

Oversupply Management Protocol

BPA Transmission Business Practice

Version 8
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Oversupply Management Protocol

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Updates for Version 8 include changes to the application of the Intentional Deviation penalty charge during an hour of displacement.

BPAT will implement the Oversupply Management Protocol (OMP) only as a last resort and after exhausting other available tools. The agency's intent is to use OMP only for the period when it is absolutely necessary.

BPA Policy References

- [Open Access Transmission Tariff \(OATT\): Section 36; Attachment P: Oversupply Management Protocol](#)
- [Transmission Rate Schedules/Provisions: Oversupply Rate, Modified Tier 1 Cost Allocations \(TOCA\) for Oversupply Rate](#)

For more information, visit the [BPA Transmission Business Practices page](#) or submit questions to techforum@bpa.gov.

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A. Purpose of Oversupply Management Protocol

1. OMP is designed to ensure the Federal Columbia River Power System (FCRPS) is operated consistently with the “Clean Water Act” and the “Endangered Species Act” obligations, as well as BPA’s obligations under the “Pacific Northwest Electric Power Planning and Conservation Act,” (under specific hydro and load conditions) and after all available mitigation measures, such as those described in section 1 of Attachment P of the OATT, have been implemented. When these conditions exist, BPA TS will issue orders to generators and replace scheduled generation in BPA’s Balancing Authority Area (BAA) with Federal hydropower.

B. Generators Subject to Oversupply Management Protocol

1. All generators with a nameplate of 3 MW or greater generating capacity in BPA’s BAA are subject to OMP, except those generators operating and scheduling output under a Bonneville Transmission Services pseudo tie agreement.

C. Establishing Minimum Generation Levels and Maximum Ramp Rates

1. BPA does not intend for actions taken during an Oversupply event to cause undue hardship or damage to generating resources. To that end, operators/owners of non-Variable Energy Resource (VER) resources within BPA’s BAA are encouraged to establish a minimum generation level and a maximum ramp rate for Oversupply Management. A resources minimum generation level will be used to determine Dispatch Orders that may be issued during an Oversupply Management event.
2. BPA, in coordination with the US Army Corps of Engineers and Bureau of Reclamation, establishes minimum generation levels for Federal Generation to minimize total dissolved gas on a system basis. These levels will be implemented as part of the mitigating measures to ensure Federal generation fully participates in mitigating the system conditions.
3. Generators Subject to Establishing Minimum Generation Levels & Maximum Ramp Rates
 - a. A minimum generation level shall be established for all non-VER generators subject to Oversupply Management Protocol as it is defined in Section B, above. If no minimum generation level is established pursuant to section C.4.b below, BPA will assume the minimum generation level is zero.
 - b. There are no minimum generation levels or maximum ramp rates for VERs because VERs do not have reliability factors dictating a lowest operating level.
4. Establishing Minimum Generation Levels & Maximum Ramp Rates
 - a. Minimum generation is an amount achievable within 10-minutes of receiving the Oversupply Management dispatch instruction, taking into account the ramp rates of the resource. The minimum generation level must be a level that is equal to or less than the resource’s schedule or generation estimate.

- b. Non-VER generators that expect to have a need to continue operating during an Oversupply Management event may establish a minimum generation level that they cannot operate below. Reliability factors may be considered when establishing minimum generation levels are established in Section 7 of Attachment P.
- c. Non-VER operators/owners of resources within BPA's BAA shall notify BPA of the minimum generation level via the Customer Data Entry (CDE) system that is currently used to submit generation forecasts.
 - i. Minimum generation values are expected to be submitted as 24 hourly values for each day and may be modified until 20 minutes before the operating hour.
 - ii. Customers are allowed to enter Minimum Generation data for the next seven days. Customers must input Minimum Generation values for the Current+7 day for Customer Data Entry (CDE) to copy the value forward. Minimum Generation values for the Current+7 day will be copied forward until new values are submitted.
 - iii. Generators that provide a minimum generation level in accordance with Section C.4.b above may follow their maximum ramp rates when following a Dispatch Order to reduce to their minimum generation.

D. Submitting Cost Information for Oversupply Management Protocol

1. In accordance with Attachment P of BPA's OATT, a Customer may submit the cost of displacing each of its generating facilities with Federal hydroelectric energy, and supporting data and documentation of such costs, to an independent evaluator selected by BPA. The costs and supporting data and documentation can be submitted here: <https://oversupply.accionpower.com>. Using the submitted cost information, the independent evaluator will build a Least-Cost Displacement Cost Curve (Cost Curve), which will be the basis for displacing generators during OMP events. See section I, below.
2. Generators have an opportunity to update their displacement costs at any time, and the updated costs will take effect the first day of the second month after submission.
3. If Customers do not submit displacement costs and supporting data and documentation for specific generating facilities, the displacement cost for these generating facilities shall be deemed to be \$0/MWh.

