Subject: New Outage Submission Requirements for Small Generators

Following are the protocols for reaching out to and following up with the small generators to meet with the outage requirements for joining the western EIM:

1. AEs are to identify the affected generator operator/owner/scheduler through the following spreadsheet: List of Affected Generators
2. AEs will then forward the draft email below (after personalization) to the affected generator owner/operator/scheduler.
3. Background information, tariff references and additional resources have been included below to support your conversation with the generator operator/owner/scheduler.
4. AEs will then update the spreadsheet with their action and, when known, confirm that the affected generator is aware and prepared to meet the new outage requirements (see the table below showing the two additional columns for AEs to fill out).
   - AEs are welcome to ask the project team (Sean) to complete the spreadsheet on their behalf with the appropriate supporting dox.
5. The project team (Roger & Sean) will review the spreadsheet weekly to ensure we are keeping pace with meeting a deadline of end of March (for contacting all affected generators).

<table>
<thead>
<tr>
<th>EIM Resource ID</th>
<th>Name</th>
<th>Fed/Non Fed</th>
<th>Fed</th>
<th>Transmission Customer</th>
<th>Account Exec</th>
<th>Owner / Operator</th>
<th>Scheduling Entity</th>
<th>Date Contacted</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBL_RIVRBEND_G01</td>
<td>RBL Riverbend Landfill</td>
<td>5</td>
<td>WMRE</td>
<td>Eric Taylor</td>
<td>WM Renewable Energy</td>
<td>BPA Riverbend Landfill, with WM as back-up (there are no e-tags associated with this project, only gen estimates via CDE)</td>
<td>6/15/2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DRAFT EMAIL TO GENERATORS**

Dear Small Generator Owner Operator/Owner:

BPA is conducting due diligence as it nears entry into the Western EIM this coming May. One of the outstanding issues across its BAA is enforcing new outage requirements for small generators that had previously not been required to submit their outages to BPA.

We have been asked to work directly with you, the owner/operators/schedulers of the affected generator(s), to ensure that you understand the new outage reporting requirements for small generators and that you are prepared to submit the required outage information prior to BPA joining the EIM this May (all requirements should be met by the end of April 2022).

Generators that fail to meet the new outage reporting requirements will be in violation of BPA’s Outage Planning & Coordination Policy.

We are sharing additional background information, including applicable tariff provisions, below so that you have the full context and access to the applicable standards and requirements that must be met.
After reviewing this content please feel free to contact me to answer any questions and/or to help you work with BPA’s Outage Offices to request and submit outages for your affected generators.

Sincerely,

Transmission Account Executive

Background Information

Why did the EIM require BPA to include most generators in the BPA BAA in the Western EIM market model?

- It is important that the CAISO as the market operator for the EIM has an accurate representation of BPA’s grid - including the generating capability of all of the generators represented in the network model. This data helps to ensure that the market solutions and the generator dispatches therein can be carried out without causing reliability concerns. You see this captured in EIM context as assuring grid operators that the market solutions are “security constrained”.
- Following the market modeling rules for generators, if there was telemetry, revenue metering, a schedule and the resource is in the network model, we modeled it in as a Resource the EIM Master File (GRDT).
- Some of these generators previously were not registered with the CAISO Reliability Coordinator and thus were not being required to submit outages to BPAT as the BAA.
- Further, the CAISO’s requirements include the EIM Entity providing them planned and unplanned outage and de-rate information for all generators that meet the parameters documented in their Business Practice Manual. Those parameters are provided below for the various types of resources.
- Once BPA joins the EIM, BPA will require Owners, Operators or Scheduling Entities for a set of smaller resources to begin providing outage information to BPA consistent with the Market Operators BP & BPA’s Outage Coordination Policy (https://www.bpa.gov/-/media/Aep/transmission/outage-coordination/bpa-outage-policy.pdf).
- This requirement is correspondingly documented in BPA’s Tariff as documented below.

What are the CAISO’s Outage Requirements for Generators (From the CAISO Outage Management BPM)?

