



Real Power Loss Return, Version 10

Effective:02/19/14

This Business Practice defines the process and guidelines for Transmission Customers that must return Real Power Losses to the Bonneville Power Administration's (BPA) Power Services.

Version 10 added steps A.1 g-h to include the loss exemptions for Third-Party Supply and Supplemental **Balancing Reserves**¹ and other exemptions that were not previously included.

A. General Criteria

1. All Point-to-Point (PTP), Network Integration (NT), Formula Power Transmission (FPT), and Integration of Resources (IR) Customers are required to return Real Power Losses using firm transmission on the Network segment of the Federal Columbia River Transmission System (Network), with the following exceptions:
 - a. If a Transmission **Customer**² purchases the same firm or nonfirm product on the Network to or from John Day and then over the Malin 230/Hilltop 345 path, BPA Transmission Services will charge a single Network use of the Network paths.
 - b. Transmission Customers who are Power Services' Regional Dialogue contract holders who have elected the Load-Following product will have transmission losses included for the customer's Net Requirement power purchase from BPA.
 - c. Transmission Customers who are Power Services' Regional Dialogue contract holders who have elected the **Slice**³/Block product will have transmission losses included for the Block portion of the Slice/Block product.
 - i. The Transmission Customer must return Real Power Losses associated with the non-Federal portion of their power delivery, and for delivery of the Slice portion of their Slice/Block product.

¹Reserves that compensate for any of the following: (i) moment-to-moment differences between generation and load; (ii) larger differences occurring over longer periods of time during the hour; and (iii) differences between a generator's schedule and the actual generation during an hour.

²Any customer taking service under Use of Facilities (UFT), Formula Power Transmission (FPT), Integration of Resources (IR), Part II or Part III of the OATT.

³Slice Loss Return: The loss return type whereby calculated losses are deducted from a Power Services' Slice customer's share of federal generation at the bus 168 hours after service was provided.

- ii. The Transmission Customer must notify BPA Transmission Services of its **Real Power Loss Return**¹ type (In-Kind, Financial, or Slice Output) for the non-Federal portion of its power deliveries.
- d. Transmission Customers are not required to return losses for energy delivered under a Power Services' Block Contract that includes losses or the Block portion of a Slice/Block power contract.
- e. Transmission Customers with resources that are delivered to the Customer's load without using the BPA transmission system will not be required to return losses. An example is a generator behind the meter where all the output is used to serve load on the customer's side of the meter.
- f. Transmission Customers have responsibility to the control area operator of the Montana Intertie for all real power losses incurred across the Montana Intertie and shall be responsible for making arrangements with the control area operator for the return of such losses. BPA is not the BA operator and is not the loss provider for the Montana Intertie.
- g. Transmission Customers will not be assessed losses for the following uses of the BPA transmission system:
 - i. Self Supply or Third Party Supply of **Operating Reserves**²
 - ii. Customer Supplied Generation Imbalance **Dynamic Transfer**³ INC or DEC

¹The return of Real Power Losses which were replaced with federal generation.

²(Also called Contingency Reserves) The combination of Operating Reserve-Spinning Reserve Service and Operating Reserve-Supplemental Reserve Service. Fifty percent of Operating Reserves Services must be Spinning Reserves Services.

³A term that refers to methods by which the control response to load or generation is assigned, on a real-time basis from the Balancing Authority to which such load or generation is electrically interconnected (native Balancing Authority) to another Balancing Authority (attaining Balancing Authority) or other controlling entity on a real-time basis. This includes Pseudo-Ties, Dynamic Schedules, and dynamic arrangements within the BPA Balancing Authority Area.

