

Network Integration Transmission Service (NT) and Designated Network Resources (DNR)

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For informational purposes only.



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NT Service Overview

- NT service allows the NT Customer to efficiently and economically utilize their Network Resources to serve Network Load.
 - NT Customer must designate Network Resources to serve Network Load on firm transmission.
 - NT Customer must designate Network Load at discrete Points of Delivery (POD) to be served through NT service.
- The Transmission Provider has an obligation to plan and operate the transmission system to serve the NT Customer's Network Load.
- NT Service may only be used to serve Network Load and may not be used for marketing purposes.
- NT Service is billed based on total Network Load.



Requesting NT Service

- Per section 29.2 of BPA's Tariff, a NT Customer must apply for NT Service.
 - NT Customer must submit a Transmission Service Request (TSR) over OASIS to designate New Network Load.
 - NT Customer must submit a TSR over OASIS to designate a Network Resource.
 - Informational requirements – NT Customer must provide specific information about a resource such as the generator size and capacity to be designated, any operating restrictions, redispatch costs, maintenance schedules, etc
 - Attestation requirement – NT Customer must attest that the Network Resource being designated is owned, purchased, or leased by the NT Customer at the time of designation.
 - For off-system Network Resources, the NT Customer must demonstrate firm upstream transmission arrangements to deliver the resource onto BPA's transmission system.
 - See Appendix A for the form used to designate and attest a network resource



Planning the Transmission System

- Under section 28.2 of BPA's Tariff, BPA has an obligation to plan, construct, operate, and maintain its Transmission System to ensure sufficient transfer capability to deliver the Network Customer's Network Resources to serve its Network Load, including load growth.
 - For NT Customers with the FCRPS as a designated Network Resource, BPA plans the system under the assumption that the FCRPS will serve load growth.
 - When an NT Customer designates a non-federal Network Resource, BPA uses some of the capacity reserved from the FCRPS to assess the capacity needed for the non-federal resource.
 - For BPA to effectively plan the transmission system, NT Customers are required to submit annual 10-year Load and Resource Forecasts.



Restrictions on the Use of NT Service

- Under section 28.6 of BPA's Tariff, NT service may not be used for (i) sales of capacity and energy to non-designated loads, or (ii) direct or indirect provision of transmission service to third parties.
 - For third-party sales (marketing), the NT Customer must reserve PTP service.
 - If the third-party sale is for a year or longer from a designated Network Resource, the NT Customer must first undesignate the Network Resource.
 - NT service may be used only for serving Network Load and may not be used in excess of Network Load.



Scheduling NT Service

- Deliveries of FCRPS generation
 - Load Following NT Customer within BPA's Balancing Authority Area (BAA) are not required to schedule FCRPS deliveries to load.
 - However, BPA has developed proxy-tags tracking FCRPS deliveries to unscheduled Network Loads.
- Deliveries of non-federal generation
 - NT Customers are required to schedule deliveries of non-federal Network Resources to Network Load.
 - Behind the Meter Resources, solely used to serve Network Load, are not scheduled over BPA's transmission system.



What is a Behind the Meter Resource?

- Behind the Meter Resource means a resource used to serve the NT Customer's Network Load that is internal to the NT Customer's system or is transmitted over non federal transmission facilities and is forecasted not to be transmitted over BPA's transmission system.
 - Behind the Meter Resources do not need to submit a TSR
 - Behind the Meter Resources do need to submit a Network Resource Designation form
- The integrated hourly sum of generation from an NT Customer's Behind the Meter Resources may not exceed the NT Customer's total Network Load for any given hour.



Behind the Meter Resource Requirements

Located in Customer's service territory?	Use BPA Facilities?	Used to serve Customer's load?	Is it Behind the Meter?	Requirements
Yes	No	Yes	Yes	DNR Form only
No	Yes	Yes	No	TSR & DNR Form
Yes	Yes	No	No	TSR & DNR Form
Yes	Yes	Yes	No	TSR & DNR Form

- The table above applies to generators above 200 kW nameplate. Resources less than 200 kW nameplate are not included in a customer’s NT agreement.
- Additionally, Behind the Meter Resources qualify for the NT Short Distance Discount (NT SDD)
 - NT SDD is an incentive for NT Customers to locate generation closer to load. Behind the Meter Resources do not utilize BPA facilities and qualify for the discount.



