

BONNEVILLE POWER ADMINISTRATION

Concurrent Losses User Guide

Version 1.8 9/22/2023

This guide describes the new concurrent losses process, screen and related items set forth in the following business practices: Real Power Loss Return, Requesting Transmission Service, Scheduling Transmission Service and Oversupply Management Protocol. This document contains proprietary screenshots for the Daily Concurrent Losses Obligation (DCLO) screen in webScheduler and the webSmartOASIS New TSR screen from Open Access Technology International (OATI). Do not distribute this material or use it outside the context of this document without specific authorization from OATI.

For additional assistance, submit questions to txcbs@bpa.gov.

Table of Contents

A.	Overview	2
B.	History – 2022/2024 Rate Case efforts	3
C.	Election Process / Reminders	4
D.	The New Daily Concurrent Loss Obligation Screen	6
	Full 24 hour view	7
	Filter	7
	Screen Elements for In Kind Contracts	9
	In Kind Contract Before Returning Losses Example	10
	In Kind Contract After Returning Losses Example	11
	Screen Elements for Slice Contracts	12
	Slice Contract Losses Example	13
	Oversupply Management Protocol For Concurrent In Kind Losses	14
E.	Data Update Frequency in the Daily Concurrent Loss Obligation Screen	15
F.	Customer API Query Inputs	16
G.	Customer API Query Output	17
H.	The New Concurrent Losses Product	19
ı	Resources & Links	20

A. Overview

As part of the BP-22 Rates Settlement, BPA will be implementing in-kind concurrent loss return functionality beginning with HE12 on October 2nd, 2023. This means that concurrent loss customers must have their initial return tags in by 10:40am at the latest. Concurrent loss returns will replace BPA's current 168 hour delayed loss return paradigm for all in-kind and slice contracts aside from legacy non-OATT grandfather contracts. This will not only allow BPA to have access to energy and capacity that would have been tied up in delayed loss returns but also benefits customers by not shifting costs to them and allowing customers to return losses without incurring capacity charges.

To accommodate this new method of loss returns, BPA is implementing a new loss return screen for non-legacy customers. This screen, which will replace the current Daily Loss Report screen (which will remain in use for legacy contracts), is the Daily Concurrent Loss Obligation screen. It will be available in the CDE dropdown list of screens in webTrans/webScheduler. This screen (explained in greater detail later in this guide) will allow customers to see their 24 hour loss obligations for their contracts in kWs for the current day. Customers will be able to hook up to an API to programmatically download loss obligation data as they do today in the Daily Loss Report.

Concurrent losses will be replacing 168 hour delayed losses so to capture the losses that will have accrued from the transition from 168 to concurrent, BPA will add the 168 hour delayed losses owed to the concurrent values for the first week and post an aggregated loss value for each hour.

Financial contracts will continue to be returned as they are today.

B. History – 2022/2024 Rate Case efforts

Real Power Losses refer to the loss of power that occurs over the transmission system when power moves between the point of generation and the load. Under Bonneville's Open Access Transmission Tariff (Tariff), customers must replace real power losses associated with their transmission service as calculated by BPA. BPA has maintained two loss return settlement options for customers to choose between for nearly the last 20 years: delayed in-kind (168 hour delayed return) and financial settlement (customer purchases losses from BPA). BPA Power Slice customers may also elect to use Slice Output for delayed in-kind loss returns. The requirements for calculating and returning real power losses are specified in the Real Power Losses Business Practice.

In the BP-22 rate proceeding, BPA proposed to add a capacity charge to the delayed in-kind loss return service in order to recover the capacity cost to BPA associated with this service. The rate case concluded with a settlement agreement in which BPA agreed to not implement a capacity charge associated with delayed in-kind loss returns in the BP-22 rate period and to work toward developing concurrent loss return service for BP-24. Specifically, as part of the BP-22 Rates Settlement, Bonneville agreed to implement a new concurrent loss return service for customers who wish to return their real power losses with a physical in-kind return:

"Bonneville will work toward implementing a concurrent loss-return service by the start of the BP-24 rate period or sooner, including development of an implementation plan. The implementation plan will include a timeline for engaging customers through workshops as well as opportunities for customers to provide feedback. The plan will also account for the potential need to make business practice changes according to Bonneville's Business Practice Process. Bonneville will share the implementation plan with customers no later than the end of the first quarter of FY 2022."

