



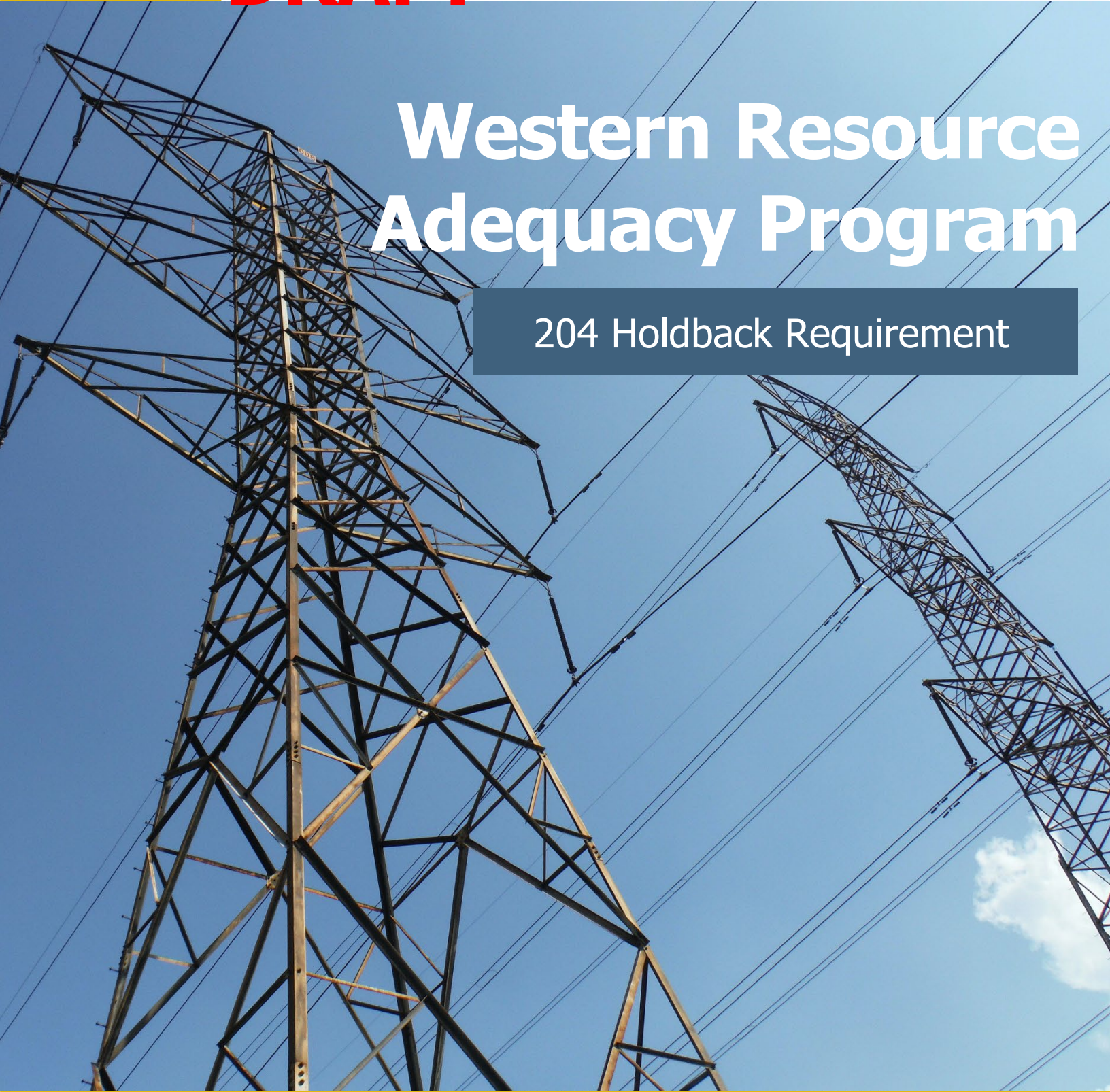
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WESTERN
POWERPOOL

Western Resource Adequacy Program

204 Holdback Requirement



Revision History

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Table of Contents

1. Introduction.....	3
1.1. Intended Audience.....	3
1.2. What Will You Find in This Manual?	3
1.3. Purpose	3
1.4. Definitions.....	3
2. Background	4
3. Sharing Calculation Run.....	4
4. Confirmation of Need for Holdback Capacity	4
5. Voluntary Offers.....	5
6. Optimization Allocation	5
6.1. Subregion with Central Hub.....	5
6.1.1. Allocation of Voluntary Holdback	5
6.1.2. Allocation of Capacity as Calculated by the Sharing Calculation	6
6.2. Subregion without Central Hub.....	7
6.3. Ensuring Whole MW Holdback Capacity.....	8
7. Bilateral Transfer of Holdback.....	8
8. Release of Capacity.....	9
8.1. Program Early Release of Holdback.....	9
8.2. Participant Petition for Early Release of Holdback	9
8.3. Holdback not claimed on the Preschedule Day.....	9



204 Holdback Requirements

1. Introduction

The Holdback Requirement Business Practice Manual (BPM 204) outlines the key processes associated with the Participant Holdback Requirements in the Western Power Pool (WPP) Western Resource Adequacy Program (WRAP) Operations Program. The Holdback Requirement is a MW quantity, determined on the Preschedule Day, that a Participant is required to be capable of converting into an Energy Deployment on a given hour of the Operating Day.

