TC-22, BP-22 and EIM Phase III Customer Workshop

October 23, 2019
Agenda

- Next Steps for EIM Process
- TC-20 Survey Results
- Overview of BP/TC-22 Process and Coordination
- Overview of Currently Proposed Issues
  - EIM Phase III
  - BP/TC-22
  - Future Proceedings
- Next Steps
NEXT STEPS FOR EIM PROCESS
Western Interconnect BAAs: EIM
Five Phases to Western EIM Decision

2022

Exploration July 2018–June 2019
Implementation agreement June–Sept. 2019
BP-22 & TC-22 Nov. 2020–July 2021
Close-out Oct.–Dec. 2021
Evaluation Principles

BPA is evaluating whether or not to move forward toward joining the Western EIM based on six principles:

1. BPA’s participation is consistent with its statutory, regulatory and contractual obligations.
2. BPA will maintain reliable delivery of power and transmission to its customers.
3. BPA’s participation is discretionary, and BPA retains its ability to effectively exit the market in the event participation is no longer consistent with these principles.
4. BPA’s participation is consistent with a sound business rationale.
5. Bonneville’s participation is consistent with the objectives of Bonneville’s Strategic Plan.
6. BPA’s evaluation of EIM participation includes transparent consideration of the commercial and operational impacts on its products and services.
**EIM Policy Timeline**

<table>
<thead>
<tr>
<th>CY 2019</th>
<th>CY 2020</th>
<th>CY 2021</th>
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<tbody>
<tr>
<td><strong>Phase III – Post-ROD policy</strong>&lt;br&gt;October 2019 – August 2020&lt;br&gt;Workshops to resolve remaining policy issues combined with BP-22 and TC-22 pre-workshops</td>
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<td><strong>Phase IV – BP-22/TC-22</strong>&lt;br&gt;November 2020 – July 2021&lt;br&gt;Rates and tariff proceedings policy decisions</td>
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<td><strong>EIM Implementation and Stakeholder Engagement</strong>&lt;br&gt;October 2019 – December 2021&lt;br&gt;Work on EIM implementation projects underway and ongoing stakeholder engagement meetings are held</td>
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What is Not in Phase III Scope

- EIM implementation projects
- Known issues in CAISO’s Policy Initiative Catalog currently being evaluated
- Evaluation of other market opportunities like the extended day-ahead market
TC-20 SURVEY RESULTS
## TC-20 Survey Results

<table>
<thead>
<tr>
<th>Summary</th>
<th>Action</th>
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<tbody>
<tr>
<td>Bring customers along in the decision-making process, show them what</td>
<td>Develop and apply norms for all topics to ensure maximum transparency</td>
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<tr>
<td>the options are along the way. Share good news and bad news. Be</td>
<td>for issues, alternatives and decisions.</td>
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<td>transparent.</td>
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<tr>
<td>Schedule meetings and topics far in advance.</td>
<td>The draft meeting schedule will be shared at the Oct. 23 meeting.</td>
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<td>Sticking with BPA sites should improve the phone bridge issues.</td>
<td>All scheduled meetings will be at BPA's RHR and endeavor to maintain</td>
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<tr>
<td>Retain Tariff redlines. Consider including reasons for changes as part</td>
<td>quality A/V capabilities.</td>
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<td>of the Tariff redlines process.</td>
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<tr>
<td>Adopt best practices from the EIM stakeholder engagements.</td>
<td>Internal staff has met with EIM staff to develop and apply best</td>
</tr>
<tr>
<td>Coordinate with other BPA initiatives (BP-22, Grid Mod, EIM, TIPP, etc.)</td>
<td>practices.</td>
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<tr>
<td>Use data more effectively.</td>
<td>Will endeavor to use data as part of the process.</td>
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OVERVIEW OF BP/TC-22
PROCESS & COORDINATION
Engaging the Region on Issues

- After every workshop, BPA will provide a two-week feedback period for customers.
  - Input can be submitted via email to techforum@bpa.gov. Please copy your Power or Transmission Account Executive on your email.