E. Oversupply Management Actions Prior to Implementing Oversupply Management Protocol

1. BPA will take all available actions that BPA determines will reduce or avoid the need for displacement, such as those actions listed in section 2 of Attachment P.
2. In accordance with section 1.b of Attachment P, BPA may implement mandatory waivers, or seek volunteers for waivers, of in-kind real power loss return obligations

before a possible OMP event in an effort to reduce or avoid the need for generation displacement.

- a. Mandatory waivers of in-kind real power loss return obligations will be cleared from the OATI Loss Module/CDE by 5am of the WECC Preschedule Trading Day.
 - i. Mandatory waivers of loss obligations will be, at a minimum, for the operating hour and could be issued for multiple hours.
 - ii. Mandatory waivers of loss obligations will be for the full amount on all in-kind loss returns.
 - iii. Mandatory waivers of loss obligations will remain in effect until the specified operating hour is over.
 - iv. In-kind loss return customers are not to schedule in-kind real power loss returns to BPA when the loss obligation has been waived. In-kind real power loss returns scheduled for waived hours will be curtailed for those hours.
- b. BPA Traders may also proactively contact customers to waive their loss return schedules.
 - i. BPA Traders will work with the customer to determine MWs and hours for the losses to be waived.
 - ii. BPA Traders will verify with customer that the e-tags have not been scheduled for the days/hours being waived.
 - iii. If a NERC E-tag already exists, the customer is required to reduce the e-tags to reflect the In-Kind Real Power losses waived. E-tags must be adjusted down prior to XX:40 for the following scheduling hour.
 - iv. Loss Return Providers who agree to waive their losses are required to send an e-mail to BPAMarketing@BPA.GOV to memorialize the agreement stating the following:
 1. Customer for whom losses are being waived
 2. Date(s) and Hour(s)
 3. MWs waived
3. BPA Transmission Customers will continue to incur transmission loss return obligations for schedules submitted prior to or during an OMP event.

F. Curtailment of E-Tags

1. All generators are subject to curtailment of e-Tags at all times for system reliability and other reasons as described in the Curtailment and Redispatch Business Practice. If the curtailment reduces the sum of remaining e-Tags originating at the generator to a level that is less than the OM minimum generation level then the generator must fully comply with the curtailment and reduce generation regardless of the established OM minimum generation level.

G. Notification that Oversupply Management Protocol is Imminent

1. Transmission Dispatch will make a posting with the category of “Curtailment” on the Notices page of BPA Transmission Services’ Open Access Same-Time Information System (OASIS) that implementing OMP is imminent. The posting may include the expected duration of the OMP event. The message will read, in part:
 - a. Subject: Oversupply Management Imminent
 - b. Message: Oversupply Management Imminent
2. Resources should continue to schedule their forecast power output, including scheduled loss returns, unless provided otherwise in Section E.3 above, for the hour when an OMP event is imminent. Continued accurate scheduling when an OMP event is imminent and during an OMP event is critical for the success of these efforts.

H. Allocation of Oversupply Management Protocol Quantity

1. BPA Hydro Operations will determine the need to implement OM and will determine the amount of generation reduction required for each hour during the event. When OMP is implemented, schedules from the generators will remain intact, but generation must be reduced.
2. BPA will use the “Cost Curve” to displace generation located in BPA’s Balancing Authority Area. The “Cost Curve” will be based on the cost of displacement for each facility, and includes both non-Variable Energy Resource (VER) and VER generators. BPA will displace generation in order of cost, from the least-cost facility to the highest-cost facility, until the required displacement quantity as determined by BPA is achieved. If the highest-cost facility that BPA displaces in an hour to achieve the required displacement quantity has the same cost as one or more other facilities, BPA will displace all such facilities on a pro-rata basis. The pro-rata reduction for each facility is calculated by: $(\text{Sum of Schedules for the generator}) / (\text{Sum of Schedules for the group})$ *required reduction.

I. Notification that Oversupply Management Protocol is in Effect

1. BPA Transmission Dispatch will make a posting with the category of ‘Curtailment’ on the Notices page of BPA Transmission Services’ OASIS that the OMP is in effect. The message will read, in part:
 - a. Subject: Oversupply Management Ongoing
 - b. Message: BPA is implementing Oversupply Management Protocols.
2. BPA will post information on the OMP on the publicly-accessible Transmission Wind Operations web site with near-real time updates.
 - a. The “BPA Balancing Authority Total Wind Generation & Wind Basepoint” link will provide information on the total amount of the OMP reduction.
 - b. The “BPA Wind State” link will provide information on the OMP state.