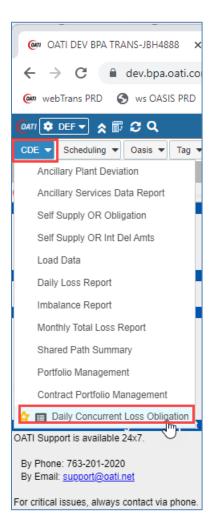
C. Election Process / Reminders

- Concurrent loss returns will begin with HE12 on October 2nd, 2023. This means that concurrent loss customers must have their initial return tags in by 10:40am at the latest.
- Starting August 2023, the new Daily Concurrent Loss Obligation CDE screen will be available for customers to test in the DEV testing environment.
- If you have not logged into your DEV test account for a while your account might be inactive. You will need to email Txcbs@bpa.gov to get it activated again and after logging in you will need to update your password again.
- If you currently elect In-Kind Loss Returns and already have access to the Daily Loss Report in the CDE dropdown list, you will automatically be granted access to the new OATI CDE Daily Concurrent Loss Obligation screen.
- Customers can contact BPA with questions regarding their testing, how to connect to the API or production support questions related to concurrent losses by emailing us at: Txcbs@bpa.gov
- While customers can continue to return losses in-kind in the same hour as the schedule, the concurrent system requires that any remaining loss return imbalances be settled financially.
- To change your Loss election, complete and submit a <u>Notification of Real Power Loss Return Service form</u> to <u>RPLPForm@bpa.gov</u>. See "Real Power Losses Business Practice, (Section A 4)".
- Customers wanting to change from in-kind losses to financial losses can contact a Trader from BPA Power Services at bpamarketing@bpa.gov or 503-230-4111 to arrange for purchase of Real Power Losses from BPA Power Services. This agreement has to be in place before August 31, 2023, to be able to return financially for the next fiscal year.

- Customers who currently return losses financially and want to continue to do so will need to renew their agreement with BPA Power Services by August 31, 2023.
- Please note that if you normally elect Financial Loss Returns but do not meet the annual deadline of August 31st prior to the next fiscal year for submitting the appropriate election forms, by default you will automatically switch your Loss election over to In-Kind Concurrent Losses starting October 2nd. For additional information, see Section A 7 of the Real Power Loss Return Business Practice.

D. The New Daily Concurrent Loss Obligation Screen

This screen is accessed via the CDE dropdown list within webTrans/webScheduler:



Full 24 hour view

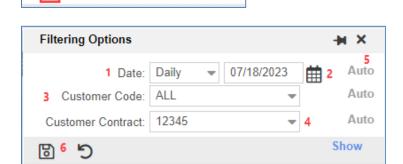


Note: If the Daily Concurrent Loss Obligation screen is too large for your screen, change the zoom for your window:

Google Chrome and Edge: Click the Customize button in the top right (in both cases, the circle with 3 dots) and vary the zoom as needed:



Filter



- 1/2. **Date**: Choose one of 4 options available in the dropdown list and update the date field as needed:
 - a. Today

- b. Yesterday
- c. Tomorrow
- d. Daily (allows the user to query any day)
- 3. **Customer Code**: The EIR-registered customer acronym/abbreviation

BONNEVILLE POWER ADMINISTRATION

- 4. Customer Contract: The customer's contract/Sale Ref number
- **5. Auto/Yes/No**: Choose Auto, Yes or No to always display the corresponding filter row in the header bar
- 6. **Enter**: Click the Enter button to see the filtered data

Note: The double-arrow icon will hide the filter row under the screen title:



■ Daily Concurrent Loss Obligation Filtered By: To Date: ◆ Daily (07/18/2023) ➤ Customer Contract: 12345 × Customer 1 Contract **Values** HE9 HE₁₀ APSE 2 12345 5 Total Obligation kWs 2009 1970 9 -30 6 Financial Obligation kWs 7 T-30 Obligation MWs 2 2 8 Returned MWs 2 Last Updated: 07/18/2023 07:37 1 07/18/2023 07:43:25 PPT

Screen Elements for In Kind Contracts

- 1. Last Updated: The date and time of the currently displayed data; details about how often data is updated can be found in the **Data Update**Frequency section below.
- 2. **Customer**: The EIR-registered customer acronym/abbreviation
- 3. **Contract**: The customer's contract/Sale Ref number
- 4. **HE1 HE24**: Hour ending total loss data for each hour of the day
- 5. **Total Obligation kWs**: The hourly calculated loss obligation rounded to whole kilowatts
- 6. Financial Obligation kWs: The hourly calculated loss obligation rounded to whole kilowatts minus the Returned MWs amount for the same hour. This will inform the customer of any changes to the loss obligation that they will settle financially with BPA after they have physically returned losses prior to the start of the hour of flow. This could result in a charge or a credit. This is referred to as a loss imbalance.
- 7. **T-30 Obligation MWs**: Hourly calculated loss obligations rounded to whole megawatts; this row only appears for In Kind customers. This is the amount of MWs customer are expected to return and have tagged by T-20.
- 8. **Returned MWs**: Aggregated MWs returned hourly via one or more loss return eTags.

