

Memorandum

To: ISO Board of Governors

From: Roger Collanton, Vice President, General Counsel, Chief Compliance Officer and

Corporate Secretary

Date: December 6, 2017

Re: Regulatory update

This memorandum does not require Board action.

Highlights

- ISO filed for use of the maximum gas constraint in Southern California and release of the two-day-ahead expected gas burn information on a temporary basis to address
- FERC accepted temporary market measures to address limited use of the Aliso Canyon storage facility and rejected the use of, on a permanent basis, the maximum gas constraint in all parts of the ISO market and release of the two-day-ahead expected gas burn information
- FERC accepted the ISO's tariff amendment to the grid management charge to incorporate the 2016 cost of service study update
- ISO filed four western energy imbalance market agreements between Powerex and the ISO and a data sharing agreement between the ISO and BC Hydro
- FERC accepted the western energy imbalance market implementation agreement between the ISO and Salt River Project
- ISO filed comments with the New Mexico Public Regulation Commission regarding the feasibility of Public Service Company of New Mexico becoming a member of the Southwest Power Pool
- FERC accepted the ISO's tariff amendment to change the cost allocation of black start procurement and system restoration

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Federal Energy Regulatory Commission and related Court of Appeals matters

 Filing to temporarily re-implement previously approved and recently expired measures to address potential gas limitations

On December 1, 2017, the ISO filed a tariff amendment to address the effects of natural gas system limitations on the ISO's system and market operations, as FERC invited the ISO to do in its November 28, 2017 order. These tariff revisions will re-implement on a temporary basis, with no modifications, previously approved tariff provisions to address gas system limitations related to the limited operability of the Aliso Canyon gas storage facility that automatically expired on November 30, 2017. These two measures consist of the ability to enforce a constraint in the Southern California area that restricts gas burn in a particular area and the provision of advisory expected gas burn information two days prior to the actual operational date to scheduling coordinators. The ISO asked for expedited treatment so that the measures could be reinstated on December 16, 2017. As reported by the California Public Utilities Commission and California Energy Commission, the Southern California region faces greater challenges than it did a year ago because, in addition to the limited operations of Aliso Canyon, three natural gas transmission pipelines that the Southern California Gas Company relies on to serve customers are on outage. The measures requested will better equip the ISO with appropriate tools to address anticipated gas curtailments to generators during the winter months as the temperatures decrease.

 FERC order accepting in part and rejecting in part tariff amendment to extend the temporary measures to address limited operability of the Aliso Canyon facility and to make permanent or modify other measures to address potential gas limitations (ER17-2568)

On November 28, 2017, FERC issued an order accepting in part and rejecting in part the ISO's tariff amendment addressing the limited operability of the Aliso Canyon facility. FERC approved the provisions of the ISO's tariff amendment that will maintain in effect for an additional 12 months certain market measures FERC previously approved to address issues arising from the inoperability of the Aliso Canyon gas storage facility. This will ensure that for the next 12 months the ISO will continue to have the tools it needs to mitigate reliability and market distortion risks proposed by the expected limited operability of Aliso Canyon. In response to concerns raised by the Department of Market Monitoring, FERC rejected the ISO's request for permanent authority to enforce a gas constraint to address potential gas limitations in all parts of its markets, which includes the balancing authority area of the ISO and the energy imbalance market entities. FERC also rejected the ISO's request to release advisory expected gas burn information two days prior to the actual operational date to scheduling coordinators. The approved tariff provisions took effect on November 30, 2017 and will expire on November 30, 2018.

 FERC order accepting the ISO's tariff amendment to update the Grid Management Charge to incorporate the 2016 Cost of Service Study Update (ER18-91)

On November 21, 2017, FERC issued an order accepting the ISO's tariff amendment to

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implement a modest adjustment to the allocation of its revenue requirement to the market services, system operations, and congestion revenue rights services cost categories of its grid management charge (GMC). The ISO's 2016 cost of service study completed in May 2017 indicated the need to adjust the GMC percentage allocation. The ISO proposed to change the total revenue requirement allocated to the GMC cost categories as follows: (1) market services from 27% to 32%; (2) system operations from 70% to 66%; and (3) congestion revenue rights services from 3% to 2%. The ISO also proposed minor clarifications to the description of the western energy imbalance market administrative charge. This tariff amendment will become effective on January 1, 2018.

