

Concurrent Loss Return Service Customer Workshop

December 8, 2021



Agenda

- Kickoff
- Stage 1: Policy Development
- Stage 2: System Implementation
- Policy Proposal
- Specific Policy Items: Managing kW Remainders & Managing Loss Return Imbalance
 - Steps 1 & 2
- Next Steps

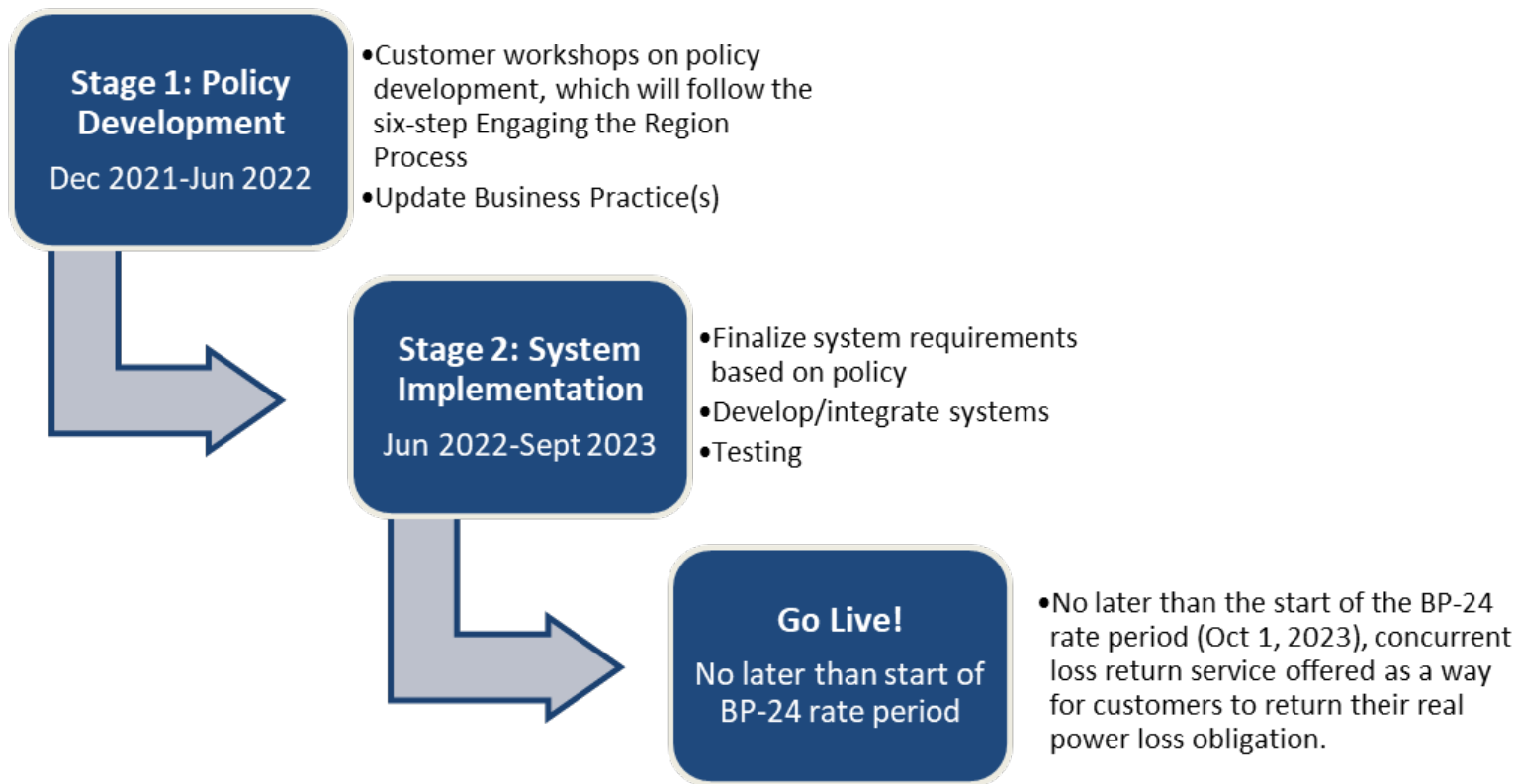
KICKOFF

BP-22 Commitments

- Offer concurrent loss-return service by the start of the BP-24 rate period or sooner.
- Develop a customer engagement timeline that includes workshops and opportunities for feedback.
- Use the Business Practice Process to update business practices to establish BPA's concurrent loss return service.