schedules

- iii. Self Supply or Third Party Supply of Balancing Reserves
 - iv. **Supplemental Service**¹ Balancing Reserves
- h. Transmission Customers will not be assessed losses for loss return e-tags referencing a loss return **Product Suffix Code**².
2. A new Transmission Customer must designate a Real Power Loss Return type (In-Kind, Financial or Slice Output) for returning Real Power Losses by submitting a Notification of Real Power Loss Return Type form to its Transmission Account Executive. The form must be submitted with the Customer application package.
 3. Customers who are not planning on scheduling at the time of submitting the Notification of Real Power Loss Return Type form must provide an estimated start date for scheduling on the form. Customer must update the Loss Return Type form 60 days prior to commencing scheduling activity.
 4. A Transmission Customer may change its Real Power Loss Return type no more than four times in a **FY**³ and must provide 60-days notice. To change Real Power Loss Return type, complete all applicable items on the Notification of Real Power Loss Return Type form (see forms below) and email to: RPLPForm@bpa.gov.
 5. Customers must submit an updated Notification of Real Power Loss Return Type form and provide a copy of their loss provider contract when there are any changes to the return type or Loss Provider information on the form 60 days prior to the change.
 6. A third-party loss provider which is a Power Services' Regional Dialogue Slice/Block customer may supply losses from Slice Output or losses may be returned In-Kind by using e-Tags.
 7. BPA Transmission Services will refuse all requests for service from Transmission

¹A service through which a customer may reduce its exposure to a DSO 216 event by making available a Supplemental Service Resource acquired by a customer or by BPA that would be deployed by BPA during a DSO 216 event thereby reducing the amount by which the energy profile of the e-Tag for a Wind Facility or other Variable Energy Resource would be reduced when BPA initiates a wind e-Tag curtailment or when BPA initiates a wind limit event to address an over-generation condition.

²A set of tagging codes used to identify Transmission Services' product service types.

³Fiscal Year - October - September

Customers that have not submitted a properly completed Notification of Real Power Loss Return Type form designating a Real Power Loss Return Type (In-Kind, Financial or Slice Output) including required loss provider contract information.

8. In-Kind Real Power Loss Returns must be from a Transmission Customer designated control area, a system, or a generator interconnected with the Network segment.
 - a. If a generator is down for any reason, the Transmission Customer must continue to deliver energy either by scheduling an alternative source back through that generator, or from another provider, tagged to BPALOSS (SINK) to ensure that In-Kind losses are returned as scheduled.
9. A Transmission Customer may elect to be its own In-Kind **Real Power Loss Provider**¹ if it has its own generation and is interconnected with the Network segment.
10. BPA Transmission Services will assess an **Unauthorized Increase Charge**², as described in its current [Rate Schedules](#), or its successor, if the Transmission Customer schedules transmission in excess of its Reserved Capacity to return Real Power Losses.
11. The Transmission Customer may elect to purchase Hourly Firm transmission for Real Power Loss Returns during Preschedule.
12. Real Power Loss Returns cannot be scheduled concurrently on e-Tags. BPA Transmission Services will deny tags that include concurrent losses for BPAT segments.
13. BPA Transmission Services will calculate Real Power Losses daily for all Transmission Customers for return 168 hours after service was provided.
14. A single loss obligation is calculated for each Service Agreement based on:
 - a. E-Tags.
 - b. Actual or other data that references the Service Agreement.
15. Loss obligations for an FPT Transmission Customer are calculated as described in their FPT contract.
16. Loss obligations for an IR Transmission Customer are calculated as described in their IR contract.

¹The generator, system or control area that is providing the return of the In-Kind Real Power Losses.

²Transmission Customers taking Point-to-Point Transmission Service under the PTP, IS, and IM Rate Schedules shall be assessed the UIC when they exceed their capacity reservations at any Point of Receipt (POR) or Point of Delivery (POD). Transmission Customers taking Network Integration Transmission Service under the NT Rate Schedule shall be assessed the UIC if their Actual Customer-Served Load (CSL) is less than their Declared CSL. BPA-TS will notify a Transmission Customer that is subject to a UIC once BPA-TS has verified the UIC amount.