Limited protest to Metcalf Energy Center's reliability must-run agreement (ER18-240)

On November 20, 2017, the ISO filed a limited protest to Metcalf Energy Center's unexecuted reliability must run (RMR) agreement. The ISO supports Metcalf's request that the RMR agreement be made effective January 1, 2018, subject to refund, so long as the reliability services can be made available to the ISO without interruption. The ISO has requested that the rate schedule be suspended subject to hearing or settlement judge procedures, establish a refund date to the proposed effective date of January 1, 2018, and set the rate schedules for settlement judge procedures to assist parties in resolving the outstanding issues.

Limited protest to Gilroy Energy Center's reliability must-run agreement (ER18-230)

On November 20, 2017, the ISO filed a limited protest to Gilroy Energy Center's unexecuted RMR agreement and accompanying rate schedules for the Yuba City Energy Center and Feather River Energy Center. The ISO supports Gilroy's request that the RMR agreement be made effective January 1, 2018, subject to refund, so long as the reliability services can be made available to the ISO without interruption. The ISO has requested that the rate schedule be suspended subject to hearing or settlement judge procedures, establish a refund date to the proposed effective date of January 1, 2018, and set the rate schedules for settlement judge procedures to assist parties in resolving the outstanding issues.

Joint Protest to Dynegy Oakland's reliability must-run agreement (ER18-192)

On November 16, 2017, the ISO along with the Pacific Gas & Electric Company filed a protest to Dynegy Oakland's RMR agreement. Dynegy Oakland seeks to recover certain costs relating to its RMR rate schedules. The ISO and PG&E protested the filing on the grounds that Dynegy Oakland has failed to provide adequate support to establish that the proposed rate schedule is just and reasonable.

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 FERC order accepting tariff amendment to implement black start and system restoration phase 2 (ER17-2237)

On October 30, 2017, FERC issued an order accepting the ISO's tariff amendment to revise its tariff rules for allocating costs associated with black start procurement. The procurement of incremental black start capability is necessary to enhance system restoration times in the Greater San Francisco Bay Area. The ISO will designate costs of the black start capability it procures as reliability costs under the tariff, and allocate those costs to the participating transmission owner in whose service area the black start generator(s) will be located. The participating transmission owner is able to recover these costs from rate-payers. These revisions went into effect on November 1, 2017.

• FERC denied the ISO's petition for limited tariff waiver to suspend changes to the availability assessment hours for April to October 2018 (ER17-2263)

On October 24, 2017, FERC denied the ISO's petition for limited tariff waiver to suspend the tariff section 4 0.9.3.1(a)(2)(B) regarding the posting of the availability assessment of hours. The tariff provision requires that the ISO post changes to the availability assessment hours based on its new findings. The availability assessment hours affect resource adequacy requirements for market participants. The waiver would have only applied to the availability assessment of hours for resources providing local and/or system resource adequacy capacity for the period of April to October 2018, and it would have alleviated any problems and any negative impacts on resource delivery for participants of the California Public Utilities Commission's demand response auction mechanism.

 Comments of the ISO/RTO Council to the Notice of Proposed Rulemaking— Grid Reliability and Resiliency Pricing (RM18-1)

On October 23, 2017, the ISO/RTO Council (IRC), of which the ISO is a member, responded to the Notice of Proposed Rulemaking (NOPR) issued by the Department of Energy and FERC's Office of Energy Policy and Innovation, entitled *Grid Reliability and Resiliency Pricing*. The IRC and its members support the Commission's goals of promoting competitive markets, facilitating appropriate price formation in those markets, and fostering a reliable electric system. However, the IRC objected to the proposal set forth in the NOPR as it is far-reaching and would degrade the efficiency and effectiveness of existing organized wholesale markets, would provide improper incentives and disincentives to current and future market participants, would not promote the goals stated in the NOPR, and would reverse the progress FERC and the nation's regional transmission organizations and independent system operators have made in developing robust and reliable competitive markets. The IRC urged FERC to decline to adopt the NOPR as a final rule.

