



Decision on reliability must-run designations for Midway Sunset Cogen for 2021

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

Midway Sunset Cogen (Units A, B and C – Pmax 248 MW)

- Owned by Midway Sunset Cogeneration Company
- Retirement/mothball notice: September 28, 2020.
- Requested retirement/mothball date: December 31, 2020 - 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 RMR contract will be executed if the resources secure an RA contract in the meantime.

20% 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 CAISO 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 10%.
- 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 20% Margin

Month	Total resource stack with average RA imports (MW)	15% PRM plus load for HE 8 p.m. PDT	20% PRM plus load for HE 8 p.m. PDT	Total resource stack minus 15% PRM plus load ([B] - [C])	Total resource stack minus 20% PRM plus load ([B] - [D])
[A]	[B]	[C]	[D]	[E]	[F]
June	49,855	47,270	49,325	2,585	530
July	51,241	49,802	51,967	1,439	(726)
August	51,921	50,191	52,373	1,730	(452)
September	50,518	51,591	53,834	(1,073)	(3,316)
October	47,601	42,861	44,725	4,740	2,876

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 RA import (as average RA monthly showings – last 5 years)

Conclusions on need for RMR

- The resource stack analysis indicates that July through September fall below the 20% margin level for HE 8 p.m., even with Midway Sunset Cogen assumed in service, falling short of the 20% margin found by the ISO to be needed to meet BAL-002-WECC-2a requirements on a forecast basis.
- A sensitivity of the maximum RA import (contracted) showings over the past 5 years, instead of the average contracted import capacity, was also considered. Even with this assumption the margin would only reach 18% for September.

Stakeholder engagement:

- Due to time constraints, between the submission of the RA year ahead showings on October 31st and the initial release of this analysis on November 30, 2020, the ISO has not yet presented the situation to stakeholders in a public setting.
- Written stakeholder comments received after the preparation of this memo will be discussed herein.

Management recommends designation of reliability must-run services as set out below:

- Establish must-run contracts for 2021 based on system capacity requirements for:
 - Midway Sunset Cogen (Units A, B and C)
- Management will report back the results of the reliability must-run contracts at the next Board meeting.