17. Transmission Customers that return losses for In-Kind and Slice Output returns must use the **Customer Data Entry (CDE)**¹ system.
 - a. An Open Access Technology International, Inc. (**OATI**)² WebCares Certificate is required to access **CDE**³. Information on obtaining the certificate is at: <http://www.oaticerts.com/repository/oaticerts.html>
18. Transmission Customers can access the loss return obligations using either:
 - a. CDE interface.
 - b. Extensible Markup Language (XML) interface.
 - c. For technical assistance to access data using XML, send an email to txcbs@bpa.gov.
19. Transmission Customers must execute a CDE agreement with BPA Transmission Services to:
 - a. Gain access to the CDE application to view loss data and reports.
 - b. Authorize a third party to view the Transmission Customer's select loss data.
 - c. Transmission Customers who have more than one authorized third party for viewing loss data and reports must coordinate and elect which party is responsible for returning all the loss obligations.
20. A signed original CDE agreement should be mailed or faxed to the Transmission Customer's account executive.
21. The CDE application will provide the following user interface information:
 - a. Daily Loss Report: Loss obligations.
 - b. Imbalance Report: View over/under returned losses.
 - c. Shared Path Summary: Owners/Non-Federal Participants (NFP) can view their shares and scheduled use of the Northern Intertie, Southern Intertie and DC Intertie.

B. Loss Reconciliations

1. At the end of each **Delivery Month**⁴, after BPA Transmission Services has balanced with WECC, BPA Transmission Services will work with the Transmission Customer to identify

¹A Transmission Services access point that allows a customer to obtain information pertaining to its Ancillary Services, Loss Return obligations, portfolio manager, and contract portfolio manager.

²Open Access Technology International System

³Customer Data Entry

⁴The calendar month during which Transmission Services were provided and Real Power Losses were incurred.

and reconcile any deviation between losses incurred and losses returned resulting from changes made to schedules or actual data. Adjustment records for reconciliation of wheeling loss deviations are available to the Transmission Customer in its Daily Loss Report available via CDE.

2. Transmission Services will provide notice to Customers through txcbs@bpa.gov email when loss reconciliation has been finalized for a Delivery Month. BPA Transmission Services and the Transmission Customer, however, may agree to adjust final reconciled losses if, within three years, either party discovers a reconciliation error resulting from source data errors (e.g., meters, tags, loss database) programming errors, or other clear error. Any errors of this type must be corroborated by data from both BPA Transmission Services and the Transmission Customer.

C. Loss Return Requirements

In-Kind Loss Return (In-Kind)¹

1. All Short-Term Firm (STF) Transmission Service Requests (TSRs), including requests to return losses, will be processed in queue order.
2. Requests to return losses will not be subject to competition.
3. Available **Flowgate**² Capability (AFC)/Available Transfer Capability (**ATC**³)
 - a. Requests to return losses affecting external interconnections or interties may be REFUSED due to lack of ATC.
 - b. Requests to return losses not affecting external interconnections or interties will be ACCEPTED, regardless of AFC.

¹The loss return type requiring losses calculated on the Transmission Customer's usage to be tagged and returned by the Transmission Customer's Real Power Loss Provider 168 hours after service was provided.

²Flowgate (Cutplane): Transmission lines and facilities owned by BPA on a constrained portion of BPA's internal network transmission grid or transmission lines and facilities owned by BPA and one or more neighboring transmission providers that are interconnected and the separately owned facilities are operated in parallel in a coordinated manner, and each of the owners has an agreed upon allocated share of the transfer capability.

³Available Transfer Capability

4. A Transmission Customer, or its alternate Real Power Loss Provider, must return In-Kind Real Power Losses on firm transmission by one of the following reservation procedures:
 - a. **No Charge Reservation**¹:
 - i. To reserve No Charge Reservations in **OASIS**², go to the Reservation Summary screen and select "F-Daily Loss Return" or "F-Hourly Loss Return" service.
 - ii. If the Customer does not want to access OASIS to reserve No Charge Reservation, they will need to arrange to have another entity do business for them as their **Reservation Agent**³. Refer to the Reservation Agent Business Practice for details.
 - iii. For submittal timelines for the No Charge Reservations see the Requesting Transmission Service Business Practice.
 - b. CONFIRMED No-Charge Reservations to return losses will increment (or decrement) posted ATC and AFC.
 - c. Previously reserved firm transmission.
 - d. Hourly Firm Service purchased at Preschedule
5. To return In-Kind Losses the following criteria must be met:
 - a. The No Charge Reservation must show the **POR**⁴ as the Real Power Loss Provider and BPAPOWER as the **Point of Delivery**⁵ (POD⁶).
 - b. Transmission Customers shall return losses by submitting e-Tags during the Preschedule window that matches the MW profile from Customer Data Entry (CDE).
 - c. All In-Kind Real Power Loss Return service e-Tags must be submitted for the WECC Preschedule Day no later than 15:00:00 **PPT**⁷.