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 Comments of the ISO/RTO Council to the Notice of Proposed Rulemaking— Grid Reliability and Resiliency Pricing (RM18-1)

On October 23, 2017, the ISO responded to the Grid Reliability and Resiliency Pricing NOPR. Although the proposed rule would not apply to the ISO because it does not have a capacity market and the ISO does not have baseload coal or nuclear resources physically located in the ISO's balancing authority area that would be eligible for the proposed compensation scheme, the ISO does not support adoption of the proposed rule. The ISO asked FERC that if it takes any action in this proceeding, it should not require the ISO and other independent system operators or regional transmission organizations without capacity markets to submit compliance filings. The ISO further argued that even if the rule were to apply to independent system operators or regional transmission organizations without capacity markets, the ISO already has mechanisms in place that ensure the ISO balancing authority area remains reliable and resilient in the face of unexpected loss of supply resources. On November 7, 2017, the ISO replied to other comments filed with FERC. The ISO noted that all commenters requested that FERC reject this NOPR. The ISO also objected to the requests made by other parties that FERC address price formation issues in taking action in this proceeding or others.

Regulatory Agreements

 Order accepting GridLiance West Transco LLC – transmission control agreement effective date (ER17-694)

On November 21, 2017, FERC issued a letter order accepting the ISO's compliance filing to reflect the effective date of the transmission control agreement reflecting GridLiance West Transco LLC as a new participating transmission owner. The transmission control agreement became effective September 15, 2017.

 FERC letter order accepting western energy imbalance market implementation agreement with the Salt River Project (ER17-2559)

On November 16, 2017, FERC issued a letter order accepting the western energy imbalance market implementation agreement between the ISO and the Salt River Project. The ISO requested an effective date of April 1, 2018, with a participation date in the western energy imbalance market of April 1, 2020. This agreement will enable the Salt River Project, an entity outside of the ISO's balancing authority area, to participate in the ISO's real-time market for energy imbalance.

 Powerex Canadian western energy imbalance energy market agreements (ER18-251)

On November 3, 2017, the ISO filed four agreements with FERC between the ISO and Powerex Corp., which will facilitate Powerex's participation in the western energy

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imbalance market. The ISO also filed a data sharing agreement with FERC between the ISO and BC Hydro. The five agreements provide the contractual support for the Powerex western energy imbalance market participation framework. These agreements apply the western energy imbalance market rules and tariff provisions to Powerex, an entity with resources located in a balancing authority area outside of the United States, to participate in the western energy imbalance market as of April 4, 2018. The ISO requested that these agreements become effective February 15, 2018.

 FERC order accepting generator scheduling agreement for the O'Neill Pumpgenerating plant (ER17-2402)

On October 30, 2017, FERC issued an order accepting the Generator Scheduling Agreement between the ISO and Western Area Power Administration, Sierra Nevada Region (WAPA). The agreement sets the terms under which WAPA will submit self-schedules into the ISO market for the O'Neill Pump-Generating Plant. The Participating Generator Agreement went into effect on November 1, 2017.

 Order accepting transferred frequency response agreement between the ISO and Public Utility District No. 2 for Grant County, Washington (ER17-2393)

On October 27, 2017, FERC issued an order accepting the transferred frequency response agreement between the ISO and Public Utility District No. 2 for Grant County, Washington. The ISO issued a competitive solicitation to procure transferred frequency response in order to be compliance with NERC Reliability Standard BAL-003-1.1. The transferred frequency response agreement will become effective December 1, 2017, as requested, and that the agreement will be in effect for one year.

