

ISSUE #9: TRANSMISSION LOSSES

Step 4: Discussion on possible alternatives to solve Issue

Agenda

- Discuss Alternatives (Step 4)

Objectives

- Settling of transmission wheeling losses
 - Ensure that BPA captures
 - Value of capacity
 - Value of energy
 - Minimize
 - Administrative costs of system administration, maintenance, and reconciliation of deviations
 - Load uncertainty

Customer Comment Themes

BPA Response

Customers suggested financial settlement of deviations of loss returns (*expected vs actual*)

Considered in alternatives 2 through 5

Customers requested to understand BPA's willingness to review and alter it's financial settlement

Considered in alternatives 3, 5 and 6

Customers requested the ability to elect physical or financial settlement of loss obligations

Considered in alternatives 1 through 5

Alternatives

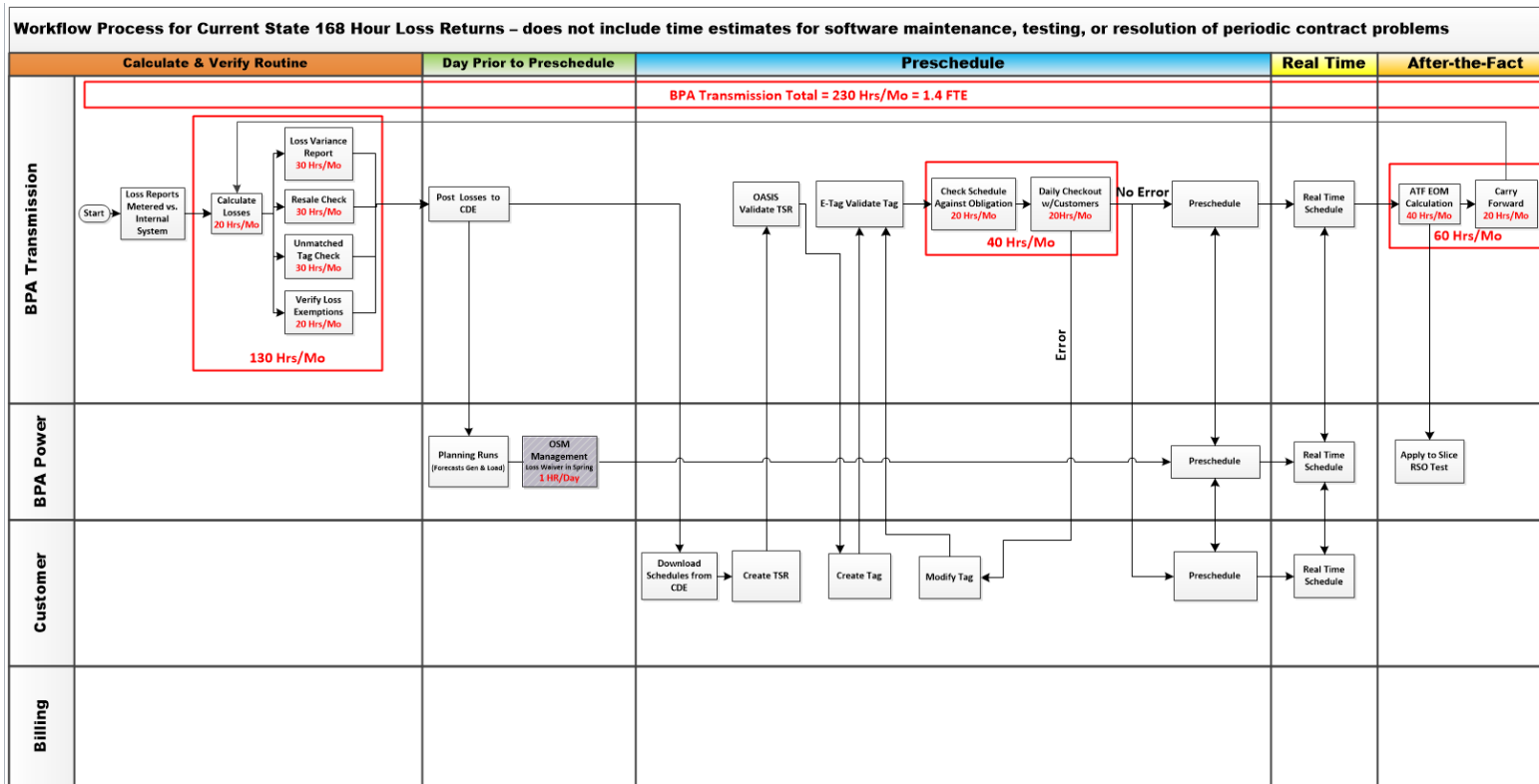
| Alternative | Time to Return In-Kind | Settle Delivery Errors Financially? | Financial Rate Set by |
|---|------------------------|-------------------------------------|-----------------------|
| 1. Keep Status quo | 168 hours | No | Trading Floor |
| 2. Keep in-kind at 168 hours + implement financial settlement only for inaccurate return of energy (“Financial for inaccuracy - FFI”) | 168 hours | Yes | Trading Floor |
| 3. Keep in-kind at 168 hours + change financial rate to be set in rate case + implement FFI | 168 hours | Yes | Rate Case |
| 4. Change in-kind to concurrent only + implement FFI | Concurrent | Yes | Trading Floor |
| 5. Change in-kind to concurrent only + change financial rate to be set in rate case + implement FFI | Concurrent | Yes | Rate Case |
| 6. Change to financial settlement only | N/A | N/A – No delivery | Rate Case |