- Issues will be presented according to the following process at workshops (multiple steps might be addressed in a single workshop):
  Step 1: Introduction and education
  Step 2: Description of the issue
  Step 3: Data and/or analysis that supports the issue
  Step 4: Discussions on possible alternatives to solve issue
  Step 5: Discussion of customer feedback to alternatives and BPA’s response
  Step 6: Staff proposal for solution
BP/TC-22 Proposed Workshop Timeline

- **BP-22 Topics**
- **TC-22 Topics**
- **EIM Topics**

**Sept. 26 EIM ROD**

**Nov. 12 ATC 101 Southern Intertie Studies**

**Integrated Program Review**

**BPA Workshops**
- Oct 23, 2019
- Nov 19, 2019
- Dec 12, 2019
- Jan 28, 2020
- Feb 25, 2020
- Mar 17, 2020
- Apr 28, 2020
- May 19, 2020
- Jun 23, 2020
- Jul 28, 2020
- Aug 25, 2020

**Customer Led Supplemental Workshops**
- Jan 15, 2020
- Feb 12, 2020
- Mar 11, 2020
- Apr 15, 2020
- May 13, 2020
- Jun 10, 2020
- Jul 15, 2020
- Aug 12, 2020
BP/TC-22 Potential Procedural Schedule

Note: This is based on past schedules and is subject to change; it will be updated as we get closer to the procedural process.

- **TC/BP-22 Initial Proposal** (Nov 20)
- **Parties File Direct Case** (Dec 20)
- **Cross Examination** (Jan 21)
- **Oral Argument** (Feb 21)
- **Draft ROD** (Mar 21)
- **Final ROD/Studies Published** (Apr 21)
- **Litigants File Rebuttal Cases** (May 21)
- **Initial Briefs Filed** (Jun 21)
- **Hearing Officer’s Recommended Decision (TC-22)** (Jul 21)
- **Briefs on Exception** (Aug 21)
- **New Rates and Tariff Changes go into Effect** (Sept 21)
- **TC/BP-22 Initial Proposal** (Oct 21)
Explanation of the Scope & Relationships

- Certain topics must be addressed in the Tariff and Rate proceedings.
- Certain topics are specifically driven by BPA’s recent decision to sign the implementation agreement for the Western EIM.
- The schedule for other rate case topics (e.g., joint topics regarding the revenue requirement or power-only topics) will be discussed in more detail in the spring.
Overview of Topics and Coordination
OVERVIEW OF CURRENTLY PROPOSED ISSUES
1) EIM Charge Code Allocation

- BPA will need to determine methods of allocating EIM charge codes and any updates to BPA’s existing rates.
- As an EIM Entity in 2022, BPA will begin settling with the EIM Market Operator on behalf of transmission and entities within BPA’s Balancing Authority (BA). BPA will need to determine how to allocate those costs and credits.
2) EIM Losses

- The EIM automatically dispatches and prices incremental losses (above Bases Schedules, which are inclusive of losses prior to the market run).
- BPA plans to evaluate what, if any, changes are needed to our current Transmission Loss practices on account of the EIM.
3) EIM Resource Sufficiency

- The EIM has hourly Resource Sufficiency requirements in order for BPA and its BA to fully participate in the market. BPA needs to determine policies, products, and rules for BPA and entities within the BPA BA in regard to this test.

- BPA needs to determine how to approach passing the Resource Sufficiency tests and how that impacts entities within the BPA BA.
4) EIM Tariff Changes

- EIM participation will require BPA to articulate new rules and expectations for entities within the BPA BA and transmission customers. EIM Entities typically develop a separate EIM attachment to their OATT.