¹An Open Access Same Time Information System (OASIS) Reservation for F-Daily Loss Return on the Network for the return of Real Power Losses at no charge.

²Open Access Same-Time Information System

³An entity authorized to submit and process Transmission Service Requests (TSR) on behalf of the Customer. This entity is a registered customer of Open Access Technology International, Inc. (OATI).

⁴Point of Receipt is an interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available by the Delivering Party; An OASIS field on a TSR that is the scheduling POR.

⁵Point of Deliver (POD) is a point on the The Transmission Provider's Transmission System where capacity and energy transmitted by the Provider will be made available to the Receiving Part; An OASIS field on a TSR that is the scheduling POD.

⁶Point of Delivery is a point on the The Transmission Provider's Transmission System where capacity and energy transmitted by the Provider will be made available to the Receiving Part; An OASIS field on a TSR that is the scheduling POD.

⁷Pacific Prevailing Time

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- d. If the associated Real Power Loss Return schedule specifies the same Network **Point of Receipt**¹ (POR) as the Service Agreement under which the losses were incurred, the Transmission Customer may return remaining losses under the same Service Agreement on unused firm Reserved Capacity.
 - e. Unused Reserved Capacity on the Southern Intertie under the Transmission Customer's Service Agreement must not be used for In-Kind Loss Return.
6. If Firm Reserved Capacity (ATC) is insufficient for a Transmission Customer to obtain a full reservation to return losses, BPA Transmission Services will offer **Partial Service**².
 7. The OASIS Reference field of the e-Tag must reference either the:
 - a. **AREF**³ of the No Charge Reservation request for a loss return. The **Sale Ref**⁴ of the No Charge Reservation must be the same as the Transmission Customer's Service Agreement for which losses are being returned; or
 - b. The Transmission Customer's Service Agreement under which the losses were incurred.
 8. Transmission Customers must reference the appropriate Product Suffix Code on the e-Tag:
 - a. Point-to-Point Service Agreement - LP
 - b. Network Integration Service Agreement - L3
 - c. Integration of Resource contract - L1
 - d. Formula Power Transmission contract - L2
 - e. Southern Intertie owners and Non-Federal participant's (NFP) - L7
 - f. Northern Intertie owners - L9
 9. The e-Tag must have BPAPOWER as the POD and BPALOSS as the sink.
 10. The Daily Loss Report Imbalance should be zero when a loss return e-Tag's status is Implement, indicating that losses have been prescheduled correctly.

¹Point of Receipt is an interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available by the Delivering Party; An OASIS field on a TSR that is the scheduling POR.

²Firm Point-to-Point (PTP) Transmission Service for a portion of the capacity requested and/or a portion of the term requested.

³A unique reference number automatically assigned by OASIS to provide a unique record for each transmission or ancillary service request.

⁴An OASIS field on a TSR. This number is an existing Customer's NT, PTP, or grandfathered Service Agreement number.

11. If no firm transmission is available (ATC = 0) for the hour in which a Transmission Customer is scheduled to return losses, the Transmission Customer must acquire transmission for the next like hour in which firm transmission is available to return the losses. The losses must be returned in like hours, Heavy Load Hour (HLH) or Light Load Hour (LLH).
12. Real Power Loss Return schedules are firm and subject to pro rata curtailment in real time. Real Power Loss Returns that are curtailed must be returned in like hours, HLH or LLH, as soon as possible but no later than 168 hours from the time of the curtailment.
13. **Slice Loss Return**¹
 - a. Power Services' Regional Dialogue Slice/Block Customers are not required to submit a No Charge Reservation when using Slice Output to provide Real Power Loss Returns. Losses returned by Slice Output Losses Return Type are deducted from the Customer's share of Slice Output 168 hours after service was provided, prior to making the share available for scheduling.