STAGE 1: POLICY DEVELOPMENT

Implementation Stages



Engaging the Region in Development of Concurrent Loss Return Service

- Policy items will be presented according to the following six-step process at workshops (multiple steps might be addressed in a single workshop):

Approach Development

Step 1:
Introduction & Education

Step 2:
Description of the Issue

Evaluation

Step 3:
Analyze the Issue

Step 4:
Discuss Alternatives

Proposal Development

Step 5:
Discuss Customer
Feedback

Step 6:
Staff Proposal

Customer Workshop Dates

- **Workshop 1: Dec. 8, 2021**
 - Kickoff and Overview of Implementation Plan
 - Overview of Implementation Plan
 - Overview of policy proposal and specific policy items
 - Steps 1 & 2 for specific policy items
 - Customer feedback requested by Dec. 31, 2021*
- **Workshop 2: Jan. 26, 2022**
 - Discuss customer feedback
 - Steps 3 & 4 for specific policy items
 - Customer feedback requested by Feb. 9, 2022
- **Workshop 3: Mar. 30, 2022**
 - Discuss customer feedback
 - Steps 5 & 6 for specific policy items
 - BPA will share an early draft of the business practice changes necessary to implement concurrent loss return service.
 - Customer feedback requested by April 13, 2022

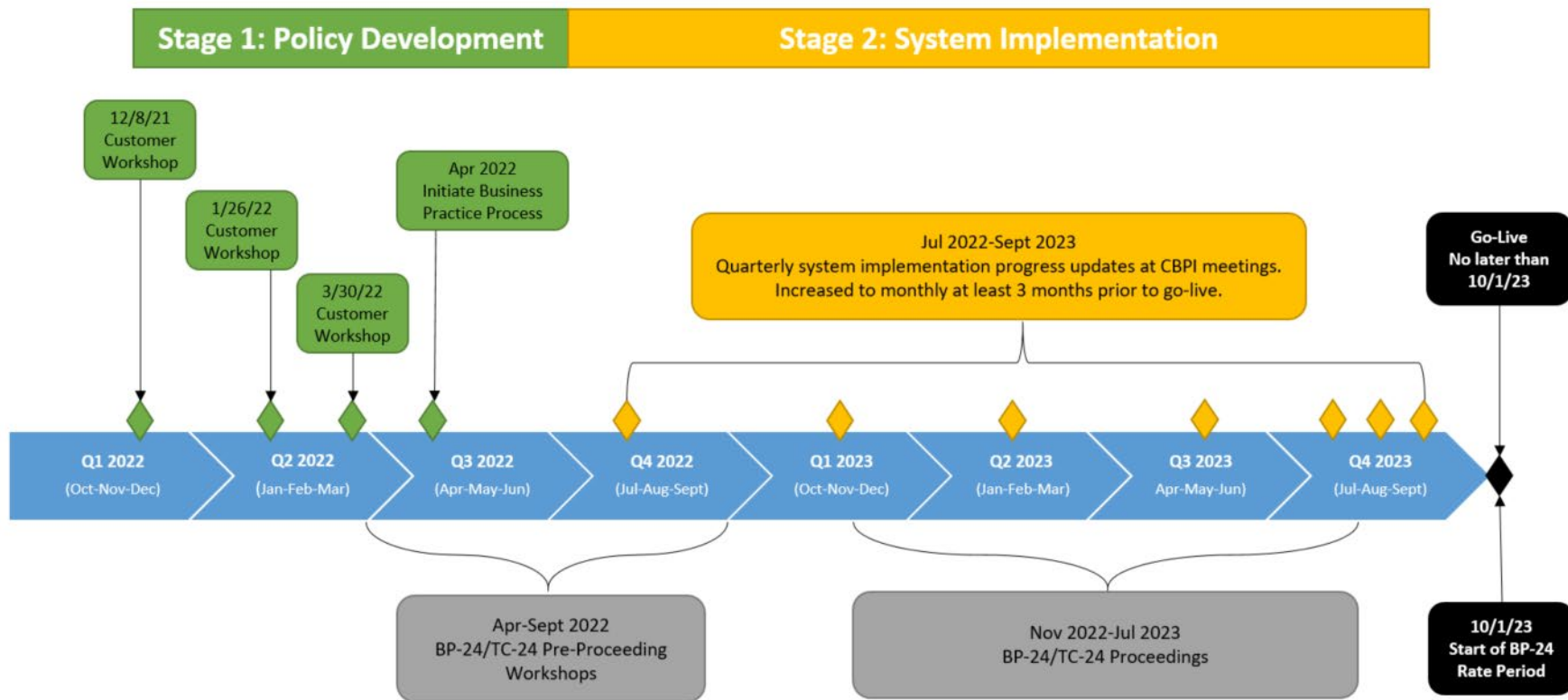
*We've flagged  several specific items we are seeking feedback from customers.

