



# NT 101 - Overview

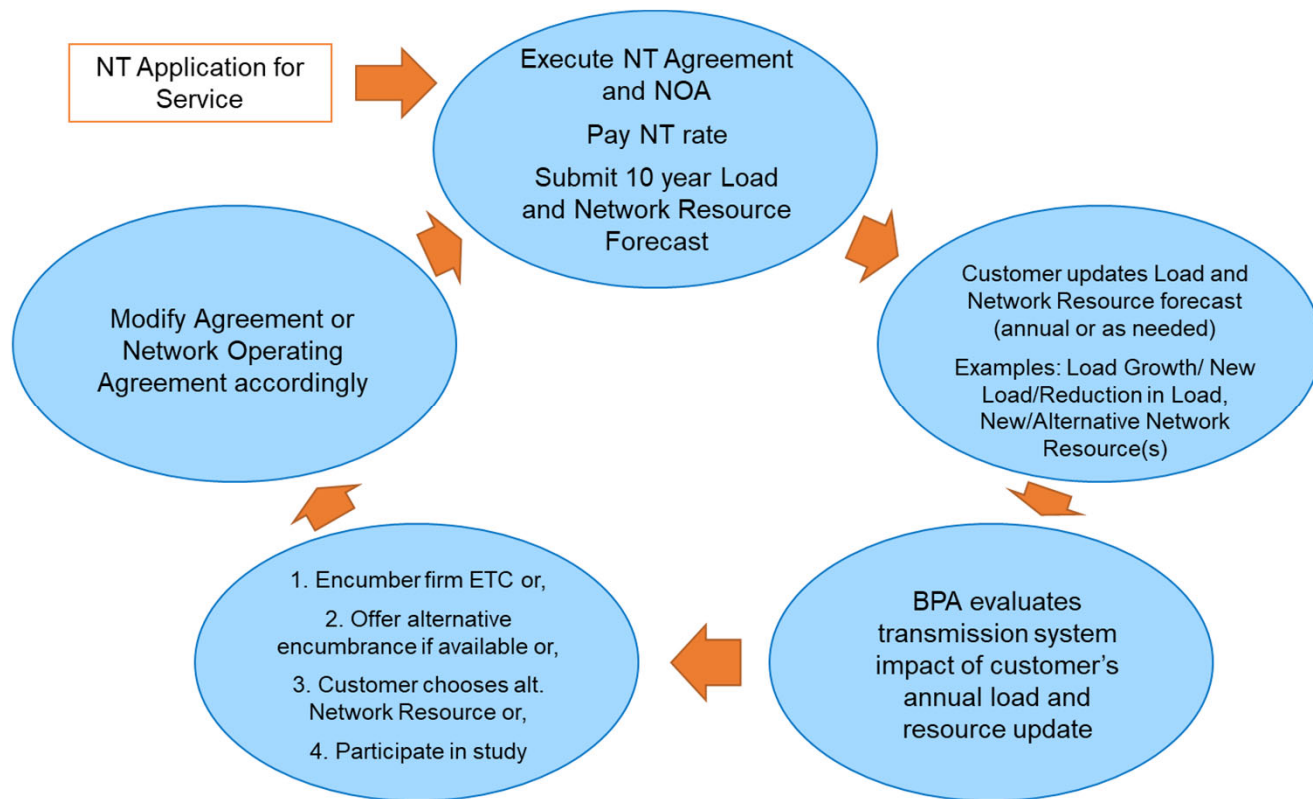


## Tariff Transmission Service Products

The Open Access Transmission Tariff (the Tariff) delineates the terms and conditions of providing and taking transmission service.

- BPA's Tariff provides for two types of Transmission Service:
  - Point-to-Point (PTP) Service
    - Terms and conditions of PTP Service are located in Part II of the Tariff.
    - PTP Service allows the Customer to move power from a Point of Receipt to a Point of Delivery
    - Billed on reservation capacity
    - Reference [PTP Product Overview](#)
  - Network Integration Transmission Service (NT Service)
    - Terms and conditions of NT Service are located in Part III of the Tariff
    - Available only for service to Network Load
    - Billed based on metered Network Load
    - Reference [NT Product Overview](#)

# Cycle of NT Service



## Network Load

**Network Load** is load designated by the Customer to be served by NT. A Customer may designate less than its total load as Network Load, but may not designate only a part of the load at a discrete Point of Delivery. Load not designated as Network Load must be served with Point-to-Point Transmission Service (PTP).<sup>3</sup> Network Load is designated during the application process<sup>4</sup> or by amending the Service Agreement for Network Integration Transmission Service.<sup>5,6</sup>