1.1. Intended Audience

BPM 204 is intended for WRAP Participants and other interested individuals or entities. BPM 204 is particularly useful for those responsible for their Participant organization's implementation and decision-making with respect to responding to and managing a Holdback Requirement, bilateral exchange of Holdback Requirements, and voluntary offers of capacity.

1.2. What Will You Find in This Manual?

BPM 204 consists of sections detailing the allocation of a Holdback Requirement to Participants for Subregions with a Central Hub and for Subregions without a Central Hub, the process for opting in to Holdback Capacity and the release of capacity not claimed on the Preschedule Day, bilateral exchange of holdback, voluntary offers of capacity, and early release of holdback. Related provisions are addressed in other BPMs. BPM 204 will be paired with *BPM 205 Energy Deployment*, *BPM 206 Settlement Pricing*, and *BPM 207 Settlement Process*.

1.3. Purpose

The purpose of BPM 204 is to provide implementing details of the Tariff rules for determining the surplus Participant, the deficient Participant, and the transaction quantity for Holdback Requirements.

1.4. Definitions

All capitalized terms that are not otherwise defined in BPM 204 have the meaning set forth in the Tariff. Any capitalized terms not found in the Tariff are defined here.

Optimization Allocation: The calculation in the Operations Program that assigns Holdback Requirement to Participants.

Point to Point Limits (PTPL) file: Described in the Input Date File Specification document which is located on the WPP website.



Point Limits (PL) file: Described in the Input Date File Specification document which is located on the WPP website.

Program Interface Tool or PIT: As defined in *BPM 201 Operations Program Timeline*.

2. Background

The Operations Program of the WRAP allows a Participant with a calculated capacity deficiency (or negative Sharing Calculation result) to require Participants with a calculated capacity surplus (or positive Sharing Calculation result) to make surplus capacity available and be prepared to deploy energy on the Operating Day at prices and quantities determined by the Program Administrator and Program Operator as prescribed by the WRAP Tariff, *BPM 205 Energy Deployment*, *BPM 206 Settlement Pricing*, and *BPM 207 Settlement Process*. The Holdback Requirement is a MW quantity, as determined on the Preschedule Day, that a surplus Participant is required to be capable of converting into an Energy Deployment on a given hour of the Operating Day.

3. Sharing Calculation Run

On the Preschedule Day, each Participant is required to submit to the Program Operator an hourly forecast of i) expected load, ii) output of Variable Energy Resources (VER), iii) output of Run-of-River Qualifying Resource (ROR), iv) expected Contingency Reserve requirement and v) total forced outages including outages on transmission facilities associated with imports utilized by the Participant to meet its Forward Showing Capacity Requirement. These inputs are further described in *BPM 202 Participant Sharing Calculation Inputs*. These files are submitted by Participants, as detailed in *BPM 201 Operations Program Timeline*, and inform the Multi-Day-Ahead Assessment. After submission and following the timeline in *BPM 201 Operations Program Timeline*, the Program Operator will post the Sharing Calculation results to the Program Interface Tool (PIT).

4. Confirmation of Need for Holdback Capacity

After the Sharing Calculation results are posted to the PIT, each Participant sees whether it is surplus, deficient, or neither. A Participant that has been calculated to have a capacity deficiency has the opportunity to confirm whether it would like to receive Holdback Capacity and the MW quantity it would like to claim, capped at the negative Sharing Calculation result of that Participant. A deficient Participant must confirm its need for and amount of requested Holdback Capacity (i.e., Opt-in per Figure 3 of *BPM 201 Operation Program Timeline*). If a deficient Participant does not proactively confirm their need for Holdback Capacity, the WRAP considers that Participant as not needing any assistance and that Participant will not be eligible for any Energy Deployment on the Operating Day.

5. Voluntary Offers

Participants with excess supply that are not obligated to the WRAP through their positive Sharing Calculation result may voluntarily offer such supply to the WRAP as Voluntary Holdback. This voluntarily offered capacity is in addition to the Participant's surplus capacity as calculated by the Sharing Calculation in Section 3. Once capacity that is voluntarily offered into the Operations Program is allocated, it is deemed to be a binding obligation, meaning that non-delivery fees may be assessed for any Voluntary Holdback not delivered as part of a required Energy Deployment.