Forecasted Network Resources

- NT Customers can submit Forecasted Network Resources via the NT Dialogue Process.
 - NT Dialogue Process provides BPA with information necessary to plan to meet the NT customer's forecasted uses of the Transmission system.
 - At the time of the NT Dialogue and submittal of the forecast, NT Customers do not need to meet the Tariff attestation requirements.
 - This process incentivizes NT Customers to plan for their resource choices earlier than today, and provides the ability to reserve capacity for those forecasted needs.
 - Prior to delivery of the resource, prior to service commencement, NT Customers must formally designate the resource and meet the attestation requirements.



Appendix A

- Network Resource Designation Form can be viewed on the next two slides and is posted with the forms on BPA's Business Practice site:
 - http://transmission.bpa.gov/ts_business_practices/
- Direct link:
 - http://transmission.bpa.gov/ts_business_practices/Content/2_Bulletins_Forms_BP_Index/Forms/NT_Resource_Designation_Form.doc





Transmission Services

NETWORK RESOURCE DESIGNATION FORM

The following form is to be used for the designation of each Network Resource, in accordance with section 29.2 and 30.2 of the Tariff, and for exercising reservation priority on each existing designated Network Resource.

Please complete the Attestation Information requested on page 1, as well as supplemental data for power arrangements (either Section I or Section II) on page 2-3. The signed forms should be e-mailed in .pdf format to: TxRequests@bpa.gov.

CUSTOMER INFORMATION

Company Name:

Contact Name:

Address:

Telephone Number:

Fax Number:

E-mail Address:

NT Service Agreement No.:

Associated NT Reservation A-Ref.:

ATTESTATION

Customer attests that the Network Resource specified below satisfies the following conditions:

- (1) Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and,
- (2) The Network Resource does not include any resources, or any portions thereof, that are committed for a sale of one year or more to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program.
- (3) Firmness of Network Resource- Customer certifies that it has reserved firm transmission service on all intermediate transmission systems, including the source system, or that it has submitted such requests and the Customer will notify BPA Transmission Services when such requests are confirmed or declined.

Customer further attests that in the event the above Assign Ref is replaced by a "confirmed" Transmission Service Request (TSR), the Network Resource associated with such confirmed TSR will also satisfy the conditions above.

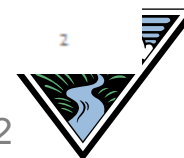
Authorized Officer or Agent Name:

Signed:

Title:

Date:

POWER ARRANGEMENTS (Complete either Section I or Section II as appropriate)	
Section I. Complete for Generating Resources located within the BPA Balancing Authority Area or for Behind the Meter Resources ONLY. (Complete all segments or put N/A if not applicable)	
1) Start Date and Stop Date: Must be consistent with the Transmission Service Request.	<input type="text"/>
2) Type of Generating Resource: Identify the type of Generating Resource. E.g., PCRRS, win, hydro, etc.	<input type="text"/>
3) Power Purchase Agreement No. (if applicable): Provide the contract number of the Power Purchase Agreement.	<input type="text"/>
4) Name of Generating Resource: Enter the complete name of the Generating Resource.	<input type="text"/>
5) Owner of Generating Resource: Enter the name of the owner of the Generating Resource.	<input type="text"/>
6) Nameplate Capacity: Enter Total Installed Capacity in MW of Generating Resource; Does not apply for PCRRS.	<input type="text"/>
7) Capacity (MW) to be Designated: (Enter designated capacity in MW. For designated network resources associated with one Transmission Service Request, the MW amount must match the "MW Requested" field in the Transmission Service Request. For designated network resources associated with multiple Transmission Service Requests, the MW amount should be the highest of the "MW Requested" in the multiple Transmission Service Requests or if the designated capacity exceeds the highest "MW Requested" in the multiple Transmission Service Requests, then the MW amount should be the designated capacity.)	<input type="text"/>
8) VAR capability (both leading and lagging) of all generators: Attach Reactive Capability Curve for Generating Resource. Does not apply for PCRRS.	<input type="text"/>
9) Maintenance Schedules: Describe duration & seasonality of planned maintenance outages. Does not apply for PCRRS.	<input type="text"/>
10) Minimum loading level of the Generating Resource: Amount may vary based on Generating Resource & can be expressed as the percentage (%), or the MW amount, of the nameplate capacity of the Generating Resource listed in the item 6. Does not apply for PCRRS.	<input type="text"/>
11) Normal operating level of the Generating Resource: Enter normal operating level of the Generating Resource in MW.	<input type="text"/>
12) Upstream Transmission Arrangements (limited to POR of NWRKTHUB only): (Identify the Transmission Provider and associated A-Ref number of the Upstream Transmission Arrangements. (If a firm transmission service request is pending, identify the associated A-Ref number and identify the request as "pending.")	<input type="text"/>
13) Any periods of restricted operation throughout the year: Enter the period of restricted operations. Does not apply to PCRRS.	<input type="text"/>
14) Any must-run Generating Resource designations required for system reliability, contract, regulatory or other non-power reasons:	<input type="text"/>
15) Approximate variable generating cost (\$/MWh) for (dispatch) computations: Enter current approximate actual production costs or contract price, as appropriate.	<input type="text"/>
16) If only a portion of the Generating Resource output is designated as a Network Resource, provide details on the arrangements for sale and delivery of additional output to third-parties:	<input type="text"/>



<p>Section II. Complete for Generating Resources located outside the BPA Balancing Authority ONLY (contract or owned). (Complete all segments or put N/A if not applicable)</p>
<p>1) Start Date and Stop Date: Must be consistent with the Transmission Service Request.</p>
<p>2) Type of Generating Resource: Identify the type of Generating Resource. e.g., system sale purchase, wind generation, hydro, etc.</p>
<p>3) Power Purchase Agreement No. (if applicable): Provide the contract number of Power Purchase Agreement.</p>
<p>4) Capacity (MW) to be Designated: Enter designated capacity in MW. For designated network resources associated with one Transmission Service Request, the MW amount must match the "MW Requested" field in the Transmission Service Request. For designated network resources associated with multiple Transmission Service Requests, the MW amount should be the highest of the "MW Requested" in the multiple Transmission Service Requests or if the designated capacity exceeds the highest "MW Requested" in the multiple Transmission Service Requests, then the MW amount should be the designated capacity.</p>
<p>5) Balancing Authority Area from which the power will originate: Use WSCC Balancing Authority abbreviations.</p>
<p>6) Transmission Interchange point for Delivery to BPA Balancing Authority Area: Interchange point must match the Point of Receipt (POR) source field of the Transmission Service Request.</p>
<p>7) Upstream transmission arrangements (on BPA Balancing Authority Area or external transmission systems): If the customer takes title to power at the specific generator - identify the Transmission Provider, and the associated A-Ref number of the Upstream Transmission Arrangements. If a firm transmission service request is pending, please identify the associated A-Ref number and identify the request as "pending." If the customer is taking title to firm power at the point of interconnection between BPA's S&S and the source S&S, no need to identify upstream transmission arrangements.</p>
<p>8) Any periods of restricted operations throughout the year: Enter the periods of restricted operations. Not applicable for system sales.</p>
<p>9) Maintenance schedules: Describe duration and seasonality of planned maintenance outages. Not applicable for system sales.</p>
<p>10) Minimum loading level of the Generating Resource: This amount may vary based on the Generating Resource and can be expressed as the percentage (%), or MW amount, of the nameplate capacity of the Generating Resource. Not applicable for system sales.</p>
<p>11) Normal operating level of the Generating Resource: Enter normal operating level of the Generating Resource in MW. Not applicable for system sales.</p>
<p>12) Any must-run Generating Resource designations required for system reliability or contract reasons:</p>
<p>13) Approximate variable generating cost (\$/MWH) for dispatch computations: Enter current approximate actual production costs or contract price, as appropriate.</p>

