



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

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Board of Governors Meeting

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Seeking conditional approval to designate the following as reliability must-run for 2021:

Kingsburg Cogen (Pmax 34.5 MW)

- Owned by KES Kingsburg, LP
- Retirement/mothball notice: October 7, 2020.
- 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

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

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.