 Order accepting transferred frequency response agreement between the ISO and Public Utility District No. 1 for Chelan County, Washington (ER17-2398)

On October 27, 2017, FERC issued an order accepting the transferred frequency response agreement between the ISO and Public Utility District No. 1 for Chelan County, Washington. The ISO issued a competitive solicitation to procure transferred frequency response in order to be compliance with NERC Reliability Standard BAL-003-1.1. The transferred frequency response agreement will become effective December 1, 2017, as requested, and that the agreement will be in effect for one year.

 Order accepting transferred frequency response agreement between the ISO and Bonneville Power Administration (ER17-2387)

On October 27, 2017, FERC issued an order accepting the transferred frequency response agreement between the ISO and Bonneville Power Administration. The ISO issued a competitive solicitation to procure transferred frequency response in order to be compliance with NERC Reliability Standard BAL-003-1.1. The transferred frequency response agreement will become effective December 1, 2017, as requested, and that the agreement will be in effect for one year.

Reports filed

 Informational report: energy imbalance market – available balancing capacity report (ER15-861)

On November 16, 2017, for the fourth quarter of 2016 (October 1 to December 31, 2016) and first quarter of 2017 (January 1 to March 31, 2017) the ISO submitted informational reports to FERC of the ISO's adoption of the available balancing capacity functionality so that the energy imbalance market automatically recognizes and accounts for capacity an energy imbalance market entity identifies as available to maintain reliable operations in its own balancing authority area and that is not otherwise bid into the market. The ISO's available balancing capacity enhancement was implemented on March 23, 2016. The quarterly informational reports are to provide information on the performance of the available balancing capacity functionality and to provide the same information the ISO provides in its monthly informational reports submitted during an energy imbalance market entity's first six-month transition period.

 Negotiated default energy bids, major maintenance adders, and customer operations and maintenance (ER06-615)

On November 7, 2017, the ISO submitted to FERC informational filings containing the rates or formulas used to calculate negotiated default energy bids, custom operations and maintenance adders, and major maintenance adders, that were implemented, modified or terminated in the month of October 2017.

• Informational report on transition period for first six months of new energy imbalance market participants (ER15-2565)

When a transmission or power balance constraint is binding, the ISO calculates energy prices based on penalty factors pegged to the bid caps. During the first six month transition period of the start of a new participant in the energy imbalance market, the ISO will not apply the penalty factors when a transmission or power-balance constraint is binding and will instead calculate energy price based on the last economic price signal. FERC required that the ISO and the DMM file monthly reports on the performance of these measures during the transition period. The ISO has filed this informational report for Portland General Electric on November 29, 2017, which entered the EIM on October 1, 2017. On October 17, 2017, the DMM filed its informational report for Arizona Public Service for March 2017.

Market disruption reports (ER06-615 and ER07-1257)

On October 16, 2017, and November 15, 2017, the ISO submitted to FERC monthly market disruption reports for the periods of August 16 to September 15, 2017, and September 16 to October 15, 2017, respectively. A market disruption is an action or event that causes a failure of the ISO market that is related to system operation issues or system emergencies.

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Exceptional dispatch reports (ER08-1178 and EL08-88)

On October 16, 2017, October 30, 2017, November 15, 2017, and November 30, 2017, the ISO submitted exceptional dispatch informational reports on: (1) the price impact of exceptional dispatches as required by FERC in its September 2, 2009 order in this proceeding; and (2) an analysis of mitigation as required by tariff section 34.11.4. The reports covered July (Chart 2 data), August (both Charts 1 and 2 data), and September (Chart 1 data) 2017. An exceptional dispatch is a dispatch or a commitment issued by the ISO to a resource outside the operation of the ISO market to address operational needs that cannot be addressed by the ISO market.

California Public Utilities Commission and other state matters

 Comments on inquiry of the New Mexico Public Regulation Commission of Public Service Company of New Mexico becoming a member of the Southwest Power Pool (17-00261-UT)

On November 21, 2017 the ISO filed comments and a motion to intervene with the Public Regulation Commission on the feasibility of Public Service Company of New Mexico becoming a member of the Southwest Power Pool. The ISO offers it support to help Public Service Company of New Mexico explore the range of options for participating in an organized wholesale market and identify the costs and benefits of each model to meet its needs.

