

Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President of Market & Infrastructure Development

Date: August 24, 2016

Re: **Decision on conditional approval to extend existing reliability must-run contracts for 2017**

This memorandum requires Board action.

EXECUTIVE SUMMARY

Total capacity and the number of resources under reliability must-run contracts with the California 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. This year, the ISO requests that the Board of Governors grant Management the authority to extend, through calendar year 2017, the reliability must-run contracts for the Dynegy Oakland, LLC generating units as well as the AES Huntington Beach, LLC synchronous condensers listed in *Attachment 1*.

Management will exercise 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 2017 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 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.

Moved, that the ISO Board of Governors authorizes Management to extend reliability must-run contracts for any of the reliability must-run units listed on Attachment 1, consistent with the criteria described in the memorandum dated August 24, 2016.

DISCUSSION AND ANALYSIS

The Oakland resources are required to meet local reliability requirements in the Oakland sub-area based on analysis of real-time operations data for 2015 and 2016 that shows a need of at least¹ 98 MW for a 1-in-3 heat wave and instances where all three Oakland generators were on-line simultaneously to maintain local reliability. This real-time analysis supplemented the analysis performed in the 2017 Local Capacity Technical Requirements Study, released on April 29, 2016. The 2017 local capacity study only showed a 45 MW need in this sub-area due to a discrepancy in load forecast distribution among substations in the area. The ISO will work with PG&E and the California Energy Commission to correct this discrepancy in future studies but will rely on the supplemental real-time analysis for the Oakland sub-area local reliability requirements for 2017.

Consistent with past years, the operational studies from the ISO and Peak Reliability, as well as ISO transmission planning internal reliability assessment of scenario related to unavailability of generation in the western LA Basin impacted by Aliso Canyon gas storage outage, continue to show a need for both Huntington Beach synchronous condensers in providing voltage support to the LA Basin and San Diego-Imperial Valley local areas under contingency conditions.

Therefore, Management requests authority to extend the existing reliability must-run contracts (up to 165 MW of capacity) listed in *Attachment 1*. If it determines additional resources are needed for reliability must-run service, Management will seek further Board approval to enter into additional reliability must-run contracts to ensure all local capacity and reliability requirements are met. *Attachment 1* also identifies resources that currently have black start (1463 MW of capacity) and dual fuel (163 MW of capacity) agreements at zero capacity cost², which the ISO may also extend for the 2017 contract year.

¹ The local capacity technical study was intended to model a 1-in-10 heat wave resulting in an increased local capacity need beyond that observed in real-time.

² Zero cost dual fuel and black start agreements do not require Board approval.

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 wishes 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, 2016. This information will allow the ISO to potentially avoid an unnecessary extension of a reliability must-run contract. These showings are preliminary because the CPUC 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 CPUC-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 renewal of the reliability must-run contracts, Management requests Board authorization to extend the term of the contracts for an additional year and delegation to Management the discretion to do so based on review of the preliminary resource adequacy showings. Management will brief the Board on the results of reliability must-run contract extension at the October Board meeting.

ATTACHMENT 1: 2017 Reliability Must-Run, Black Start and Dual Fuel Contract Status

RMR Units Extension Status				
<i>Any Extended RMR Contracts will be effective January 1, 2017 thru December 31, 2017</i>				
<i>Any Released RMR Contracts will be terminated effective Midnight on December 31, 2016</i>				
Owner	RMR Contract	Unit	MW	Status
AES Huntington Beach, LLC	Huntington Beach	Huntington Beach, Unit 3	0	TBD
		Huntington Beach, Unit 4	0	
Dynergy Oakland, LLC	Oakland	Oakland, Unit 1	55	TBD
		Oakland, Unit 2	55	
		Oakland, Unit 3	55	
Black Start Units Extension Status				
<i>Any Extended Black Start Contracts will be effective January 1, 2017 thru December 31, 2017</i>				
<i>Any Released Black Start Contracts will be terminated effective Midnight on December 31, 2016</i>				
Owner		Unit	MW	Status
Pacific Gas and Electric Company		Pit River Watershed Units	249.1	TBD
		Kings River Watershed II Units	250.6	TBD
		Feather River Watershed Units	180	TBD
Southern California Edison Company		Big Creek Physical Scheduling Plant	354	TBD
		McGrath Peaker	47	
		Barre Peaker	47	
		Center Peaker	47	
		Grapeland Peaker	46	
		Mira Loma Peaker	46	
San Diego Gas & Electric Company		Miramar Energy Facility, Unit 1	47.6	TBD
		Miramar Energy Facility, Unit 2	48.6	TBD
Orange Grove Energy, L.P.		Orange Grove, Unit 1	49.85	TBD
		Orange Grove, Unit 2	49.85	TBD
Dual Fuel Agreement Units Extension Status				
<i>Any Extended Dual Fuel Contracts will be effective January 1, 2017 thru December 31, 2017</i>				
<i>Any Released Dual Fuel Contracts will be terminated effective Midnight on December 31, 2016</i>				
Owner	Contract	Unit	MW	Status
Pacific Gas and Electric Company	Humboldt Bay	Humboldt Bay, Unit 1	48.8	TBD
		Humboldt Bay, Unit 2	48.8	
		Humboldt Bay, Unit 3	65.1	