

Memorandum

To: ISO Board of Governors
From: Neil Millar, Vice President of Transmission Planning and Infrastructure Development
Date: September 15, 2021
Re: **Decision on conditional approval to extend existing reliability must-run contracts for 2022**

This memorandum requires Board action.

EXECUTIVE SUMMARY

Management requests that the Board of Governors grant Management the authority to extend, through calendar year 2022, the reliability must-run contracts for the Dynegy Oakland, LLC (DO), Starwood Energy Group (SEG), CSU Channel Islands Site Authority (CSU CISA), Midway Sunset Cogeneration Company (MSCC) and KES Kingsburg, LP (KESK) generating units listed in *Attachment 1*.

Total capacity and the number of resources under reliability must-run contracts with the ISO has been significantly reduced since the implementation of the state's resource adequacy program and the addition of new grid facilities. However, reliability must-run contracts remain an important backstop instrument to ensure reliability when other alternatives are not viable.

Management exercises this authority to extend a reliability must-run contract or designate a resource as needed for reliability must-run service under any of the following conditions:

- A load serving entity does not purchase the capacity needed to satisfy local reliability criteria in the *ISO 2022 Local Capacity Technical Analysis* through a resource adequacy contract;
- The load serving entity does purchase the needed capacity under a resource adequacy contract, but Management needs a reliability must-run contract to:
 1. Obtain from the unit a reliability service, such as voltage support, black start or dual fuel capability; or
 2. Mitigate local market power; or
 3. Protect availability of a given resource that could be jeopardized or reduced without a reliability must-run contract.

- A resource is otherwise needed to meet local or system reliability service including voltage support, black start or dual fuel capability and is not under a resource adequacy contract.

Where a reliability must-run contract augments a resource adequacy contract, Management will ensure that any fixed-cost recovery will compensate the unit owner only for the incremental costs of providing reliability must-run services. This will guarantee the owner is not paid twice for its capacity.

Management proposes the following motion:

Moved, that the ISO Board of Governors authorizes Management to extend reliability must-run contracts for the Dynegy Oakland, LLC, Starwood Energy Group, CSU Channel Islands Site Authority, Midway Sunset Cogeneration Company (MSCC) and KES Kingsburg, LP (KESK) generating units listed on Attachment 1 of the memorandum dated September 15, 2021, and consistent with the criteria described therein.

DISCUSSION AND ANALYSIS

The Dynegy Oakland, LLC resources are required to meet the 2022 local capacity requirement in the Oakland sub-area of the Bay Area local area. The sub-area local capacity requirement was determined to be 101 MW, and while there are 159 MW of total available resources in the sub-area, only 110 MW (the remaining Oakland units) will directly participate in the ISO market. The rest of the resources are used as load-following by a metered sub system and potentially may not be available to meet local reliability constraints. The local need for the remaining Oakland resources is expected to come to an end no earlier than the end of 2022, after the Oakland Clean Energy Initiative¹ is in service.

Greenleaf II Cogen continues to be required to meet the 2022 local capacity requirement in the Drum-Rio Oso sub-area of the Sierra local area. The sub-area local capacity requirement was determined to be 748 MW, and there are only 629 MW (624 MW at peak) of total available resources in the sub-area including the Greenleaf II Cogen unit. The Rio Oso 230/115 kV Transformers project, which will mitigate the reliability need, is scheduled for October 2023 operation.

In order to maintain reliability, the ISO must comply with several North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC)

¹ The Oakland Clean Energy Initiative is a combination of substation upgrades, in-front-of-the-meter energy storage, and preferred resources that together will eliminate the need for the local capacity requirement for the Oakland Generation Station. The transmission components were approved as part of the 2017-2018 ISO Transmission Plan, available at: http://www.caiso.com/Documents/BoardApproved-2017-2018_Transmission_Plan.pdf in March, 2018. The other components are being pursued by PG&E through CPUC procurement processes.

standards in real-time. BAL-002-WECC-2a requires the ISO to carry approximately 6% of expected load as contingency reserves. The contingency reserves required under BAL-002-WECC-2a cannot be used for other types of operational needs other than contingencies unless the ISO is in an energy emergency alert. In addition, the ISO also requires unloaded capacity to meet operational needs like frequency response and regulation pursuant to BAL-003-2 and BAL-001-2. In order to assess the ISO's ability to maintain those reserve margins necessary for reliable service in real time operation, the ISO considered the capacity needs taking into account the overall outage rate of the existing fleet, which is currently about 7.5%. The ISO also based its assessment on meeting a 1-in-5 load forecast level. The combined effect of these requirements established a threshold need for a 17.5% margin above a 1-in-2 load forecast level.