- EIM participation will require the development of certain tariff provisions.
5) EIM Transmission Usage for Network

- BPA has determined how it intends to allow transmission to be made available for EIM Transfers. This issue concerns what, if any, additional requirements are needed for the use of transmission within the BPA BA.
6) EIM Non-Federal Resource Participation

- EIM Entities provide for rules to allow resources to participate in the market. BPA has made certain determinations for FCRPS participation but needs to develop rules that can apply to all BA resources.
- These rules are a requirement of EIM Entities.
7) EIM Metering and Data Requirements

- A comprehensive metering plan is a requirement for EIM Entities.
- BPA must also determine how to use data that is essential for EIM operation from all entities within BPA’s BA.
- BPA will work with all entities within BPA’s BA to determine metering requirements and data submission requirements for effective EIM operation.
8) EIM Evaluation of Operational Controls

- BPA relies on a suite of operational controls and will continue to do so as the EIM does not displace our reliability obligations.
- BPA is evaluating what, if any, changes should be made on account of joining the EIM.
9) Transmission Losses

- BPA provides customers with three methods for returning their loss energy obligations to BPA:
  - In-Kind (168 Hours later),
  - Financial Settlement, and
  - through Slice.

- BPA is reviewing its real power loss program, including what options BPA provides to customers for the repayment of their loss obligations.
  - BPA is analyzing the current return options against other possible approaches.
10) Ancillary Services

- When BPA joins the EIM, the CAISO does not become the BA for BPA. BPA will continue to assume all of the responsibility for managing and operating our BA.
- BPA will continue to be responsible to meet its BA and tariff obligations, including the performance standards in BAL-001 and BAL-002.
- BPA must continue to ensure that as a BA, it has sufficient capacity to supply Ancillary Services to loads and generators located in BPA’s BA.
- Real-time load and generation energy imbalances within the BPA BA will be settled through the EIM.
- BPA will need to address cost recovery of Ancillary Services in both the tariff and rate schedule.
11) Revenue Financing & Debt Retirement

- Consistent with the Leverage Policy goals, the Financial Plan, and Strategic Plan, BPA is evaluating whether to engage in additional revenue financing or additional debt repayment for both Power and Transmission to further deleverage the agency’s assets.

- Additional deleveraging can help address concerns on borrowing authority and long-term financial health, but must be balanced with other competing objectives (i.e. rate and financial reserve levels).
12) Generator Interconnection

- Consistent with Bonneville’s Strategic Plan, BPA is reviewing its current Tariff Attachments L and N, in an ongoing effort to align with the *pro forma* tariff.

- BPA will consider remaining elements of FERC Order Nos. 845 and 845-A.
13) Regional Planning

- BPA will file updated Attachment K language to codify transition to NorthernGrid as the Regional Planning Organization on Jan. 1, 2020.
- Necessary to support BPA’s compliance with Attachment K transmission planning.
14) Creditworthiness

- BPA is exploring whether to include the Basic Credit Standards in the tariff and will also evaluate the standards to determine if any changes are necessary.

- This is consistent with an objective of Bonneville’s Strategic Plan to align BPA’s tariff as closely as possible to the FERC *pro forma* tariff.
15) PTP/NT Agreement Templates (Incremental Changes)

- BPA’s Form of Service Agreement for Point-to-Point (PTP) and Network Integration Transmission Service (NT) in Attachments A and F of the tariff have language inconsistencies from the templates BPA uses today.