¹The loss return type whereby calculated losses are deducted from a Power Services' Slice customer's share of federal generation at the bus 168 hours after service was provided.

D. Additional Information

Policy Reference

- [OATT](#): Sections 15.7,28.5, Schedule 9

Related Business Practices

- Redirects
- Requesting Transmission Service
- Scheduling Transmission Service
- Reservation Agent

Forms

- [Notification of Real Power Loss Return Type](#)

Version History

Version 10	2/19/14 Version 10 added steps A.1 g-h to include the loss exemptions for Third-Party Supply and Supplemental Balancing Reserves and other exemptions that were not previously included.
Version 9	05/30/12 Version 9 includes the following changes: Changed Slice to Slice Output throughout the document. Section A: Deleted “ Real Power Loss ¹ ” from step A.1.a, Rewrote step A.1.b and A.1.c, Added “or the Block portion of a Slice/Block power contract” to step A.1.d, Added step A.1.e, Added “Regional Dialogue” and “Block” to step A.4, Added step A.3 and A.5 regarding the 60-day requirement for submitting updates to the Real Power Loss Return Type form., Added “who have more than” and “must coordinate and elect which party is responsible for returning all the loss obligations” to step A.17.c; Section C: Added “Northern Intertie owners - L9” as new step C.8.f, Added “Regional Dialogue” and “Block” to step C.13.a Real Power Loss Provide Type form: Revised to include requirement for customer contract, Added to step C.4.a.i “F-Hourly Loss Return”, Replaced “F-Daily Loss Return” with “No Charge Reservation” in C.4.a.ii to reflect the inclusion of F-Hourly Loss Return, Deleted “(F-Daily Loss Return as designated on OASIS)” in step C.4.a.iii to reflect the inclusion of F-Hourly Loss Return in “No Charge Reservation”, Section D: Added Reservation Agent under Related Business Practices
Version 8	11/10/11 Added step C.4.ii needing to arrange a Reservation Agent if reserving F-Daily Loss Return not using OASIS.
Version 7	05/11/11 Updated the General Criteria section, added new #10 and added “...for return 168 hours after service was provided.” to #11.
Version 6	3/29/11 Updated the Loss Return Requirements section with 1-3.b and 4.b related to competition and ATC/AFC.

¹The energy lost during transmission of power caused by the electrical resistance of high-voltage transmission lines.