As demonstrated in Attachment 1 of the March 17, 2021, Board Memorandum regarding "Decision on reliability must-run designation for Kingsburg Cogen," the current fleet of available internal resources does not meet either the 15% or the 17.5% margin, at the net peak hour, for the month of September 2021, let alone the load forecast increase for year 2022. These requirements, demonstrate that Channel Islands Power, Midway Sunset Cogen units and Kingsburg Cogen are required for the ISO to meet the 2022 system-wide reliability needs.

It is important to note that, due to the addition of new resources in the Santa Clara sub-area, the Channel Island Power is no longer required to meet the local area reliability need; however, it is required to meet the overall system reliability need. Because of the reliability need change, its reliability must-run costs, as well as resource adequacy credits for year 2022, will be allocated to all load serving entities inside the ISO.

Accordingly, Management requests authority to extend the Dynegy Oakland, LLC, Starwood Energy Group, CSU Channel Islands Site Authority, Midway Sunset Cogeneration Company (MSCC) and KES Kingsburg, LP (KESK) reliability must-run contracts (up to 469.2 MW of capacity) listed in *Attachment 1*. If additional resources are found to be needed for reliability must-run service, Management will seek further Board approval to enter into additional reliability must-run contracts to ensure local capacity and reliability requirements are met.

The Agnews Power Plant, owned by O.L.S. Energy-Agnews, Inc. (OLSEA), for which the Board approved, at its July meeting, a local reliability must-run designation for 2022, has entered into a resource adequacy contract for the full amount of their available capacity through 2022 and will be available to the ISO without the need for a reliability must-run contract.

Under long-established provisions of the existing *pro forma* reliability must-run contract, by October 1 of any year, the ISO must notify a reliability must-run unit owner that the ISO is exercising its right to extend the existing contract from January 1 through December 31 of the following year. If the contract is not extended by this date, the reliability must-run unit may not be designated again for one full year unless:

- The unit is needed due to the extended outage of another unit or a transmission element not known at the time of the contract expiration; or
- The unit is selected through a competitive process in which the unit owner participated.

The California Public Utilities Commission requires its jurisdictional load serving entities to provide a preliminary resource adequacy showing to the ISO by September 15, 2021, if they entered into a contract with any of the existing reliability must-run units. This information will allow the ISO to potentially avoid an unnecessary extension of a reliability must-run contract. These showings are preliminary because the California Public Utilities Commission jurisdictional load serving entities have until October 31 to submit their final year-ahead resource adequacy showings. These final showings must demonstrate compliance with all California Public Utilities Commission-imposed year-ahead procurement targets (100% local capacity area resources and 90% of the load serving entities' demand forecast and reserve margin for the months of May through September).

Consistent with longstanding practice due to the timing required for annual extensions of the reliability must-run contracts, Management requests Board authorization to extend the term of the contracts for an additional year and delegate to Management the discretion to do so based on review of the preliminary resource adequacy showings. Management will update the Board on the results of reliability must-run contract extensions at the November Board meeting.

ATTACHMENT 1: 2022 Reliability Must-Run Contract Status

RMR Units Extension Status			
<i>Any Extended RMR Contracts will be effective January 1, 2022, thru December 31, 2022</i>			
<i>Any Released RMR Contracts will be terminated effective Midnight on December 31, 2021</i>			
Owner	Unit	MW	Status
Starwood Energy Group	Greenleaf II Cogen	49.2	TBD
CSU Channel Islands Site Authority	Channel Islands Power	27.5	TBD
Midway Sunset Cogeneration Company	Midway Sunset Cogen, Units	248.0	TBD
KES Kingsburg, LP	Kingsburg Cogen	34.5	TBD
DynergyOakland, LLC	Oakland, Unit 1	55.0	TBD
	Oakland, Unit 3	55.0	TBD