Business Practice Process

- **April 2022:** BPA will post draft revisions to the business practices necessary to implement concurrent loss return service, initiating the public Business Practice Process.
 - If a new or revised rate needs to be developed it will be discussed in the BP-24 pre-proceeding workshops and proposed in the BP-24 rate proceeding.

- Should BPA need to include additional technical or implementation changes to the business practice(s), customers will be notified ahead of time in the CBPI forum prior to BPA initiating the Business Practice Process.

Project Timeline



STAGE 2: SYSTEM IMPLEMENTATION

System Implementation Overview

- BPA expects to begin the system implementation stage in June or July 2022, following the Business Practice Process.
 - Identify technical requirements
 - Develop and/or integrate systems
 - Testing (including system functionality available to customers in development environment)
- Exact timeline for system implementation is unknown; however, BPA is committed to meeting the go-live deadline of Oct. 1, 2023 and will keep customers informed on the system implementation progress.

Keeping Customers Informed

- BPA will use the Commercial Business Process Improvement (CBPI) to share quarterly progress updates on system implementation.
 - Customers will be notified of CBPI meetings via Tech Forum.
 - Materials will be posted on the CBPI website.
 - Customers will have an opportunity to provide feedback within the CBPI meetings and following the meeting.
- The frequency of updates at the CBPI meetings will increase to monthly when BPA is three months away from implementation go-live.

Keeping Customers Informed (cont.)

- As necessary, BPA will use the CBPI forum to brief customers on any additional policy changes raised by BPA or customers in the system implementation stage and will follow the Business Practice Process to make changes to any impacted business practices.
- BPA may hold a workshop separate from the CBPI meetings to discuss the transition to concurrent loss return service prior to go-live.

POLICY PROPOSAL

Current State

- Currently, customers elect one of three Real Power Loss Return Services (Financial, Delayed In-Kind, or Slice Output) to satisfy their loss obligation.
- For Delayed In-Kind and Slice Output loss returns:
 - BPA calculates an hourly loss obligation for each contract and posts it in the CDE system by 3 PM of the business day before the preschedule day (often 5 or 6 days after the flow of the transaction).
 - Delayed In-Kind customers submit their loss returns on a separate e-Tag scheduled to the Loss POD and sink to BPALOSS no later than 3 PM of the preschedule day.
 - Slice Output customers meet their loss obligation by offsetting their Right to Power allocation by their hourly loss obligation.
 - The Slice customer ends up taking less energy than originally allocated to them, which returns the energy to BPA.

Future State

- Once implemented, concurrent in-kind loss return service will replace delayed in-kind loss return service, except for customers with legacy contracts that specify the return of losses in that manner.
- Purchasing financial settlement of loss obligations from Power Services will continue to be an option for all transmission customers.
- Customers that choose concurrent loss return service must schedule their e-Tag(s) for returning their transmission loss obligation to flow on the same hour their transmission service flows.
- BPA is evaluating how concurrent loss return service will impact Slice Output returns.
 - In discussion with customers via the SIG meetings.

