curtailments, System of Record Failures & Operational Controls for Balancing Reserves

1. During an Operational Controls for Balancing Reserves limit generation event or transmission schedule curtailment, t~~ T~~he Uncommitted–Scheduling Participant's performance will be measured on the BPA-provided schedule value as defined in Section E, above
2. During an Operational Controls for Balancing Reserves schedule curtailment the Uncommitted Scheduling Participant does not need to limit its generation in response to the Operational Controls for Balancing Reserves schedule curtailment if there are no other transmission curtailments affecting e-Tags sourced at the Uncommitted Scheduling Resource.
3. During a transmission schedule curtailment, participants are expected to comply and limit generation to not exceed the sum of remaining approved e-Tags during the curtailment.
4. During a System of Record failure, the scheduling value that BPA provides to the Uncommitted-Scheduling participant may not be sent.
    a. The Uncommitted-Scheduling Participant should schedule the subsequent scheduling interval as accurately as possible by using iCRS to obtain the BPA-provided schedule value.
    b. In recognition that inaccuracy could result from unavailability of the scheduling value, BPA will exclude the subsequent schedule interval from scheduling accuracy performance requirements.
    c. The participant should notify their BPA Transmission AE as soon as possible.

G. Application of Intentional Deviation Penalty Charge (ID)

1. Uncommitted-Scheduling Participants are subject to the Intentional Deviation ~~(ID) p~~Penalty ~~c~~Charge (ID) as defined in BPA's ACS Rate Schedule.
    a. An Uncommitted-Scheduling Participant scheduling to the BPA-provided schedule value will satisfy the schedule accuracy performance requirement to avoid the Intentional Deviation Penalty Charge.
    b. The ACS Rate Schedule provides the performance measures that determine when an Intentional Deviation ~~p~~Penalty ~~c~~Charge will be applied.
2. For schedule Intervals with no curtailments or with curtailments issued prior to the close of the scheduling window:
    a. ID applies, in accordance with the ACS Rate Schedule, when the resource schedules to a value other than the BPA-provided schedule value (Intentional Deviation Measurement Value), except
    b. When the resource schedules to another value and the imbalance from a different schedule value meets or beats the imbalance that would have otherwise

occurred had the resource scheduled to the BPA-provided schedule value, as defined in Section E.

3. For schedule periods with curtailments issued after the close of the scheduling window for each scheduling period ID will not apply~~ in accordance with Sections G.1 and G.2, above~~.

~~4. For scheduling periods with curtailments issued prior to the close of the scheduling window ID will be measured on the approved sum of schedules after the close of the scheduling window for that scheduling period as follows:~~

   ~~a. When the sum of schedules is equal to the BPA-provided schedule value then ID does not apply in accordance with G.1 and G.2.a, above.~~

   ~~b. When the sum of schedules is less than the BPA-provided schedule value then ID will apply in accordance with G.1 and G.2.b, above.~~

   ~~c. When the sum of schedules is greater than the BPA-provided schedule value then ID will apply in accordance with G.1 and G.2.b, above.~~

H. Notification of Participation in Uncommitted Scheduling

1. When resources change their election in accordance with the rate schedule applicable at the time their BPA Transmission AE will confirm the change with the resource.
2. BPA encourages Wind and Solar Generators to automate their scheduling at the time they elect Uncommitted Scheduling.
3. In planning the time necessary for testing, participants are encouraged to build in time for edits and revisions to systems and processes.