Participants use the Voluntary Holdback file to submit Voluntary Holdback to the Program Operator. Voluntary Holdback must be in line with the timeline in *BPM 201 Operation Program Timeline* on the Preschedule Day for any day being scheduled during which the Participant would like to provide Voluntary Holdback. Voluntary Holdback must be in whole MW values for each hour for the given Operating Day being scheduled. Voluntary Holdback file parameters are described in the Input Data File Specification on the WPP website.

Voluntary Holdback can be offered as early as seven days ahead of the Operating Day. If a Participant offered Voluntary Holdback ahead of the Preschedule Day and then on a later day (either Preschedule or an earlier day) submitted a different offer of Voluntary Holdback, the PIT would use the most recent offer in the Optimization Allocation. Additionally, if a Participant offered Voluntary Holdback ahead of the Preschedule Day and then was determined to be deficient on the Preschedule Day by the Sharing Calculation results, the Voluntary Holdback that was previously submitted would not be utilized in the Operations Program.

6. Optimization Allocation

6.1. Subregion with Central Hub

Per the timeline in *BPM 201 Operation Program Timeline*, the Ops Program runs the Optimization Allocation. This allocation is done in two steps: the first is the allocation of voluntarily offered capacity and the second is the allocation of capacity as calculated by the Sharing Calculation.

The results of the Optimization Allocation are posted per the timeline in *BPM 201 Operation Program Timeline*. Any amount of Voluntary Holdback or surplus as calculated by the Sharing Calculation for a Participant that is in excess of the Optimization Allocation result for that Participant is released from any WRAP obligations.

6.1.1. Allocation of Voluntary Holdback

There are three cases for the allocation of Voluntary Holdback.

- If the sum of all Voluntary Holdback offered is exactly enough to meet all deficient Participant requests for holdback, then each Participant who offered Voluntary Holdback is assigned its offered amount as its Holdback Requirement.
- If the sum of all Voluntary Holdback offered is not enough to meet all assistance requested by deficient Participants, then the amount of Voluntary Holdback offered by each Participant is included as a term in its Holdback Requirement (see more below).
- If the sum of all Voluntary Holdback offered is more than the sum of all deficient Participant requests for assistance, then each Participant who offered Voluntary Holdback is assigned a Holdback Requirement via this calculation:

Definition: Holdback Requirement with only Voluntary Holdback

$$\text{Holdback Requirement}_{VH} = \text{Sharing Ratio}_{VH} * \text{Total Assistance}$$

where

$$\text{Sharing Ratio}_{VH} = \frac{VH_{part}}{\sum VH_{part}}$$

$$\text{Total Assistance} = \sum \text{Assistance Requested}_{part}$$

and

$$VH_{part} = \text{Voluntary Holdback of a Participant}$$

6.1.2. Allocation of Capacity as Calculated by the Sharing Calculation

In addition to any Voluntary Holdback, there may be more capacity required to be held back to meet all the requested need. This additional holdback is capped at the positive Sharing Calculation results in Section 3 for each surplus Participant. If there is not enough Voluntary Holdback to meet all assistance requested by deficient Participants, then the remaining portion of the Holdback Requirement for surplus Participants is calculated using the following methodology.

For a Subregion containing a Central Hub permitting energy deliveries to that Central Hub from any point within such Subregion, a Participant with a positive Sharing Calculation result will be allocated a percentage of the sum of all Voluntary Holdback offered in that Subregion subtracted from the sum of all Holdback Capacity requested by deficient Participants in that Subregion that is equal to their pro rata share of the surplus as determined by the Sharing Calculation. This will be done by first determining a Participant Sharing Ratio, which is found by dividing a Participant's surplus (Positive Sharing Calculation Result_{part}) by the Subregion's total surplus, where the surplus is

determined by the Sharing Calculation in Section 3 (i.e., prior to accounting for Voluntary Holdback). This ratio is then multiplied by the sum of the Subregion’s Voluntary Holdback subtracted from the sum of the requested Holdback Capacity, and that result is the Participant’s Sharing Calculation holdback term of the Participant’s Holdback Requirement.

Definition: Allocation of Participant Holdback Capacity as calculated by the Sharing Calculation

$$\text{Holdback Requirement}_{SC} = \text{Participant Sharing Ratio} * \text{Total Assistance}_{VH}$$

where

$$\text{Participant Sharing Ratio} = \frac{\text{Positive Sharing Calculation Result}_{part}}{\sum \text{Positive Sharing Calculation Results}_{part}}$$

$$\text{Total Assistance}_{VH} = \text{Total Assistance} - \sum \text{VH}_{part}$$

The Holdback Requirement for a surplus Participant in a Subregion with a Central Hub when the sum of all Voluntary Holdback offered is not enough to meet all assistance requested by deficient Participants is the Voluntary Holdback offered plus the Participant’s allocation of the Holdback Capacity as calculated by the Sharing Calculation, noting that the Voluntary Holdback term may be zero.