 Comments on order instituting rulemaking – Resource Adequacy Program (R.17-09-020)

On October 26, 2017, and November 9, 2017, the ISO submitted comments and reply comments, respectively, to the CPUC in response to the CPUC's order instituting rulemaking (OIR) to oversee the resource adequacy program. The OIR set forth three issues to be addressed in this resource adequacy proceeding: (1) setting local and flexible resource adequacy procurement obligations for 2019 and 2020, (2) changing the basic structure of the resource adequacy program, and (3) incrementally refining resource adequacy program elements. The ISO recommended that the CPUC adopt two separate tracks for this proceeding, with the first track focusing on re-examining the basic resource adequacy structure and the second track focusing on annual local and flexible procurement obligations for 2019 and 2020.

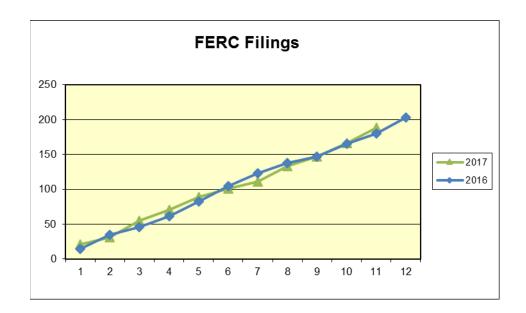
 Comments on Administrative Law Judge's ruling – proposed system reference plan and related commission policy actions and integrated resource plan workshop (R.16-02-007)

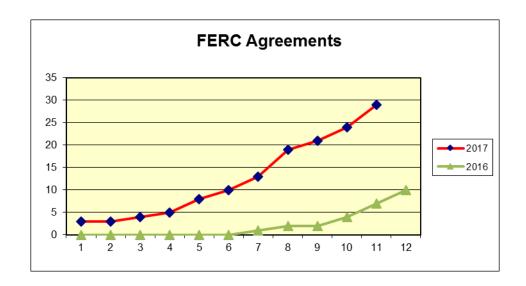
On October 26, 2017, and November 9, 2017, the ISO submitted comments and reply comments, respectively, to the CPUC in response to questions raised by the Administrative Law Judge's ruling seeking comment on proposed reference system plan

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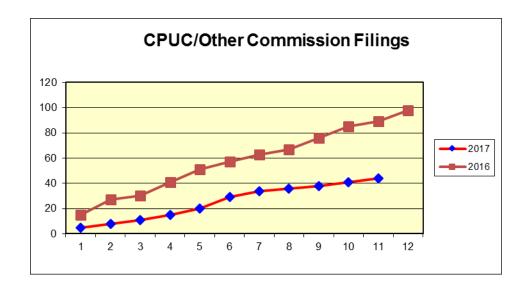
Regulatory Filings Through November 2017

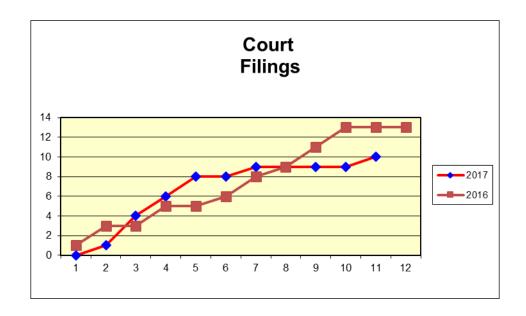




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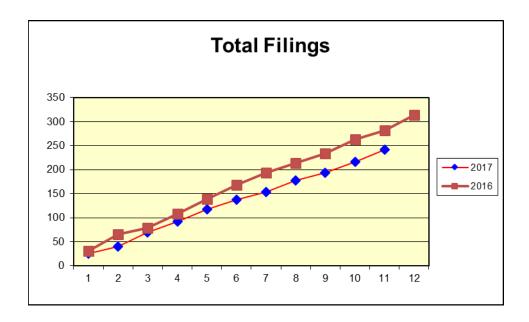
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