Version 5	<p>04/16/10 Version 5 of this business practice updates loss reconciliations, In-Kind Loss Return requirements, and use of Customer Data Entry (CDE). Specific changes include:</p> <ul style="list-style-type: none"> • Section 2: Definitions <ul style="list-style-type: none"> o Step 2.6: Added “In-Kind” to Real Power Losses. o Step 2.8: Revised the definition for clarity by adding “The loss return type whereby calculated losses are deducted from a ...” and deleted “The loss return type requiring a...” and “...to deduct calculated losses from its...”. • Section 3: General Criteria <ul style="list-style-type: none"> o Step 3.2: Added “new” and “The form must be submitted with the customer application package”. o Step 3.3: Added: To change Real Power Loss Return type, complete all applicable items on the Notification of Real Power Loss Return Type form and e-mail to: RPLPForm@bpa.gov. o Step 3.4: New step added for clarification on Slice customers returning losses for Slice resources or In-Kind using e-Tags. o Step 3.17.1: Added “Loss” after Daily Loss Report and deleted “View loss” and “...that will be returned either In-Kind or Slice returns”. • Section 4: Loss Reconciliations <ul style="list-style-type: none"> o Step 4.2: Deleted “Once this notice is sent, neither Transmission Services nor the Transmission Customer will pursue claims or further actions related to the final reconciled losses, including dispute resolution, in court, with FERC, or elsewhere”. • Section 5: Loss Return Requirements <ul style="list-style-type: none"> o Section title: Deleted “In-Kind”. o Step 5.1: Added “In-Kind Loss Return”. o Step 5.1.1: Added “reservation”. o Step 5.2: Moved step to the end of the section as step 5.2 and 5.2.1. o Step 5.1.5.1 and 5.1.10.5: Corrected the spelling of BPAPOWER. o Step 5.1.5.4: Deleted “The transmission must be something other than...” and added “...under the Transmission Customer’s Service Agreement must not be used for In-Kind Loss Return”. o Step 5.1.6: Added “(ATC)”. o 5.1.7: Added “Reference”. o Step 5.1.8 and 5.1.9: Added “Transmission Customer’s”. <p>Notification of Real Power Loss Return Type form: <ul style="list-style-type: none"> o Added to the effective date of this action line “(No earlier than 60-days from the date this form is completed)”. o Added to the In-Kind Real Power Loss Return Types “or sources”, “must”, and “transmission Customer designated”. o Added a date line to the bottom of the form. </p>
Version 4	<p>11/20/07 Transmission Services is revising its Real Power Loss Return, Version 3 Business Practice to incorporate language in Section 3 that clarifies losses on the Network to or from John Day and then over the Malin 230/Hilltop 345 path. Please submit comments to Transmission Services on the revision by the Close of Business¹ on December 7, 2007.</p>
Version 3	<p>10/2/07, V3 Transmission Services revised its Real Power Loss Return, Version 2 Business Practice (Business Practice) to incorporate the applicable provisions included in the following CBPI Bulletins:</p> <ul style="list-style-type: none"> • CBPI Bulletin 11: E-Tag Timing Validations • CBPI Bulletin 14: No Charge Reservation for the Return of Real Power Losses <p>The following sections and/or steps of this Business Practice were revised to incorporate the new process described in the CBPI Bulletins referenced above:</p> <ul style="list-style-type: none"> Section 2 • Step 2.1 - Clarified the No Charge Reservation definition. Section 3 • Step 3.1 - Clarifies when a Customer would be required to return losses. • Step 3.4 - Revised to eliminate the option of submitting a No Charge Reservation as a daily Point-to-Point (PTP) Network Loss Return service type. Section 4 • Step 4.2 - Clarifies that No Charge Reservations submitted after 07:59:00 PPT will be processed manually. • Step 4.3 - Clarifies that Losses can be submitted on Preschedule day and beyond. • Step 4.4- Changed posting of Real Power Loss Return service for No Charge Reservations from the Transmission Service Information screen in the Capacity Type Field in OASIS to the Reservation Summary screen. <p>Transmission Services also replaced the following terms throughout the Business Practice:</p> <ul style="list-style-type: none"> • TBL is now referred to as Transmission Services • PBL is now referred to as Power Services • Tariff is now referred to as OATT • Pre-Schedule is now referred to as Preschedule
Version 2	<p>04/06/06 This version clarifies the procedure that we have been operating under with regard to use of the Network (Sections 3.4.2, 3.4.3, and 3.7) and has identified the product code to be used on the OASIS when submitting a No Charge Reservation as either a F-Daily PTP Network Loss Return or an F-Daily PTP IS Network Loss Return (Section 3.4).</p>
Version 1	<p>9/2/05 This version defines the process and guidelines by which Transmission Customers must return</p>

¹5:00 p.m. Pacific Prevailing Time

	<p>Real Power Losses to the BPA Power POD and includes the customer's right to return losses from an existing firm transmission service agreement. When there is no Available Transfer Capability (ATC) to obtain a reservation to return losses, The Customer may purchase Hourly Firm Transmission on Pre-Schedule. This version clarifies that losses that are moved from one hour to another must remain in either Heavy Load Hours (HLH) or Light Load Hours (LLH). This Business Practice replaces the Real Power Loss Return Methodology; Version 3 Business Practice posted March 1, 2004.</p>
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