The Holdback Requirement in a Subregion with a Central Hub is defined below.

Definition: Holdback Requirement in a Subregion with a Central Hub

Holdback Requirement

$$= \begin{cases} \text{Holdback Requirement}_{VH} & \sum \text{VH}_{part} > \sum \text{Assistance Requested}_{part} \\ \text{VH}_{part} & \sum \text{VH}_{part} = \sum \text{Assistance Requested}_{part} \\ \text{VH}_{part} + \text{Holdback Requirement}_{SC} & \sum \text{VH}_{part} < \sum \text{Assistance Requested}_{part} \end{cases}$$

6.2. Subregion without Central Hub

For any hour, for any Subregion not containing a Central Hub, the Program Operator will conduct an optimization-based allocation to pair surplus and deficient Participants. The allocation methodology will utilize the points at which surplus Participants can

deliver their Holdback Requirement, the points at which deficient Participants can take receipt of their allocation of the total Holdback Capacity, the transfer capability that exists to the points at which surplus Participants can deliver and the points at which deficient Participants can take receipt, and voluntarily supplied capacity.

6.3. The optimization will generally attempt to prioritize (i) Voluntary Holdback; (ii) Holdback Capacity matched pursuant to the information provided on a nearest neighbor and cluster basis, allocated pro rata among Participants within such cluster; (iii) Holdback Capacity matched pursuant to the information provided and allocated among Participants within the same Subregion to the extent not matched and allocated under category (ii); and finally (v) Holdback Capacity from Participants in another Subregion, paired with any transmission service offered to per Section 14.3.2 of the Tariff.

Ensuring Whole MW Holdback Capacity

In any Subregion, for both the Voluntary Holdback and allocation of capacity as calculated by the Sharing Calculation, Participants will only be asked to hold back and deliver energy in 1 MW increments (meaning no fractional MWs). Allocation of the total Holdback Capacity to deficient Participants may result in non-integer values. To address this issue the following general methodology will be utilized:

- The surplus Participant's Holdback Requirement is allocated to each deficient Participant on a pro rata basis.
- If the amount of Holdback Capacity allocated to a deficient Participant is a non-integer value the result is rounded to the nearest integer.
- The total unallocated MWs accumulated as a result of rounding are then distributed to each of the deficient Participants using a per-Participant, round-robin-based algorithm that attempts to minimize the biasing of allocation to any particular Participant.

7. Bilateral Transfer of Holdback

Any surplus Participant (A) may agree with any other Participant (B) for Participant (A) to transfer to the second Participant (B) some or all of the Holdback Requirement established for Participant (A) for any hour on any Operating Day. Any such Holdback Requirement transfer shall be a bilateral arrangement settled outside the WRAP, provided, however, that both Participants of such Holdback Requirement transfer must notify the Program Administrator and the Program Operator in a timely manner using the PIT between 07:00 PPT and T-120 on the Operating Day. Any necessary transmission arrangements and any transaction settlements shall be the sole responsibility of the Participants that are parties to such bilateral arrangement. The transferred Holdback Requirement that Participant (B) is responsible for making available to the WRAP will be settled with the deficient Participant for which it is holding

the capacity back and may deploy as energy via the WRAP settlement pricing as detailed in *BPM 206 WRAP Settlement Pricing*.

8. Release of Capacity

8.1. Program Early Release of Holdback

If the Multi-Day-Ahead Assessment indicates low risk of a potential Sharing Event, the Program Operator may consider early release of a portion or all of the indicative holdback for Participants with a positive Sharing Calculation result. Evaluation for early release of holdback may include but is not limited to weather conditions, Participants' forecasts, date and time of the interval, application of a Safety Margin, and historical data.

8.2. Participant Petition for Early Release of Holdback

Participants may request release of indicative Holdback Requirements based on a showing of extenuating circumstances. Extenuating circumstances justifying release of a Participant's indicative holdback may include, but are not limited to, such circumstances as extreme weather conditions, earthquakes, wildfires, geomagnetic disturbance events, tsunamis, government-declared states of emergency, civil unrest, and cyber security events. The decision to grant a request for the early release of a Participant's indicative holdback is to be made by the Program Administrator with support as requested from the Program Operator.

8.3. Holdback not claimed on the Preschedule Day

On the Preschedule Day, any surplus capacity as calculated by the Sharing Calculation is released in whole or in part to the extent one or more deficient Participants fail to confirm, per Section 4, their need for capacity for the subject hour.