Principles

1. Meet BPA's commitment in the BP-22 settlement.
2. Informed by what has been implemented by other utilities.
3. As simple as possible and minimizes administrative burden for BPA and customers, where possible.
4. Cost efficient implementation for BPA through minimization of custom changes to systems.
5. Losses returned the same hour as the schedule.
6. Minimizes unintended impacts on other policies and is auditable.

Industry Scan

- BPA reviewed the Tariffs and Business Practices of several utilities that offer in-kind concurrent loss return service.
 - No single industry standard on how to implement this service.
 - BPA used the industry scan as a starting point for developing its policy proposal and will continue to look to what other utilities have implemented for guidance as the other specific policy options are considered.

Policy Proposal: Separate Aggregated e-Tag

- Customers schedule their aggregated loss obligation(s) on separate e-Tag(s) prior to the start of flow.
 - Hourly aggregated loss obligation calculated by BPA for each Transmission Contract.
 - Loss scheduling takes place prior to start of flow – in line with BPA’s tag timing window.
 - Customers acquire and use no charge transmission for losses e-Tag (status quo).
 - Loss returns scheduled to the Loss POD and sink to BPALOSS (status quo).

Tagging Options Considered

- **Option 1 - Same e-Tag:** Customers schedule their loss return obligation on the same e-Tag as their Transmission Schedule prior to the start of flow.
- **Option 2 - Separate Aggregated e-Tag:** Customers schedule their aggregated loss return obligation(s) on separate e-Tag(s) prior to the start of flow.

| | Option 1: Same e-Tag | Option 2: Aggregated separate e-Tag(s) submitted prior to start of flow |
|-----------------|---|--|
| Benefits | <ul style="list-style-type: none"> • Ability to automatically validate loss return obligation, including adjustments for curtailments and reloads. • Customers would not need to adjust timing of when they submit their schedules since they would submit their loss obligation together on the same e-Tag. | <ul style="list-style-type: none"> • Lower administrative burden on customers since BPA would continue to calculate/post customer’s loss obligation, including tracking exclusions and OMP events. • Retains no charge reservations. • Third party suppliers allowed. • Less complex system development needed to integrate with BPA’s downstream systems that use scheduling data. • Allows for increased accuracy of loss returns collected: <ul style="list-style-type: none"> • Aggregation of loss obligations reduces the number of transmission schedules that would result in a loss obligation of less than 0.5 MW • Provides more options for tracking loss returns at the kW level. |
| Risks | <ul style="list-style-type: none"> • Higher customer administrative burden since customers would be required to calculate their loss obligation and track exclusions, including adjusting for OMP events. • No charge reservation eliminated. • Third party suppliers disallowed. • Complex system development to integrate with BPA’s downstream systems that use scheduling data. • Risk of less accurate loss returns collected because the automated validation system uses standard rounding to validate a customer’s loss obligation <ul style="list-style-type: none"> • Without aggregation of loss obligations, many individual transmission schedules would result in a loss obligation of less than 0.5 MW • Limited ability to track at the kW level results in less accurate loss returns. | <ul style="list-style-type: none"> • Continued reliance on penalties to ensure accurate scheduling. • Customers may have to adjust tagging procedures for when they submit their transmission schedules to have their loss obligation calculated and submitted within the BPA time line. • Complex system development required to calculate and post customer loss obligation, as well as to validate/audit the correct amount was delivered. |

SPECIFIC POLICY ITEMS: MANAGING KW REMAINDERS & LOSS RETURN IMBALANCE

Step 1: Introduction and Education

Step 2: Description of the Issue

Specific Policy Items

- How will BPA manage loss obligation remainders (kW) since transmission service must be delivered in whole MWs?
 - Will utilize this workshop series and the 6-step customer engagement process to make a determination that will feed into the Business Practice Process.
- How will BPA manage imbalance for over and under deliveries of loss obligations in order to provide adequate loss returns?
 - Will utilize this workshop series and the 6-step customer engagement process to make a determination that will feed into the Business Practice Process.