Alternative 1 - Status Quo

- Financial Settlement
 - Price established by BPA Power Trading Floor
- In-Kind
 - Delivery is scheduled for 168 hours following the hour of incurring the line loss
 - Incorrect MWs are rolled forward to another hour/day
- Slice
 - Losses are deducted from Slice Right-To-Power 168 hours following the hour of incurring line loss

Note: Additional context available from 12/12/19 customer workshop:
<https://www.bpa.gov/Finance/RateCases/BP-22-Rate-Case/Documents/121219-Tx-Losses-Steps-1-3.pdf>

In-Kind Process – Current State



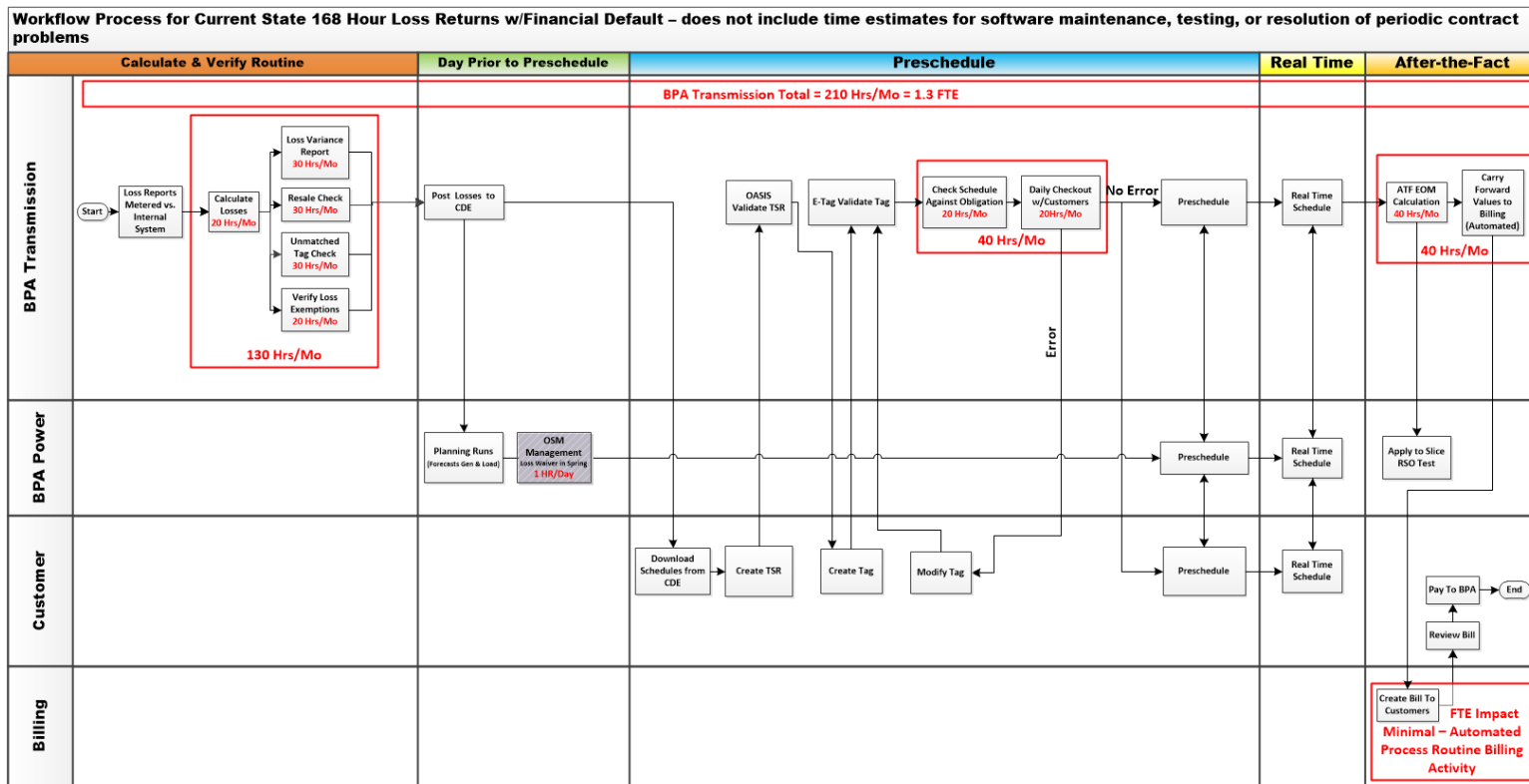
Alternative 2

- Financial Settlement
 - Price established by BPA Power Trading Floor
- In-Kind
 - Delivery is scheduled for 168 hours following the hour of incurring the line loss
 - *Incorrect MWs are settled financially*
- Slice
 - Losses are deducted from Slice Right-To-Power 168 hours following the hour of incurring line loss

Alternative 3

- Financial Settlement
 - *Price established through BP-22 rate proceedings*
- In-Kind
 - Delivery is scheduled for 168 hours following the hour of incurring the line loss
 - *Incorrect MWs are settled financially*
- Slice
 - Losses are deducted from Slice Right-To-Power 168 hours following the hour of incurring line loss

168 Hour Return + Default to Financial



Alternative 4

- Financial Settlement
 - Price established by BPA Power Trading Floor
- In-Kind
 - *Delivery is scheduled for concurrent time by the customer*
 - *Incorrect MWs are settled financially*
- Slice
 - Losses are deducted from Slice Right-To-Power concurrently

Note: Prior customer comments indicated concern regarding design, implementation, and workload for concurrent loss returns