In Kind Contract Before Returning Losses Example



In this example, an in kind customer has accrued a losses obligation (shown in the Total Obligation kWs row) of 1931 kWs and has not returned losses yet.

- The screen rounds the Total Obligation kWs into MWs to be returned (in this example, 1931kWs rounds up to 2MWs needed for the return).
- Because the customer has not returned losses yet, the Returned MWs row has not populated.
- Also because losses have not been returned, the Financial Obligation kWs row matches the kWs amount of the Total Obligation kWs row.

■ Daily Concurrent Loss Obligation Filtered By: To Date: ◆ Daily (07/27/2023) ▶ × Customer Contract: 12345 × Customer ' Contract HE8 HE9 **HE10 HE11** HE12 **HE13 Values** 1931 1970 1970 1970 1970 1989 1931 APSE 12345 Total Obligation kWs Financial Obligation kWs -1011 -30 -30 -30 -30 931 T-30 Obligation MWs 2 2 2 2 2 2 2 2 2 2 2 Returned MWs 1

In Kind Contract After Returning Losses Example

Using the same example, the customer has returned losses.

- The Returned MWs row is now populated with the returns that the customer has entered.
- The Financial Obligation kWs row is also now populated with the difference between the Returned MWs amount and Total Obligation kWs. Red, negative kWs indicate credits.
- Losses have been returned correctly for HE8 HE11 and HE14.
 - For HE8 HE11 and HE14, 2MWs were returned. Because the Total Obligation kWs was 1970 and 2MWs (or 2000kWs) were returned, a credit of -30 appears in the Financial Obligation kWs row.
- Losses were over-returned for HE12; 2MWs were owed but 3 were returned. This causes the extra MW to be added to the Financial Obligation kWs row. This error would result in an ILRP penalty.
- Losses were under-returned for HE13; 2MWs were owed but only 1 was returned. This causes the Financial Obligation kWs row to show 950kWs still owed and also results in an ILRP penalty.

■ Daily Concurrent Loss Obligation Filtered By: To Date: ■ Daily (07/18/2023) ➤ Customer Contract: 12345 × Customer 1 Contract **HE12 Values** APSE 12345 5 Total Obligation kWs 1931 1931 6 Financial Obligation kWs -69 -69 7 T-85 Obligation MWs 2 2 Last Updated: 07/18/2023 08:48 1 07/18/2023 08:49:57 PPT

Screen Elements for Slice Contracts

- Last Updated: The date and time of the currently displayed data; details about how often data is updated can be found in the Data Update Frequency section below.
- 2. **Customer**: The EIR-registered customer acronym/abbreviation
- 3. **Contract**: The customer's contract/Sale Ref number
- 4. **HE1 HE24**: Hour ending total loss data for each hour of the day
- 5. **Total Obligation kWs**: The hourly calculated loss obligation rounded to whole kilowatts
- 6. Financial Obligation kWs: The hourly calculated loss obligation rounded to whole kilowatts minus the Returned MWs amount for the same hour. This will inform the customer of any changes to the loss obligation that they will settle financially with BPA after they have physically returned losses prior to the start of the hour of flow. This could result in a charge or a credit.
- 7. **T-85 Obligation MWs**: Hourly calculated loss obligation rounded to whole megawatts. This row only appears for Slice customers.

Note: Unlike in kind contracts, slice contracts do not have a Returned MWs row.