- BPA is prioritizing addressing the inconsistencies with incremental changes to align the tariff with BPA’s current contracting and electronic notification practices.
16) Seller’s Choice

- Per the TC-20 Settlement Agreement section 2.g.iii:
  - Starting October 1, 2019, BPA will monitor and evaluate the implementation of this section g (Seller’s Choice) as indicated in Attachment 1, section 2.d hourly firm evaluation.
  - BPA will share the results of its evaluation with customers at least once before July 2020.
  - Based on the hourly firm evaluation, BPA may, in its sole discretion, include in its TC-22 Initial Proposal, Network Resource designation at Mid-Columbia Points of Receipt.
General Rate Case Topics

- These topics are typically discussed during pre-rate case workshops in order to provide customers with information on load and sales forecasts and other rate issues for the rate period.
- The timing of these discussions typically occurs at the end of the workshop series so BPA can provide customers with information that may be seen in the Initial Proposal.
(26-33) Overview of Issues Proposed for Future Proceedings

- BPA is proposing that these issues be discussed in future proceedings as some are dependent on other issues, and the timing of addressing those issues may be dependent on markets or industry changes.

- BPA also recognizes that with the potential change in markets or industry, some of these issues may or may not require changes.
# EIM Priority Issues

<table>
<thead>
<tr>
<th>#</th>
<th>Issue</th>
<th>BP-22</th>
<th>TC-22</th>
<th>Future BP/TC</th>
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<tr>
<td>1</td>
<td>EIM Charge Code Allocation</td>
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<td>2</td>
<td>EIM Losses</td>
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<td>3</td>
<td>Resource Sufficiency</td>
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<tr>
<td>3a</td>
<td>- Balancing Area Obligations</td>
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<tr>
<td>3b</td>
<td>- LSE Performance &amp; Obligations</td>
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<tr>
<td>3c</td>
<td>- Gen Input Impacts</td>
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<td>X</td>
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<td>4</td>
<td>Development of EIM Tariff Changes</td>
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<td>5</td>
<td>Transmission Usage for Network</td>
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<td>6</td>
<td>Non-federal Resource Participation</td>
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<td>7</td>
<td>Metering &amp; Data Requirements</td>
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<td>8</td>
<td>Evaluation of Operational Controls</td>
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## Rates & Tariff Topics

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<th>#</th>
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<th>BP-22</th>
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<td>11</td>
<td>Revenue Financing</td>
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<td>12</td>
<td>Generator Interconnection</td>
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<td>13</td>
<td>Regional Planning</td>
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<td>14</td>
<td>Creditworthiness</td>
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<td>15</td>
<td>Incremental/Minor Changes to Agreement Templates</td>
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<td>16</td>
<td>Seller’s Choice</td>
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<td>17</td>
<td>Loads</td>
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<td>18</td>
<td>Sales</td>
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<td>19</td>
<td>Generator Interconnection (assumed for BP-22)</td>
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<td>Review of Segments</td>
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<td>23</td>
<td>Review of Sale of Facilities</td>
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<td>Financial Leverage Policy Implementation</td>
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<td>25</td>
<td>Power-Only issues</td>
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Potential Future Rates & Tariff Issues

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<tr>
<th>#</th>
<th>Issue</th>
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<th>TC-22</th>
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<tr>
<td>26</td>
<td>Simultaneous Submission Window</td>
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<tr>
<td>27</td>
<td>Study Process</td>
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<td>28</td>
<td>Attachment C (Short-term &amp; Long-term ATC)</td>
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<td>Hourly Firm (TC-20 Settlement – Attachment 1: section 2.c.ii)</td>
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<td>Required Undesignation</td>
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<td>31</td>
<td>Reservation window for Hourly non-firm</td>
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<td>32</td>
<td>Non-federal NT Redispatch</td>
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<td>33</td>
<td>PTP/NT Agreement Templates</td>
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WRAP UP & NEXT STEPS
Next Steps

- Please provide feedback by Nov. 6 via techforum@bpa.gov (with copy to your account executive) on:
  - The scope of issues presented today
  - Level of education required/requested

- Workshops will follow the same engagement process for every topic (see slide 12)
  - BP-22 and TC-22 Meetings and Workshops web site

- Next meeting on Nov. 19
Proposed November Workshop Agenda

- Proposed Topics (refer to slide 12 for Steps)
  - Regional Planning Organization (Steps 1-6)
  - EIM Resource Sufficiency (Steps 1-2)