Alternative 5

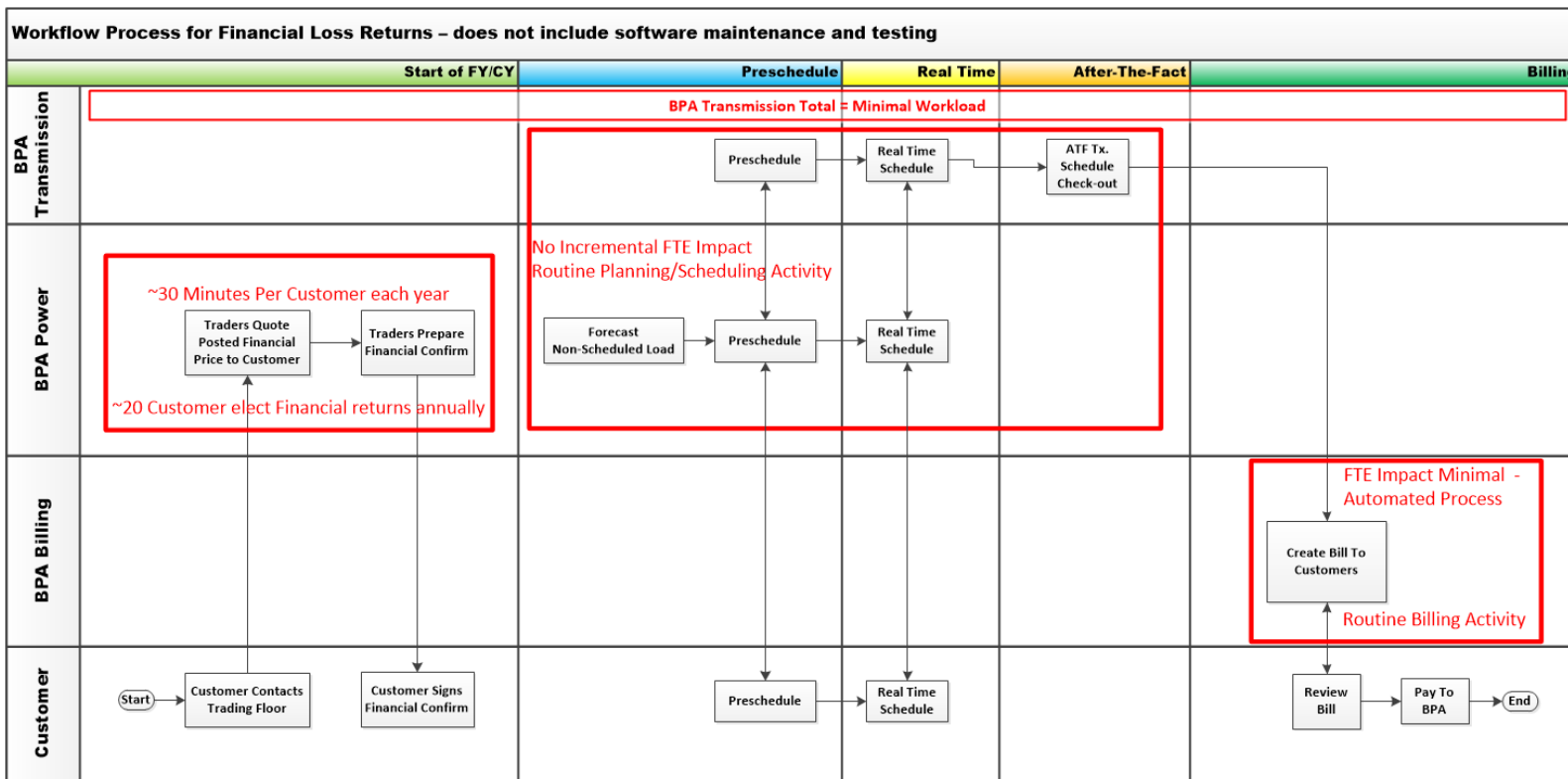
- Financial Settlement
 - *Price established through BP-22 rate proceedings*
- In-Kind
 - *Delivery is scheduled for concurrent time by the customer*
 - *Incorrect MWs are settled financially*
- Slice
 - Losses are deducted from Slice Right-To-Power concurrently

Note: Prior customer comments indicated concern regarding design, implementation, and workload for concurrent loss returns

Alternative 6

- All Customers are transitioned to financial settlement of losses
 - Financial Settlement
 - *Price established through BP-22 rate proceedings*

Financial Loss Returns Process



Criteria for Decision

- Aligned with the *pro forma* tariff and/or industry standards or best practices.
- Appropriate and fair compensation for FCRPS Capacity and Energy
- Efficiency of process and ease of administration, including managing deviations and imbalances
- Simplicity of policies to administer and enforce
- Cost of on-going IT system maintenance
- Align losses valuation with pricing and scheduling used when commercially purchasing energy
- Customer impact

Next Steps

- Workshop on May 19, 2020
 - Step 5 - Customer feedback on loss returns alternatives
 - Pricing methodology
 - Update on loss factor analysis

- Workshop on June 23, 2020
 - Step 6 - Staff proposal for loss returns alternatives
 - Discuss customer feedback
 - Pricing methodology and loss factor update