Slice Contract Losses Example



- There is no Return MW row
- At T-85, the T-85 Obligation MWs row should not change again.
- Financial obligation KW row will always show the difference between total obligation KW and T85 KW

■ Daily Concurrent Loss Obligation Filtered By: To Date: Daily (07/18/2023) Customer Contract: 12345 Cu Contract HE1 HE2 HE4 Customer 1 **Values** APSE 12345 Total Obligation kWs 0 0 0 0 Financial Obligation kWs 0 0 0 0 0 0 0 0 T-30 Obligation MWs 0 0 0 0 0 0 0 0 0 0 0 0 0 Returned MWs Last Updated: 07/18/2023 13:45 07/18/2023 14:26:36 PPT ©1996-2023 Open Access Technology Internat

Oversupply Management Protocol For Concurrent In Kind Losses

- From midnight on the start of the PreSchedule day, the Total Obligation line should be populated for any new obligations that come in between 00:00 and 05:00
- As of 05:00 of the PreSchedule day, Power Marketing initiates an OMP event changing the obligation for 1+ hour(s) to zero.
- For those hours impacted by the OMP event, the Total Obligation, Financial Obligation and T-30 rows will change to zero (as in the example above).
- Because of the timing described above, there is a window between 00:00 and 05:00 of the PreSchedule day where a customer may have submitted a Loss Return tag prior to the OMP event being initiated. In such a circumstance, the total MWs of the tag will appear in the Return row.
- Once notified of the OMP event, the customer should take action to manually adjust any existing Loss Return tag down to zero for the hours impacted by the OMP event prior to T-20.
- During OMP events, if a customer has a T-30 value of zero and a greater Return value this is not considered an over delivery of losses as it would be during non-OMP circumstances. Customers are exempt from penalties during OMP events.
- The Oversupply Management Protocol Business Practice includes details about OMP and Concurrent Loss returns, and will go into effect with Concurrent Losses on October 2nd, 2023

E. Data Update Frequency in the Daily Concurrent Loss Obligation Screen

Note: Reference the Real Power Loss BP, section D (Calculation and Posting of Real Power Losses) for details about data update frequency for this screen.

- Between 00:00 and 21:00 of the PreSchedule day, the Real Power Losses for each remaining hour of the current day and the following five (5) Calendar Days will be posted four times per hour.
- Between 21:00 of the night prior to the RealTime day and the close (HE24) of the RealTime Day, the Real Power Losses for the next hour and the two following hours will be posted once per minute. The final one minute posting will be at T-30 prior to each hour of flow.
- Between the start of each hour of flow and 180 hours after each hour of flow, an adjusted Real Power Losses amount will be posted for all previous hours of the current day and each hour for the previous five (5) Calendar Days.
- The up to one minute posting frequency is expected to have limited impacts on total webTrans/webScheduler system performance.

F. Customer API Query Inputs

For purposes of testing in the DEV environment, here is the URL to the DEV API:

https://dev.bpa.oati.com/sched_bpa/interfaces/xml/ConcurrentLosses/sched-concurrent-losses-webservice.wml

For the Production environment, here is the URL to the Production API: https://www.bpa.oati.com/sched bpa/interfaces/xml/ConcurrentLosses/sched-concurrent-losses-webservice.wml

Data queries and returns must be limited to a 168 hour span of time, either in the past present or future. Please note that all data defaults to UTC time.

The customer API allows the querying of the following data elements:

- Customer_Code (Alpha-numeric): Customer acronym as registered in the EIR. Used by the API to verify CDE read access for the customer and/or customer's designated 3rd Party Loss Provider.
 - Allows for "*" used to query any codes for which they are a thirdparty loss provider
- Customer_Contract (Alpha-numeric): Allows the customer to request loss obligation and return data for a specific contract. Allows for multiple contracts to be queried at once.
 - Allows for "*" used to query all Customer's own contracts and any contracts for which they are a third-party loss provider
- Start_Date_Time (Datetime): First date / time to be queried.
- End_Date_Time (Datetime): Last date / time to be queried.

NOTES for Start/End Date Time entries:

- The Datetime type data elements will be in format "YYYY-MM-DDTHH:MM:SSZ", for example "2023-01-15T14:00:00Z" in UTC.
- The Start_Date_Time and End_Date_Time specified in the API retrieves all individual hours that span in-between.