3. During an OMP event, the imbalance signals to Customers' self-supplying balancing reserves under the Customer Supplied Generation Imbalance (CSGI) Pilot will be offset by the amount of the CSGI Customer's share of the OMP requirement plus the amount of regulation and load following service being provided by BPA to the CSGI Customer. The CSGI Customer will control its resources down so the total error for the Customer including the OMP requirement, regulation and load following offset is less than or equal to zero.
4. Electronic notification will be sent to generators to indicate that OMP is in effect.
 - a. During the implementation of OMP, Dispatch Orders will be communicated via iCRS Generation Advisor and generators will receive the alarms and Limit Targets.
 - i. A message of "OMP: LIMIT GENERATION" and "OMP: RAMP TO NEW LIMITS" will be indicated on iCRS Generation Advisor with the alarm that OMP is in effect.
 - ii. To be in compliance with the Dispatch Order, Generators have 10 minutes to reduce (and maintain) generation below the Limit Target plus the greater of 2% of the nameplate capacity of the generating facility or 4 MW.
 - iii. The Limit Target will be at or below the generator's schedule for the scheduling intervals for which OMP is in effect.
 - iv. In the event there are multiple dispatch orders within an operating hour, a generator must follow the lowest limit order in effect. Specific questions about a dispatch order should be directed to BPA Transmission Dispatch.
 - v. During the "OMP: RAMP TO NEW LIMITS" period, VERs with D20 RTUs will have their Limit Targets modified in a linear fashion during the ramp period (20 minutes at the top of the hour if OMP is for an entire hour or five minutes if it is a within-hour change), while all other generators will get a step change to the Limit Targets (at the top of the hour if OMP is for an entire hour, or at the beginning of the five minute ramp if it is a within-hour change).
 - b. Generators and their agents may request to receive a notice via email indicating that OMP is in effect. Generators must reduce generation to minimum levels or to the Limit Target provided via iCRS GA or other electronic signal.
 - c. VERs will also receive notification that OMP is in effect via the same electronic signal they currently receive for an Operational Controls for Balancing Reserves (OCBR). Generators receiving this signal via ICCP or a Remote Telemetry Unit (RTU) will receive the OMP alarm and generation Limit Target directly.
 - i. To be in compliance with the Dispatch Order, Generators have 10 minutes to reduce (and maintain) generation below the Limit Target plus the greater of 2% of the nameplate capacity of the generating facility or 4 MW..
 - ii. The Limit Target will be at or below the generator's schedule for the scheduling intervals for which OMP is in effect.
 - iii. In the event there are multiple dispatch orders within an operating hour, a generator must follow the lowest limit order in effect. Specific questions

about a dispatch order should be directed to BPAT Generation Dispatcher.

5. Customers that net their facilities for OCBR response purposes may net their facilities for an OMP response. However, BPA will compensate the netted facilities based on the cost curve for the OMP displacement amount allocated to specific facilities within the netted group.

J. Notification that an Oversupply Management Event has Ended

1. If system conditions improve to the point where the OMP is no longer required, the alarm status in iCRS Generation Advisor will revert to normal functionality for Operational Controls for Balancing Reserves (OCBR) limits. This will be preceded by an informational message of "OMP: PREPARE FOR NORMAL" during the ramp. This information will also be visible on the publicly accessible Transmission Wind Operations website.
2. When system conditions improve to the point where the OMP is no longer required, those on the email list will receive a notice that OMP has concluded. Generators may return to their scheduled operation.
3. When system conditions improve to the point where the OMP is no longer required, Transmission Dispatch will make a posting with the category of "Curtailement" on the Notices page of BPA Transmission Services' Open Access Same-Time Information System (OASIS) that OMP is over. The message will read:
 - a. Subject: Oversupply Management Concluded
 - b. Message: BPA has concluded implementation of Oversupply Management Protocols.

K. Adjustments to Energy & Generation Imbalance

Accounting During an Oversupply Event

1. For the hours when the OMP is in effect, the Generation Imbalance accounting, including for Persistent Deviation and the Intentional Deviation penalty charge, is disabled for all Generating Customers that are issued an order to modify generation for the OMP.
2. For the hours when the OMP is in effect, if a Load Serving Entity's (LSE) behind the meter resource is ordered to reduce generation to Minimum Generation level, BPA will increase the LSE's scheduled load amount by the difference between the generation estimate for the behind the meter resource and the minimum generation level. BPA will serve the increased load with Federal hydropower.

L. Short Distance Discount for Displaced or Redispatched Resources

1. When the OMP is imminent or in effect, Network (NT) Customers that have resources that qualify for a short-distance discount and reduce generation in response to requests from Power Services or a Dispatch Order from Transmission Services will continue to receive an adjustment to their NT base charge as if the generator was serving the load.
2. When OMP is imminent or in effect, Point-to-Point (PTP) reservations that would otherwise receive the PTP Short-Distance Discount will continue to receive the discount when the generator for the POR of the reservation reduces generation in response to requests from Power Services or a Dispatch Order from Transmission Services.

M. Adjustments to DERBS Charges

1. For the hours when the OMP is in effect and a resource subject to Dispatchable Energy Resource Balancing Service (DERBS) is issued an order to reduce generation to Minimum Generation level, the DERBS charge for that hour for that generator will not be assessed.

N. Generating Customer's Operating Reserve Obligations During an Oversupply Management Event

1. Generating Customers are responsible for the Operating Reserve Obligation for the schedules they submit during an OMP event.