- CAISO has some specific rules on when an outage needs to be submitted as outlined below from the CAISO’s Outage Management Business Practice Manual. It is based on outage type (Planned/Forced) and resource type:
<table>
<thead>
<tr>
<th>Planned Outages</th>
<th>EIR (VER)</th>
<th>Hydro</th>
<th>Thermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource PMAX &lt; 10 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
</tr>
<tr>
<td>Resource PMAX &gt; 10 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
<td>Report all planned outages &gt; 1 MW</td>
</tr>
<tr>
<td>Resource PMAX &gt; 50 MW and child resource &gt; 50 MW</td>
<td>Report all planned outages &gt; 1 MW at parent level and report all child units that have a complete outage</td>
<td>Report all planned outages &gt; 1 MW at parent level and report all child units that have a complete outage</td>
<td>Report all planned outages &gt; 1 MW at parent level and report all child units that have a complete outage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forced Outages</th>
<th>EIR (VER)</th>
<th>Hydro</th>
<th>Thermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource PMAX &lt; 10 MW</td>
<td>Only report complete resource outage</td>
<td>Only report complete resource outage</td>
<td>Only report complete resource outage</td>
</tr>
<tr>
<td>Resource PMAX &gt; 10 MW</td>
<td>Report any conditions leading to availability deviation of 1 MW or more</td>
<td>Report any conditions leading to availability deviation of 10 MW or more</td>
<td>Report any conditions leading to availability deviation of 10 MW or more</td>
</tr>
<tr>
<td>Resource PMAX &gt; 50 MW and child resource &gt; 50 MW</td>
<td>Report any conditions leading to availability deviation of 1 MW or more and report child units that have a complete outage</td>
<td>Report any conditions leading to availability deviation of 1 MW or more and report child units that have a complete outage</td>
<td>Report any conditions leading to availability deviation of 1 MW or more and report child units that have a complete outage</td>
</tr>
</tbody>
</table>

**What Does BPA’s Tariff Require?**

TC22 Tariff outage submission sections listed below require qualifying smaller generators to submit outages to BPA:

**4.2.3 Outages**

Transmission Customers with BPA EIM Participating Resources and Transmission Customers with Non-Participating Resources shall be required to provide planned and unplanned outage information for their resources in accordance with Section 7 of this Attachment Q. The BPA EIM BP shall set forth the outage information requirements for BPA EIM Participating Resources and Non-Participating Resources.

**7.4 Outages of Transmission Customers with Non-Participating Resources**

- **7.4.1 Planned Outages and Known Derates of Transmission Customers with Non-Participating Resources**
Transmission Customers with Non-Participating Resources shall report information regarding planned outages and known derates of resources to the BPA EIM Entity according to the BPA’s Outage Planning and Coordination Policy. The Transmission Customer with a Non-Participating Resource shall update the submittal if there are changes to the resource’s outage plan according to the BPA’s Outage Planning and Coordination Policy. The BPA EIM Entity shall submit planned resource outages and known derates of Non-Participating Resources to the MO’s outage management system in accordance Section 29.9(c) of the MO Tariff and according to BPA’s Outage Planning and Coordination Policy. Bonneville Power Administration Open Access Transmission Tariff Effective Date: October 1, 2021

7.4.2 Unplanned Outages and Derates of Resources of Transmission Customers with Non-Participating Resources

Unplanned outages of resources of a Transmission Customer with Non-Participating Resources shall be reported to the BPA EIM Entity as soon as practicable but shall also be reported according to the BPA’s Outage Planning and Coordination Policy. The BPA EIM Entity shall then submit this information to the MO’s outage management system.

What Does BPA’s Outage Coordination Policy Require?

- Requires coordination among BAs, TOPs & reporting to the Reliability Coordinator
- Generator operators are to submit outage requests to BPA’s Outage Offices referenced in the Policy
- BPA will coordinate the outages within the BAA
- BPA will also communicate the outages to downstream entities (i.e. RC, Market Operator)

Additional Resources

- Customer Impact Summary – On the EIM Project page off of the BPA.Gov hope page
- EIM 101 Training Video
- EIM 101 Slide Deck
- And there’s any number of detail presentations available in the [EIM Projects page](https://www.bpa.gov) under BPA.gov