G. Customer API Query Output

For each hour queried, the following data elements will be returned:

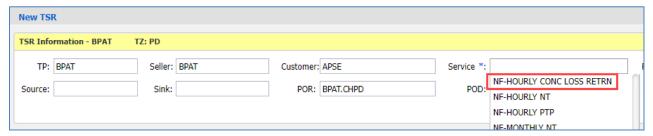
- Customer_Code: The Customer Code specified in the customer's query.
 Listed once for each line of data returned associated to the Customer Code specified.
- Customer_Contract: The Customer Contract specified in the customer's query. Listed once for each line of data returned associated to the Customer Contract specified.
- HE Date Time: Date and time in which the loss obligation was incurred.
- Total_Obligation_KW (Positive Numeric): Hourly calculated loss obligation rounded to whole kilowatts.
- Financial_Obligation_KW (Positive/Negative Numeric): Hourly calculated loss obligation rounded to whole kilowatts minus the Returned_MW amount for the same hour. This will inform the customer of any changes to the loss obligation that they will settle financially with BPAT after they have physically returned losses prior to the start of the hour of flow. This could result in a charge or a credit.
- T-85_Obligation_MW (Positive Numeric or NULL): Hourly calculated loss obligation rounded to whole megawatts.
- T-30_Obligation_MW (Positive Numeric or NULL): Hourly calculated loss obligation rounded to whole megawatts.
- Returned_MW (Positive Numeric or NULL): Aggregated MWs returned hourly via one or more Loss Return eTags.
- Upload_Date_Time (Datetime): Date and time the queried data had been most recently updated from the Upload API.

NOTES for Customer Query Data Output:

- The Datetime type data elements will be in format "YYYY-MM-DDTHH:MM:SS.SSS", for example "2023-01-15T14:00:00.000" in UTC.
- All data returned should be directly based on data uploaded from the Upload API, no additional calculations needed.

 While the Concurrent Loss SOAP endpoint is an additional web service provided by BPAT, the CDEs Set and GetAncillary, Wheeling Loss, and Portfolio Manager SOAP endpoints are not changing will continue to function as designed.

H.The New Concurrent Losses Product



A new NF-HOURLY CONC LOSS RETRN product has been added for customers to utilize. Concurrent customers will still be able to use the existing F-DAILY LOSS RETURN and F-HOURLY LOSS RETURN products for their loss return tags, in addition to the new NF-HOURLY CONC LOSS RETRN.

Please note that there are availability limitations for the products:

- The original F-DAILY LOSS RETURN and F-HOURLY LOSS RETURN products are available for reserving until 3pm of the preschedule day.
- The new NF-HOURLY CONC LOSS RETRN product becomes available for reserving at 3pm of the preschedule day.

I. Resources & Links

- Starting August 2023, the new Daily Concurrent Loss Obligation CDE screen will be available for customers to test in the **DEV testing environment**.
- Here are links to BPA's <u>Real Power Losses</u> webpage and <u>Real Power Losses</u>
 FAQ.
- Join BPA's Commercial Business Process Improvement (CBPI) calls for updates on concurrent losses (a link to CBPI notes with sign up information at the bottom): <u>Commercial Business Process Improvement - Bonneville</u> <u>Power Administration (bpa.gov)</u>
- Customer can contact BPA with questions regarding their testing, how to connect to the API or production support questions related to concurrent losses by emailing us at: Txcbs@bpa.gov
- To change your Loss election, complete and submit a <u>Notification of Real Power Loss Return Service form</u> to <u>RPLPForm@bpa.gov</u>. See "Real Power Losses Business Practice, (Section A 4)".
- As noted above in the guide, Customers wanting to change from in-kind losses to financial losses can contact a Trader from BPA Power Services at bpamarketing@bpa.gov or 503-230-4111 to arrange for purchase of Real Power Losses from BPA Power Services. This agreement has to be in place before August 31, 2023, to be able to return financially at the beginning of concurrent losses.
- For additional information, see Section A 7 of the <u>Real Power Loss Return</u>
 <u>Business Practice</u>.

Contact your AE with any other concurrent losses questions:

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Revision History

Version	Date	Change
1.0	07/18/23	Initial draft created.
1.1	07/25/23	Incorporated suggested revisions.
1.2	07/31/23	Updated screenshots.
1.3	08/03/23	Final version formatted to match existing guides.
1.4	08/09/23	Updated information in Resources & Links section.
1.5	08/15/23	Added references for inactive test accounts and SOAP calls not
1.5		changing.
1.6	08/28/23	Updated the information in The New Concurrent Losses Product
1.0	06/26/23	section to clarify use of new and existing Loss Product.
1.7	1.7 09/20/23 Added URL to Production API.	
1.8	09/22/23	Updated API Query Data Output time format from
1.0	03/22/23	YYYY-MM-DDTHH:MM:SSZ to YYYY-MM-DDTHH:MM:SS.SSS