**Interconnections and Delivery Points** – New Interconnections or Delivery Points, as well as modifications to existing Interconnections or Delivery Points are managed through BPA's Load and Line Interconnection Procedures.<sup>7</sup>

## Network Resource

A **Network Resource**<sup>8</sup> is any designated generating resource owned, purchased, or leased by a Customer.<sup>9</sup> Network Resources serve Network Load.<sup>10</sup> Network Resources are designated during the application process and may be updated as needed.<sup>11</sup> A Network Resource may not be committed for a sale of one year or more to third parties or otherwise cannot be called upon to meet the Customer's Network Load on a non-interruptible basis except when obligated by a reserve sharing program.<sup>12</sup>

**Generation Interconnections** – Generation Interconnections are managed through BPA's Generator Interconnection Procedures. Separate procedures are defined for Large (greater than 20MW)<sup>13</sup> and Small (less than or equal to 20MW)<sup>14</sup> Generators.

## Secondary Service

A Customer may use Secondary Service to **deliver energy** to its Network Loads from resources that **have not been designated** as Network Resources on an as-available basis at no additional charge. Secondary Service has a higher priority than any non-firm PTP.<sup>23</sup>

## Restricted Use of NT

NT may only be used to **serve Network Load**. NT cannot be used for sales of capacity and energy to non-designated loads or to third parties.<sup>24</sup> NT may only be used over the BPA Network and Delivery Facilities. Interties with their own rate may not be used with NT, i.e., Southern Intertie, Montana Intertie, Eastern Intertie.<sup>25,26</sup>

# Planning for the Transmission System

Customers' Network Load is included in BPA's Transmission System planning. BPA endeavors to construct and place into service sufficient transfer capability to deliver Customer's designated Network Resources and accepted forecasted resources to **serve its Network Load in accordance with the Tariff.**<sup>38</sup>



## Load and Resource Forecasting

A Customer must provide annual updates of ten-year forecasts of Network Loads and Network Resources.<sup>36</sup> BPA facilitates this through the **NT Annual Load and Resource Forecast Process**. In addition, BPA requests notification as soon as possible when changes to forecasts occur. BPA uses a Forecast Transmission Service Request (FTSR) to track proposed and accepted Customer forecasts and to encumber or reserve capacity.<sup>37</sup>

Following an evaluation of a forecast it may be accepted with or without modifications. In addition, limitations may be identified such as sub-grid upgrades, pending interconnection work, or other situations requiring further study.

# 101+ Additional Topics

# Overview

**Network Integration Transmission Service (NT)** is a transmission service that allows Network Customers (Customer) to efficiently and economically utilize their Network Resources (as well as other non-designated generation resources<sup>1</sup>) to serve their Network Load in accordance with Part III of BPA's current Open Access Transmission Tariff (Tariff).<sup>2</sup>

## Network Resource (Cont)

**Undesignation** – A Customer may terminate the designation of a Network Resource on a temporary or permanent basis. As part of a temporary termination, only the same resource may be redesignated and the capacity cannot be greater than original designation.<sup>15</sup> Undesignation allows a Customer to make third-party sales of one year or more.

For a **temporary Undesignation**, ATC rights are forfeited during the time of the Undesignation. For a permanent Undesignation, ATC rights and reservation priority are forfeited.<sup>16</sup> Under the current Tariff, a Customer is not required to Undesignate a Network Resource for a third-party sale of one year or less

## Federal Resource

Power **provided by Federal Columbia River Power System (FCRPS)** under the Regional Dialogue contracts with BPA Power Services is considered a Federal Resource and includes Federal purchases from non-Federally owned resources to meet those contractual obligations.<sup>17</sup>

BPA Power Services designates the FCRPS on behalf of Network Customers wishing to designate their Regional Dialogue contracts in accordance with those contracts and an agreement between BPA Power Services and BPA Transmission Services.<sup>18</sup>

## Non-Federal Resource

A **Non-Federal Resource** may be a generating resource owned, purchased, or leased by a Customer, excluding Federal Resources. Non-Federal Resources are eligible to be designated as a Network Resource.<sup>19</sup>

