

ATTACHMENT N

DESCRIPTION OF RTO WEST ANCILLARY SERVICES

In compliance with FERC Order 2000, RTO West will: (1) serve as the provider of last resort of all Ancillary Services required under FERC Order 888, as supplemented, (2) ensure that adequate arrangements are put into place to ensure the development of a competitive market for Ancillary Services and (3) encourage market participants to self-provide their respective obligations of Ancillary Services.

RTO WEST ANCILLARY SERVICES

Regulation

The coordinated adjustment by RTO West of generation capacity on a second-by-second basis in real-time in order to continuously balance generation and Demand within the RTO West Control Area, thereby maintaining Area Control Error, system frequency and interchange with non-RTO West Control Areas within acceptable limits.

Load Following Up

The coordinated adjustment by the RTO West of resources on a minute-by-minute basis in real-time in response to net decreases in demand in the RTO West Control Area.

Load Following Down

The provision by an SC to RTO West of generation or demand-side capacity that can be dispatched by RTO West in real-time on a minute to minute basis to respond to net decrease in demand in the RTO West Control Area.

Spinning Reserve

The coordinated adjustment by the RTO West of synchronized resources in real-time in response to loss-of-resource contingencies on the RTO West transmission facilities.

Non-Spinning Reserve

The coordinated adjustment by the RTO West of resources, that may or may not have been synchronized to the RTO West transmission facilities prior to RTO West's dispatch instructions, in real-time in response to loss-of-resource contingencies on the RTO West transmission facilities.

Replacement Reserve

The coordinated adjustment by the RTO West of generation or demand-side capacity that can be made available to the RTO West on sixty-minute notice, to enable the RTO West to maintain adequate capacity in the RTO West's Balancing Energy stack.

Congestion Redispatch

The scheduling by the RTO West of dispatchable blocks of energy from generation or demand-side resources during RTO West's Day-Ahead Scheduling Process or RTO West's Schedule Adjustment Process to enable the RTO West to eliminate residual congestion prior to real-time.

Balancing Energy

RTO West's coordinated use of Regulation, Load Following Up, Load Following Down, Replacement Reserve and Supplemental Energy resources and, to a limited extent, Spinning Reserve and Non-Spinning Reserve resources (for the period of time during which these two types of resources are dispatched in response to a contingency) – in real-time to deliver energy to, or acquire energy from, each SC's account in order to balance each SC's account on a periodic (ten-minute) basis and to enable the RTO West to comply with NERC and WSCC control area performance standards.

Voltage Support

The coordinated scheduling by the RTO West of generation resources to maintain transmission voltages within acceptable limits throughout the RTO West transmission facilities.

Black Start

The procurement by the RTO West and emergency dispatch by the RTO West pursuant to emergency restoration plans, of generation resources that are capable of self-starting without support from the RTO West in the event of a blackout, in order to restore the RTO West transmission facilities to a secure operating state.

Scheduling and Dispatch

RTO West's (1) receipt, validation, coordination, adjustment and acceptance of scheduling information from Scheduling Coordinators (SCs), in order to develop a secure RTO West transmission facility and (2) monitoring, control and redispatch of transmission and generation resources to operate the Grid within Applicable Reliability Criteria.

SELF PROVISION /SELF TRACKING OF ANCILLARY SERVICE

Scheduling Coordinators are encouraged to satisfy their Ancillary Services obligations by self-providing/self tracking resources capable of meeting RTO West's Ancillary Services requirements.

- A. "Self provision" means where Scheduling Coordinators provide the capacity needed for Regulation, Load Following, Spinning Reserve, Supplemental Reserve "Non-Spin", Replacement Reserves, Supplemental Energy and Congestion Redispatch, which exempts the Scheduling Coordinators from paying RTO West capacity charges for procurement of the quantity of resources that was self provided. Self provided resources are actually deployed for community use, and not for the Scheduling Coordinators specific contingencies and imbalances

- B. “Self Tracking” means where Scheduling Coordinators use their own resources to meet their needs for Regulation, Load Following, Spinning Reserve, Supplemental Reserves (Non-Spin), Replacement Reserves, Supplemental Energy and Congestion Redispatch in order to avoid paying RTO West for those services. For Load Following and Regulation the Scheduling Coordinators match their own generation within an RTO West defined time period. Self Tracking resources are deployed only for the Scheduling Coordinators own use.

- C. An SC may self-provide Ancillary Services using resources for which the SC is the Scheduling Coordinator, or using resources provided by another SC through an inter-SC trade of Ancillary Services. Such resources must have previously been certified by RTO West as capable of providing the designated Ancillary Service(s).

RTO WEST AS PROVIDER OF LAST RESORT

RTO West will, as a provider of last resort, make the following Ancillary Services available to all users of the Grid:

- 1) Regulation Service
- 2) Load Following Up Service
- 3) Load Following Down Service
- 4) Spinning Reserve Service
- 5) Non-Spinning Reserve Service
- 6) Replacement Reserve Service
- 7) Congestion Redispatch Service
- 8) Supplemental Energy Service
- 9) Voltage Support Service
- 10) Black Start Service

Each SC will pay RTO West for that portion of the SC’s allocated share of each of the Ancillary Service obligations that the SC does not meet through self-provision. RTO West will bill each SC for the SC’s net obligations in two stages:

- 1) In the first stage, the SC will be charged based on estimated data, using the schedule information submitted by the SC, as part of the daily settlement process.

- 2) In the second stage, RTO West will settle with SCs based on actual meter data, as part of the monthly settlement process.

RTO West will not discriminate, in technical qualification criteria, scheduling, dispatch, compliance monitoring or any other way, between resources on the basis of whether they have been self-provided or procured directly by RTO West.

INITIAL RTO WEST OPERATIONS

Through contracts with the Executing Transmission Owner or with third party providers, RTO West will arrange, on a pre-schedule day-ahead or on an hour-ahead basis only, and as a provider of last resort, for the provision of Ancillary Services requested from RTO West in connection with the provision of Transmission Services. However, (1) for the first six months after the Transmission Service Commencement Date, if there is no competitive market for Ancillary Services, RTO West may arrange for Ancillary Services for a period greater than a day-ahead as long as such arrangements do not extend beyond the first six months of RTO West operations; (2) RTO West will be the sole provider of Scheduling and Dispatch Services, and (3) RTO West through contracts with the Executing Transmission Owner or with third party providers, may provide Black Start and Voltage Support Services on other than a pre-schedule day-ahead or hour-ahead basis.

POST COMPETITIVE MARKET OPERATIONS

At such time as a competitive market exists for Ancillary Services, RTO West will meet its obligations as provider of last resort by acquiring, at a minimum, Regulation, Load Following, Spinning Reserves and Non-Spinning Reserves Ancillary Services in the day-ahead and hour-ahead markets.

With the exception of the Initial RTO West Operational Period and for the procurement of Voltage Control and Black Start capability Ancillary Services, RTO West will not procure Ancillary Services on a forward basis.

RTO West will be the sole provider of Scheduling and Dispatch Services.