



Supplemental Service, Version 2

Effective: 10/01/13

In its 2012-2013 transmission rate case, BPA proposed offering “**Supplemental Service**¹,” a service that would allow a wind project operator to purchase reserves or ask BPA to purchase reserves which would be deployed by BPA when BPA initiates a wind e-Tag curtailment to reduce the amount by which a wind facility on BPA’s system is under-generating relative to schedule. This program began in July 2012. For a variety of reasons, customers did not take advantage of Supplemental Service.

For this Rate Period, BPA has discussed a more flexible offering for Supplemental Service. These flexibilities would better allow a customer to better anticipate a wind event and make a resource available for the forecasted duration of the wind event to reduce DSO 216 risk.

A. Eligible Customer

1. Any **Customer**² that operates a **Wind Facility**³ or other Variable Energy Resource located within BPA’s Balancing Authority Area is eligible to participate in BPA’s Supplemental Service Program.
2. A **Supplemental Service Participant**⁴ must execute a Balancing Service Supply Agreement with BPA.
3. A Supplemental Service Participant must notify its Transmission Account Executive in writing 10 business days prior to initially submitting a Supplemental Service schedule to accommodate configuration of the **Supplemental Service Centroid**⁵ and other BPA systems. The notification should indicate:

¹A service through which a customer may reduce its exposure to a DSO 216 event by making available a Supplemental Service Resource acquired by a customer or by BPA that would be deployed by BPA during a DSO 216 event thereby reducing the amount by which the energy profile of the e-Tag for a Wind Facility or other Variable Energy Resource would be reduced when BPA initiates a wind e-Tag curtailment or when BPA initiates a wind limit event to address an over-generation condition.

²Any customer taking service under Use of Facilities (UFT), Formula Power Transmission (FPT), Integration of Resources (IR), Part II or Part III of the OATT.

³A collection of individual wind generating turbines operated as a single generation resource with a common point of interconnection to BPA’s transmission system.

⁴An entity that operates a Wind Facility or other Variable Energy Resource within BPA’s Balancing Authority Area and that has signed a Supplemental Service Agreement agreeing to supply or purchase Supplemental Services for that Wind Facility.

⁵A scheduling point designated by Transmission Services for delivery of power from Supplemental Service Resources to supply Supplemental Service to or from a Wind Facility or other Variable Energy Resource.

- a. The name of the Wind Facility or other Variable Energy Resource for which Supplemental Service will be supplied.
 - b. Whether the Supplemental Service will include INC or DEC resources.
 - c. The maximum number of Supplemental Service Resources that will be scheduled by the customer in any given month if that number is greater than one.
4. A **Participant**¹ must comply with all applicable BPA Business Practices.
 5. A Participant must pay all fees and charges applicable to Supplemental Service, including its costs to install any communication or other equipment or systems necessary to implement Supplemental Service.

B. Eligible Supplemental Service Resources

1. A Supplemental Service resource is available to supply Supplemental Service to any Wind Facility or other Variable Energy Resource located within BPA's Balancing Authority Area.
2. A **Supplemental Service Resource**² must be approved in advance by BPA. A Supplemental Service Resource may be prequalified in accordance with BPA's **Balancing Services**³ Resources Prequalification Business Practice.
3. A Supplemental Service Resource may be located within or outside BPA's Balancing Authority Area.
4. A Supplemental Service Resource must satisfy the following conditions:
 - a. The Supplemental Service Resource must be capable of ramping to operating reserves capacity within ten minutes; and
 - b. A Supplemental Service Resource that is activated within the Delivery Hour must remain activated for the remainder of the delivery hour unless BPA requests the supplier to ramp out.

C. Procedures for Providing Wind Facility Data and Designating a Supplemental Service Centroid

1. At the request of the operator of a Wind Facility or other Variable Energy Resource, BPA

¹An entity that operates a Wind Facility or other Variable Energy Resource within BPA's Balancing Authority Area and that has signed a Supplemental Service Agreement agreeing to supply or purchase Supplemental Services for that Wind Facility.

²A dispatchable generator or load from which Supplemental Service would be supplied.

³Regulation Reserves, Following Reserves, and Imbalance Reserves as those terms are described in BPA's Rate Schedules.

will establish a designated Supplemental Service Centroid **POR**¹/**POD**² for that Resource. BPA may designate more than one Supplemental Service Centroid to facilitate the Supplemental Service Program.

2. The Supplemental Service Participant must establish a **Centroid**³ **Source**⁴ (for DEC Supplemental Service) or a **Sink**⁵ (for INC Supplemental Service) containing the designation ending with “.SUP” for each Supplemental Service Resource to facilitate proper accounting for Supplemental Service.
3. BPA needs at least two weeks notice to incorporate new Supplemental Service Centroids into its systems.

