



Transmission Services

Contract Accounting Methodology for the Planning Time Period, Version 8

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Unless otherwise defined herein, capitalized terms are defined in Transmission Services' Open Access Transmission Tariff (OATT), Rate Schedules, ATC and AFC Methodologies, Business Practices, Federal Energy Regulatory Commission (FERC) Standards and Communication Protocols for OASIS, and/or North American Electric Reliability Corporation (NERC) Glossary of Terms.

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1. Purpose

This document describes the Contract Accounting Methodology for ATC and AFC calculations beyond 13 months (Planning Time Period). Transmission Services uses the Contract Accounting Methodology to determine Available Transfer Capability (ATC) for Interties, External Interconnections and some paths internal to the BPA Network (Network Paths). Transmission Services also uses the Contract Accounting Methodology to determine the ATC Methodology Margin (AMM) and to manage Available Flowgate Capability (AFC) between base cases for each Network Flowgate.

2. Contract Accounting Methodology Assumptions

- 2.1 The Contract Accounting Methodology evaluates the existing transmission commitments, which include individual Network Integration (NT), Point-to-Point (PTP), and grandfathered contracts (Integration of Resources (IR), Formula Power Transmission (FPT), and other contracts--including Agreements where Transmission Services provides Transmission Service to Investor-Owned Utility Loads located in Transmission Services' Balancing Authority Area, obligations to the United States Bureau of Reclamation (USBR) to serve irrigation pumping Load) and the return of energy under the Columbia River Treaty, and maps the commitments onto each of the Network Flowgates, External Interconnections, Interties and the Network Paths.
- 2.2 The Contract Accounting Methodology assumptions include the following limited netting assumptions for the Network Flowgates.
 - 2.2.1 Some netting across the Network Flowgates for Network Integration (NT) and Point-to-Point (PTP) Transmission Service Agreements, Integration of Resources (IR) contracts, and Formula Power Transmission (FPT) contracts serving Load in the Pacific Northwest is based on historical Light Load Hour (LLH) data.
 - 2.2.2 For PTP, FPT, and IR contracts, netting for Point of Receipt (POR)/Point of Delivery (POD) combinations serving Load in the Pacific Northwest for each Network Flowgate is based on a ratio of monthly loads in LLH to winter loads in Heavy Load Hours (HLH). For NT contracts, netting for POR/POD combinations for each Network Flowgate is based on a ratio of monthly loads in LLH to monthly loads in HLH.
 - 2.2.3 All other contracts with firm Transmission to Loads outside of the Pacific Northwest (such as contracts delivering to the head of the AC Intertie) are assumed to use their full contract Demand simultaneously on Transmission Services' share of the Transmission System.
- 2.3 Full Case Power Transfer Distribution Factors (PTDF). PTDFs are derived from a model of the entire Western Interconnection (commonly referred to as a full case).
- 2.4 Federal Resource Dispatch:
 - 2.4.1 Modified 90th Percentile Method for federal dispatch for NT service.
 - 2.4.2 Transmission Services determines the amount of NT Load served by federal resources by decrementing the NT Load forecast by the amount of the demand designated for each non-federal NT resources serving such Load,

as specified in the NT Service Agreements. NT contracts do not identify the amount of Transmission from specific federal Network Resources to Network Load. These assumptions include the use of the Modified 90th Percentile Method in the Contract Accounting Methodology.

- 2.4.3 Additional adjustments for federal resource flexibility.
- 2.4.4 Transmission Services makes additional adjustments to allow for operational flexibilities to balance the federal hydro system to meet non-power obligations. These adjustments are made to the Contract Accounting Flow as follows:
 - 2.4.4.1 200 MW on the North of Hanford Flowgate for March through September;
 - 2.4.4.2 100 MW on the Cross Cascades North Flowgate for June through September; and
 - 2.4.4.3 200 MW on the Cross Cascades South Flowgate for June through September.

3. Determining Contract Accounting ETC for the Network Flowgates

- 3.1 Contract Accounting ETC = POR/POD demand x PTDF
- 3.2 The impact of each PTP or grandfathered contract over each Network Flowgate is the product of the Demand for each POR/POD combination multiplied by the PTDF for that corresponding Flowgate.
- 3.3 The impact of each NT contract or resource addition to the NT Resources Memorandum of Agreement over each Network Flowgate is the product of the NT Load forecast or non-federal resource MW amount for each POR/POD combination multiplied by the PTDF for that corresponding Flowgate. Transmission Services determines the impacts for NT contracts using load forecasts by individual POD. Transmission Services uses non-coincidental normal 1-in-2 year (that is, the probability of actual Loads exceeding the forecast is estimated to be 50% of the monthly peak load forecasts. For NT contracts or resource additions to the NT Resources Memorandum of Agreement with wind generation identified as a Designated Network Resource, Transmission Services performs two PTDF analyses per Flowgate assuming that the POR is the wind resource or the Federal system resources. The larger of the two PTDF values by Flowgate is the impact for the wind resource on that Flowgate.
- 3.4 For PTP or grandfathered contracts where there are multiple PORs and PODs, the contract Demand is proportionately allocated to the PORs and electrically dissimilar PODs as shown in Section 5 below.
- 3.5 The Contract Accounting ETC for each Network Flowgate is equal to the sum of the impacts of PTP, NT contracts, grandfathered obligations, and the other commitments specified in Section 2.1 over each Flowgate.

4. Determining ETC for the External Interconnections, Interties and Network Paths

- 4.1 The ATC for External Interconnections, Interties and Network Paths is calculated using the results of the Contract Accounting Methodology, without adjustments for planning study results. The Contract Accounting Methodology applicable to Interties, External Interconnections and the Network Paths modifies two key assumptions.
- 4.1.1 First, netting is assumed for only the West of Hatwai and LaGrande External Interconnections. For West of Hatwai, the netting approach described in section 2 of this document is applied. For LaGrande, federal generation serving grandfathered and Network Loads in Southern Idaho is netted against peak Loads in that area to calculate the ATC for LaGrande in the west-to-east direction.
- 4.1.2 Second, for all other transactions using an Intertie, External Interconnection or Network Path, the full amount of the NT Load forecast, PTP or grandfathered contract demand is deducted from the ATC (except for the previously mentioned netting).

5. Multiple POR/POD Evaluation Example

- 5.1 Some contracts contain multiple PORs and PODs. In order to use the PORs to calculate Flowgate flows, the total contract Demand must be allocated among all possible POR/POD combinations. The following is an example of how contract Demand was proportionately allocated in cases where multiple POR/POD combinations were possible.
- 5.2 Note: Transmission Services no longer accepts requests with multiple PORs and PODs.

Multiple to Multiple PTP Example						
Hypothetical Long Term Contract for 2000MW						
	POR	MW		POD	MW	
	A	1000		X	1200	
	B	650		Y	300	
	C	50		Z	500	
	D	300				
		2000			2000	
Allocation of POR Demands to the POD's						
			PODs			
	2000		X	Y	Z	
			1200	300	500	
PORs	A	1000	600	150	250	1000
	B	650	390	97.5	162.5	650

	C	50	30	7.5	12.5		50
	D	300	180	45	75		300
			1200	300	500	2000	2000