Managing kW Remainders: Step 1 (Intro and Education)

| Current State (BPA) | Current State (Customer) | Concurrent Losses Paradigm |
|--|--|---|
| <p>BPA calculates a customer's loss obligation at the kW level using their transmission schedules per contract multiplied by the applicable loss factor in BPA's Tariff.</p> | <p>n/a</p> | <p>No change.</p> |
| <p>BPA posts a customer's loss obligation on CDE by 3pm on the business day before the pre-schedule day.</p> | <p>Customers view their loss obligations posted on CDE.</p> | <p>BPA posts a customer's loss obligation on a system/platform in real time.</p> |
| <p>BPA's system requires transmission service be scheduled in whole MWs.</p> | <p>Customers schedule their losses in whole MWs.</p> | <p>No change.</p> |
| <p>When calculating a customer's loss obligation, the kW's remainders are carried forward to subsequent hours until they reach a whole MW.</p> | <p>Customers view their loss obligations posted on CDE, which includes carried forward amounts owed.</p> | <p>Hourly carry forward of kW remainders is not feasible for BPA. Options TBD and to be discussed in steps 3 & 4. Seeking customer input. 📌</p> |
| <p>In the hour in which the accumulated kW's reach a whole MW, the MW is added to that hour's expected loss obligation.</p> | <p>Customers schedule their losses in whole MWs, including any carried forward amounts owed.</p> | <p>Hourly carry forward of kW remainders is not feasible for BPA. Options TBD and to be discussed in steps 3 & 4. Seeking customer input. 📌</p> |

Managing kW Remainders: Step 2 (Description of the Issue)

- Hourly carry forward of remaining kW's is not feasible under current timeline constraints.
- Applying standard rounding to calculate loss obligation can result in an aggregated obligation of less than 0.5 MW, which when rounded down results in zero losses returned.
- How do we calculate the loss obligation to deliver the most accurate loss returns?

Managing Loss Return Imbalance: Step 1 (Intro and Education)

| Current State (BPA) | Current State (Customer) | Concurrent Losses Paradigm |
|--|---|---|
| <p>Loss obligations are calculated the business day prior to Preschedule which is often five or six days following the flow of the transaction.</p> <p>BPA assess customer an FFI penalty if they over/under deliver their loss obligation (which are not the result of a reliability adjustment).</p> | <p>Customers view their loss obligation posted on CDE and submit their loss return schedule accordingly.</p> | <p>BPA posts a customer’s loss obligation on a system/platform in real time.</p> <p>Penalty option(s) TBD and to be discussed in steps 3 & 4. Seeking customer input. 📌</p> |
| <p>Reliability adjustments are reflected in determining and calculating a customer’s loss obligation.</p> | <p>Customers view their loss obligation posted on CDE and submit their loss return schedule accordingly.</p> | <p>Options TBD and to be discussed in steps 3 & 4. Seeking customer input. 📌</p> |
| <p>After-the-fact adjustments are reflected in the calculation for a future like hour and day.</p> | <p>Customers coordinate with BPA to determine the hour in which they will deliver the adjusted loss obligation.</p> | <p>Options TBD and to be discussed in steps 3 & 4. Seeking customer input. 📌</p> |

Managing Loss Return Imbalance: Step 2 (Description of the Issue)

- Managing loss return imbalance to reflect the most accurate loss returns:
 - How does BPA manage over/under delivery of loss returns not associated with real-time reliability adjustments?
 - How does BPA manage imbalance associated with real-time reliability adjustments made to either the transmission schedule or the loss return e-Tag?
 - When would or could BPA re-calculate a customer's loss obligation that allows for enough time to adjust their loss return e-Tag(s)?
 - When the timing doesn't work, how does BPA manage the imbalance?
 - How does BPA manage imbalance associated with after-the-fact transmission e-Tag adjustments?
 - Example: Dynamic e-Tags

Next Steps

- Please submit your feedback on the Implementation Plan, policy proposal and specific policy items to techforum@bpa.gov by Dec. 31, with a cc to your Transmission Account Executive (AE).
- Specifically, we are looking for feedback on:
 - How the tagging policy proposal will impact your business procedures and/or systems. 📌
 - Input on options for addressing how BPA should manage kW remainders. 📌
 - Input on options for addressing how BPA should manage loss return imbalance. 📌
- The team is available to discuss technical questions. Please reach out to your Transmission AE to coordinate.