D. Procedures for Requesting that BPA Acquire a Supplemental Service Resource on Behalf of an Applicant

1. A Participant that intends to request BPA to acquire a Supplemental Service Resource on its behalf must notify its Transmission Account Executive in writing of its intent to do so at least 30 days in advance of the Purchase Period, comply with BPA’s credit policies, and execute a Supplemental Service Resource Enabling Agreement with BPA, which BPA will provide promptly to a Participant upon receipt of notice.
2. The Participant shall have 10 business days from the date BPA sent the Agreement to execute the Supplemental Service Resource Enabling Acquisition Agreement.
3. The Participant shall provide the following information:
 - a. The name of the Wind Facility for which Supplemental Service will be supplied from a Supplemental Service Resource to be acquired by BPA;
 - b. The MW amount of Supplemental Service to be supplied during each month of the Purchase Period to each Wind Facility from the Supplemental Service Resource to be acquired by BPA;

¹Point of Receipt is an interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available by the Delivering Party; An OASIS field on a TSR that is the scheduling POR.

²Point of Delivery is a point on the The Transmission Provider's Transmission System where capacity and energy transmitted by the Provider will be made available to the Receiving Part; An OASIS field on a TSR that is the scheduling POD.

³A unique scheduling point designated by Transmission Services for delivery of power from an INC Resource when actual generation is less than scheduled output, and from that point to a DEC Resource when actual generation exceeds scheduled output, to supply Wind Balancing Services to a Virtual Wind Facility.

⁴An OASIS field on a TSR that is the contractual POR.

⁵An OASIS field on a TSR that is the contractual POD.

- c. The maximum total cost (including capacity and anticipated deployment) that the Participant is willing to pay for the delivery of Supplemental Service to the centroid; and
 - d. Any other pertinent information requested by Transmission Services.
4. Upon receipt of an executed Supplemental Service Resource Enabling Agreement, BPA will promptly solicit offers from the market to supply Supplemental Service on a monthly basis in the amount requested for each month of requested service. BPA anticipates that this solicitation process will take a minimum of 30 days.
 5. Once BPA receives market offers to supply Supplemental Service, BPA will develop a single, aggregate estimated monthly total cost for Supplemental Service based on the weighted average price of market offers. BPA will then determine the amount of Supplemental Service that will be made available to each Participant at a price at or below the estimated maximum total cost each Participant indicated a willingness to pay and notify each Participant the extent to which its offer to purchase Supplemental Service has been accepted. To the extent that the average monthly price exceeds the estimated maximum monthly total cost for some Participants or the amount of Supplemental Service Resources offered is less than the amount of Supplemental Service requested, the lowest price requests to purchase Supplemental Service will be excluded from consideration until an average price is calculated that is at or below the estimated maximum total cost each of the remaining Participants is willing to pay.
 6. Supplemental Service provided from a Supplemental Service Resource acquired by BPA will begin on the first day of the next month following the acquisition and continue for the duration of requested service.
 7. BPA will notify each Participant in writing of the monthly amounts of Supplemental Service purchased on their behalf based on their request and the costs of such purchases.
 8. Each Participant will be billed for all costs incurred by BPA in supplying requested Supplemental Service.

E. Procedure for Submitting Supplement Service Schedule

1. A firm reservation is required to submit an e-Tag for a Supplemental Service Resource. BPA will provide a billing credit for Original reservation requests based on e-Tags for the actual capacity scheduled to or from a Supplemental Service Centroid. Billing credits will

- not be provided for other reservation requests such as Redirect or Resale¹.
- a. Each Supplemental Service E-tag shall include the AREF² of its reservation, not the Blanket Function³, to receive the billing credit and ensure the credit is at the same service rate as its underlying reservation.
2. The Participant shall submit a dynamic or capacity e-Tag for each Supplemental Service Resource it has acquired. BPA shall submit a dynamic or capacity e-Tag for each Supplemental Service Resource it has acquired on behalf of a Participant.
 - a. For INC Supplemental Service Resource, the POR is the point where the Supplemental Service Resource is connected to BPA's transmission system and the POD is the Supplemental Service Centroid.
 - b. For DEC Supplemental Service Resources, the POR is the Supplemental Service Centroid and the POD is the point where the Supplemental Service Resource is connected to BPA's transmission system.
 3. Dynamically scheduled resources require two months notice to configure a resource to allow it to be scheduled dynamically.
 4. A Supplemental Service Resource schedule submission must comply with all applicable timelines and other requirements for submitting an e-Tag.

F. Procedure for Activating, Managing, and De-activating Supplemental Service

1. BPA shall have the right to activate Supplemental Service at any time during the delivery hour when BPA initiates a wind e-Tag curtailment due to under-generation or limit wind output due to over-generation.
2. All Supplemental Service Resources available for Participants contributing to the reserve event will be fully activated for:
 - a. All Participants that are under-generating during a wind e-Tag curtailment event, or
 - b. All Participants that are over-generating during a wind limit event.