**Behind-the-Meter Resource** – A resource that is located on the Customer's side of the Point of Delivery is considered a Behind-the-Meter Resource.<sup>20</sup> A Behind-the-Meter Resource may be designated as a Network Resource.<sup>21</sup> Under the current rate schedule the Short-Distance Discount is available if a Behind-the-Meter Resource is designated and used solely to serve the Customer's Network Load.<sup>22</sup>

## Reservations

NT service is reserved using a Transmission Service Request (TSR) within the reservation window. Firm NT service is available in yearly, monthly, weekly, daily, and hourly durations. Secondary Service is available in Monthly, Weekly, and Hourly durations.<sup>27</sup>

- Firm NT is available when using a designated Network Resource.
- Non-designated resources must use Secondary Service or PTP. If PTP is used to serve Network Load the Customer is charged for both PTP and NT.<sup>28</sup>
- A TSR must be submitted on the same day when designating a Network Resource.<sup>29</sup> Behind-the-Meter resources do not need a TSR.<sup>30</sup>

## Scheduling

NT may be scheduled against confirmed TSRs in accordance with BPA's business practice.<sup>31</sup> NT has a NERC curtailment priority code of 7-FN, except for Secondary Service which uses 6-NN.<sup>32,33</sup>

BPA Power Services may submit transmission schedules on behalf of the Customer as specified in a Customer's BPA Regional Dialogue contract.<sup>34</sup> A customer may designate one or more scheduling agents to schedule transmission service.<sup>35</sup>



## Redispatch and Curtailment

Under current procedures, BPA Transmission Services and BPA Power Services provide redispatch of Federal Resources to provide congestion relief.<sup>39,40</sup> During non-emergency congestion events, NT is redispatched while PTP may be curtailed.<sup>41</sup>

## [Link to Curtailment Priority Visual on BPA.gov](#)

Transmission Service Reservation Priorities							
E-Tag Priority	Acronym	Transmission Curtailment Classification	Transmission Service Type	Time Horizon	Transmission Service Products	Description	Action
0	NX				N/A	Next-hour Market Service - BPAT does not offer	Curtail
1	NS	Non-Firm	PTP	Hourly	NF-Secondary Hourly PTP	NF PTP Service over secondary receipt and delivery points (Redirects)	Curtail
2	NH	Non-Firm	PTP	Hourly	NF-Hourly PTP	Hourly Service	Curtail
3	ND	Non-Firm	PTP	Daily	NF-Daily PTP	Daily Service	Curtail
4	NW	Non-Firm	PTP	Weekly	NF-Weekly PTP	Weekly Service	Curtail
5	NM	Non-Firm	PTP	Monthly	NF-Monthly PTP	Monthly Service	Curtail
6	CF	Non-Firm	PTP	Yearly	LTF-Yearly PTP	Conditional Firm Service curtailment priority when Conditional (not firmed up)	Curtail
	NN	Non-Firm	NT	Hourly	NF-Hourly NT	NITS <sup>2</sup> from sources not designated as a Network Resource	Curtail
	NN	Non-Firm	NT	Daily	NF-Daily NT	NITS from sources not designated as a Network Resource	Curtail
	NN	Non-Firm	NT	Weekly	NF-Weekly NT	NITS from sources not designated as a Network Resource	Curtail
7	NN	Non-Firm	NT	Monthly	NF-Monthly NT	NITS from sources not designated as a Network Resource	Curtail
	CF	Firm	PTP	Yearly	LTF-Yearly PTP	Conditional Firm Service (when firmed up)	Curtail
	F	Firm	PTP	Hourly	F-Hourly PTP	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Hourly	F-Hourly Loss Return	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Daily	F-Daily Loss Return	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Daily	STF-Daily PTP	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Weekly	STF-Weekly PTP	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Monthly	STF-Monthly PTP	Firm Point-to-Point Transmission	Curtail
	F	Firm	PTP	Yearly	LTF-Yearly PTP	Firm Point-to-Point Transmission	Curtail
	FN	Firm	NT	Hourly	F-Hourly NT	NITS from a Designated Network Resource	Redispatch (Flow-based ATC paths) or Resupply on 1:1 ATC paths
	FN	Firm	NT	Daily	STF-Daily NT	NITS from a Designated Network Resource	Redispatch (Flow-based ATC paths) or Resupply on 1:1 ATC paths
FN	Firm	NT	Weekly	STF-Weekly NT	NITS from a Designated Network Resource	Redispatch (Flow-based ATC paths) or Resupply on 1:1 ATC paths	
FN	Firm	NT	Monthly	STF-Monthly NT	NITS from a Designated Network Resource	Redispatch (Flow-based ATC paths) or Resupply on 1:1 ATC paths	
FN	Firm	NT	Yearly	LTF-Yearly NT	NITS from a Designated Network Resource	Redispatch (Flow-based ATC paths) or Resupply on 1:1 ATC paths	

