Decision on reliability must-run designations for Kingsburg Cogen for 2021

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Board of Governors Meeting
General Session
March 24, 2021
Seeking conditional approval to designate the following as reliability must-run for 2021:

Kingsburg Cogen (Pmax 34.5 MW)

• Owned by KES Kingsburg, LP


• Requested retirement/mothball date: April 8, 2021 - Denied

• Found to be required to meet the 2021 system wide reliability needs, in order to maintain BAL-002-WECC-2a contingency reserve requirements and also unloaded capacity to meet operational needs pursuant to BAL-001-2 and BAL-003-2.

• No reliability must-run contract will be executed if the resources secure a resource adequacy contract in the meantime.
17.5% margin needed to maintain reliability standard requirements on a forecast basis:

- BAL-002-WECC-2a requires contingency reserves not less than 6% of expected load. The ISO also requires unloaded capacity to meet operational needs like frequency response and regulation pursuant to BAL-003-2 and BAL-001-2.

- All resources must be operational in real time in order to meet the mandatory standards. The current ISO resource mix has an overall outage rate of 7.5%.

- Load forecast variability must be accounted for. An allowance of 4% for load variations accommodates forecasts up to a 1-in-5 level above the 1-in-2 forecast used as a baseline.
### 2021 Total Resource Stack and Load for HE 8 p.m. PDT for 17.5% Margin

<table>
<thead>
<tr>
<th>Month</th>
<th>Total resource stack with average RA imports (MW)</th>
<th>15% PRM plus load for HE 8 p.m. PDT</th>
<th>17.5% PRM plus load for HE 8 p.m. PDT</th>
<th>Total resource stack minus 15% PRM plus load ([B] - [C])</th>
<th>Total resource stack minus 17.5% PRM plus load ([B] - [D])</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>49,825</td>
<td>47,270</td>
<td>48,297</td>
<td>2,555</td>
<td>1,527</td>
</tr>
<tr>
<td>July</td>
<td>51,209</td>
<td>49,802</td>
<td>50,885</td>
<td>1,407</td>
<td>325</td>
</tr>
<tr>
<td>August</td>
<td>51,889</td>
<td>50,191</td>
<td>51,282</td>
<td>1,698</td>
<td>607</td>
</tr>
<tr>
<td>September</td>
<td>50,484</td>
<td>51,591</td>
<td>52,712</td>
<td>(1,106)</td>
<td>(2,228)</td>
</tr>
<tr>
<td>October</td>
<td>47,574</td>
<td>42,861</td>
<td>43,793</td>
<td>4,713</td>
<td>3,781</td>
</tr>
</tbody>
</table>

Analysis includes:
- Capacity from all existing resources in the 2021 NQC list (less solar)
- Capacity from all new resources scheduled to be in-service by next summer
- Capacity from resource adequacy import (as average resource adequacy monthly showings – last 5 years)
Conclusions on need for reliability must-run

• The resource stack analysis indicates that September falls below the 17.5% margin level for HE 8 p.m., even with Kingsburg Cogen assumed in service, falling short of the 17.5% margin found by the ISO to be needed to meet BAL-002-WECC-2a requirements on a forecast basis.

• A sensitivity of the maximum resource adequacy import (contracted) showings over the past 5 years, instead of the average contracted import capacity, was also considered. With this assumption the margin would reach 18% for September, only marginally higher than the 17.5% margin the ISO found necessary to meet BAL-002-WECC-2a requirements on a forecast basis.
Stakeholder engagement:

• By posting the announced retirement and mothball list in October 2020, the ISO has made public the mothball/retirement intention of Kingsburg Cogen.

• Need justification for Kingsburg Cogen is virtually unchanged from that already supplied for the reliability must-run designation of the Midway Sunset Cogen presented in December.

• No stakeholder has raised issue with the need determination to the Board of Governors or during the FERC proceeding regarding Midway Cogen reliability must-run designation.
Management recommends designation of reliability must-run services as set out below:

• Establish reliability must-run contracts for 2021 based on system capacity requirements for:
  – Kingsburg Cogen

• Management will report back the results of the reliability must-run contracts at the next Board meeting.