¹A Resale is a TSR which, when CONFIRMED, conveys scheduling rights associated with all or a portion of a reservation for firm PTP Transmission Service from a Reseller to an Assignee. There are two wesTTrans OASIS options to transact a Resale: OASIS Resale: The posting of scheduling rights offered for sale on OASIS to the open market (an open auction conducted on OASIS). TransAssign: The posting of a Resale conducted off OASIS, with a pre-selected buyer (an OASIS notice of a private sale conducted off OASIS).

²A unique reference number automatically assigned by OASIS to provide a unique record for each transmission or ancillary service request.

³A functionality that automatically allocates the Transmission Profile and the Energy Profile in an e-Tag to one or more A-Ref number(s).

3. BPA will treat energy supplied from a Supplemental Service Resource as self-provided generation imbalance.
4. BPA will measure the amount of energy supplied from each Supplemental Service Resource and assign that amount to the corresponding Participant for purposes of calculating generation imbalance charges.
5. If BPA has purchased Supplemental Service on behalf of a customer, BPA will pay the cost of acquiring and deploying a Supplemental Service resource and recover these costs from the customer.
6. The Participant will continue to pay generation imbalance on station control error for the Wind Facility remaining after accounting for energy deliveries from each Participant's Supplemental Service Resource.

G. Curtailment Priority for Supplemental Service Resources

1. An On Demand or Dynamic Supplemental Service Schedule will be given a “7-F” NERC curtailment priority.

H. Compliance with Dispatcher Directives

1. Entities supplying or receiving Supplemental Service are subject to Dispatcher directives, including directives issued under Dispatch Standing Order No. 216.
2. Wind Facilities that are netted for purposes of responding to DSO 216 events will be treated as a single Wind Facility and netted for purposes of the Supplemental Service Program.
3. A Participant that is supplying its own Supplemental Service or the operator of a generator under contract with BPA to supply Supplemental Service that does not respond appropriately to a Dispatcher directive to activate Supplemental Service is subject to a [Failure to Comply Penalty¹](#) (URL).
4. Supplemental Service Resources located within BPA's Balancing Authority Area are subject to BPA's Environmental Redispatch Business Practice (URL).

¹The consequences of non-compliance as defined in the Failure to Comply Business Practice in effect at the time.

I. Limitations on Supplemental Service

1. Supplemental Service is subject to BPA's [On Demand Resource](#)¹ Scheduling Business Practice (URL) and [Dynamic Transfer](#)² Operating and Scheduling Business Practice.
2. BPA may suspend or limit delivery of Supplemental Service if the reliability of the federal system is threatened.
3. The maximum number of Supplemental Service Resources a customer may schedule for any given hour is one.

¹a. A resource located within BPA's Balancing Authority Area; b. An arrangement with a neighboring Balancing Authority that allows the delivery of power on BPA's system to or from a neighboring system; or c. A Demand Response Resource capable of meeting the technical requirements for an On Demand Resource.

²A term that refers to methods by which the control response to load or generation is assigned, on a real-time basis from the Balancing Authority to which such load or generation is electrically interconnected (native Balancing Authority) to another Balancing Authority (attaining Balancing Authority) or other controlling entity on a real-time basis. This includes Pseudo-Ties, Dynamic Schedules, and dynamic arrangements within the BPA Balancing Authority Area.

J. Billing Procedures for a Supplemental Service Participant

1. Transmission Services shall calculate Generation Imbalance charges taking into account the energy that is provided by a Supplemental Service Resource

K. Additional Information

Related Business Practices

- Oversupply Management Protocol
- Failure to Comply
- Generation Imbalance
- On Demand Resource Scheduling
- **Redispatch and Curtailment Procedures¹**
- Requesting Transmission Service
- Scheduling Transmission Service
- Dynamic Transfer Operating and Scheduling

Version History

Version 2	10/01/13 BPA is proposing a more flexible policy for Supplemental Service. For example, BPA is proposing that a customer may opt to make a Supplemental Service Resource available to BPA on short notice for a period of time set by the customer. This would allow a customer to anticipate a wind event and make a resource available for the forecasted duration of the wind event to reduce DSO 216 risk. BPA is also proposing to allow a customer to ask BPA to acquire a Supplemental Service Resource on its behalf on a monthly basis with advance notice. As a result, the existing Supplemental Service Business Practice needs to be amended to implement these new Supplemental Service Policies. Due to the volume of changes, a list of the changes is not included.
Version 1	10/01/11 New business practice

¹Measures taken to relieve transmission system overloads and therefore manage loading on the transmission system to within the Operating Transfer Capability (OTC).