## Ancillary Services

Ancillary Services are those services necessary to support the transmission of capacity and energy from resource to loads while maintaining reliable operation of the BPA's transmission system.<sup>42</sup> Customers must obtain or provide Ancillary Services.<sup>43</sup>

## Billing

NT is charged based on **actual metered** Network Load on the hour of the **monthly peak load**. The rates are established during rate case proceedings that occur every two years.<sup>44</sup>

**Short-Distance Discount** – A discount for NT is available if a Network Resource is designated for 12 months or more and uses less than 75 circuit miles of the BPA transmission system. The discount is prorated based on the distance. For a Behind-the-Meter Resource, the distance is assumed to be zero miles.<sup>45</sup>

## Footnotes:

- 1 Non-designated resources are used with Secondary Service
- 2 BPA OATT Part III Preamble
- 3 BPA OATT §1.60 Network Load
- 4 BPA OATT §29.2 Application Procedures
- 5 BPA OATT Attachment F Service Agreement for Network Integration Transmission Service, Exhibit A Specifications for Network Integration Transmission Service
- 6 Business Practices Network Integration (NT) Transmission Service, §H Designation of a New Network Load
- 7 Line and Load Interconnection Procedures
- 8 The term “Network Resource” is being used as defined in the Tariff. This definition may not be consistent with OASIS where an undesignated resource may be referred to as a network resource
- 9 BPA OATT §1.63 Network Resource
- 10 BPA OATT §1.60 Network Load
- 11 Business Practices Network Integration (NT) Transmission Service, §E Designation of a New Network Resource
- 12 BPA OATT §1.63 Network Resource
- 13 Large Generator Interconnection Procedures
- 14 Small Generator Interconnection Procedures
- 15 BPA OATT §30.3 Termination of Network Resources
- 16 Business Practices Network Integration (NT) Transmission Service, §G Undesignation of a Network Resource
- 17 Memorandum of Agreement (MOA) for the Management of Network Integration Transmission Service for Delivery of Federal Power to Network Customer Loads, §1(a)
- 18 MOA, §8 Designation and Undesignation of BPA Network Resources
- 19 BPA OATT §30.1 Designation of Network Resources, §30.2 Designation of New Network Resources
- 20 FERC Order 888-A, page 234
- 21 Business Practices Network Integration (NT) Transmission Service, §F.8
- 22 Current Transmission Rates Rate Schedule
- 23 BPA OATT §28.4 Secondary Service

## Footnotes (Cont):

- 24** BPA OATT §28.6 Restrictions on Use of Service
- 25** BPA OATT Part III Preamble
- 26** Current Transmission Rates Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions (Rate Schedule), see various intertie rates
- 27** Business Practices Requesting Transmission Service, §E.1 Reservation Timelines
- 28** Business Practices Network Integration (NT) Transmission Service, §I, §J
- 29** Business Practices Network Integration (NT) Transmission Service, §E Designation of a New Network Resource
- 30** Business Practices Network Integration (NT) Transmission Service, §F.8
- 31** Business Practices Scheduling Transmission Service
- 32** Business Practices Scheduling Transmission Service, §A.3.c
- 33** BPA OATT §28.4 Secondary Service
- 34** Business Practices Scheduling Transmission Service, §A.3.a
- 35** Business Practices Scheduling Agent, §A
- 36** BPA OATT §31.6 Annual Load and Resource Information Updates
- 37** Business Practices Network Integration (NT) Transmission Service, §D Reserving Transmission Capacity for Forecasted Network Resources
- 38** BPA OATT §28.2 Transmission Provider Responsibilities
- 39** MOA, §6.c Congestion Management
- 40** Business Practices Redispatch and Curtailment Procedures, §C Redispatch Provided by BPA Power Services
- 41** Business Practices Redispatch and Curtailment Procedures, §D.5 Curtailment Procedures
- 42** BPA OATT §1.2 Ancillary Services, see also §3 Ancillary Services
- 43** BPA OATT §28.1 Scope of Service
- 44** Current Transmission Rates Rate Schedule
- 45** Current Transmission Rates Rate Schedule