

Memorandum

To: ISO Board of Governors

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

Date: June 21, 2016

Re: Regulatory update

This memorandum does not require Board action.

Highlights

- *FERC approved interim measures to manage risks to the ISO controlled grid posed by the limited operability of the Aliso Canyon natural gas storage facility*
- *FERC approved enhancements to the competitive solicitation process for selection of approved project sponsors to construct regional transmission solutions*
- *ISO filed the Idaho Power EIM implementation agreement with FERC*
- *FERC approved new measures to reflect temporary increases in a resource's minimum load costs due to changes in the resource's operational capabilities*
- *FERC approved request for waiver allowing for price corrections related to implementation issues*
- *FERC approved new distributed energy resource provider measures*
- *ISO filed tariff revisions to comply with new frequency response requirement*
- *ISO filed tariff revisions to implement energy storage enhancements*
- *ISO filed tariff revisions to improve settlement of variable energy resources and bid-cost recovery rules*
- *ISO filed tariff revisions to address multiplicity of pricing and multiple contingency pricing*

Federal Energy Regulatory Commission and related Court of Appeals matters

- **Tariff amendment – multiplicity of pricing and pricing multiple contingencies (ER16-1886)**

On June 6, 2016, the ISO filed tariff revisions to: (1) modify contingency modeling in the ISO's market optimization so that prices will reflect the cost of congestion associated with the most limiting contingency under transmission constraint relaxation conditions; and (2) eliminate conditions that can lead to multiple pricing solutions for the same problem, resulting in unique pricing solutions to transmission constraints. The ISO requested an effective date of September 7, 2016.

- **Order on tariff amendment – distributed energy resource provider (ER16-1085)**

On June 2, 2016, FERC approved the ISO's March 4, 2016 tariff revisions to enhance participation of aggregations of distribution-connected or "distributed" energy resources in the ISO's energy and ancillary services markets. The tariff revisions became effective June 3, 2016.

- **Tariff amendment and order – Aliso Canyon-enhanced gas/electric coordination interim measures (ER16-1649)**

On June 1, 2016, FERC accepted the ISO's tariff amendment filed on May 9, 2016 to improve its ability to maintain both gas and electric reliability in light of the risks to the ISO controlled grid posed by the limited operability of the Aliso Canyon natural gas storage facility. The bulk of the changes became effective June 2, 2016, with the balance of the tariff revisions effective July 6, 2016. The ISO proposed that the tariff modifications be accepted on an interim basis, with tariff provisions reverting back automatically on November 30, 2016, to their previous terms. FERC also ordered a technical conference to be scheduled several months after implementation of the proposed market changes to consider the performance of the interim measures and whether additional measures will be needed after November 30, 2016.

- **Tariff amendment – improve settlement of variable energy resources and bid cost recovery rules (ER16-1786)**

On May 25, 2016 the ISO filed tariff revisions to improve settlement rules regarding the treatment of residual imbalance energy from a variable energy resource and its bid cost recovery provisions for all resources. The ISO requested an effective date of October 1, 2016.

- **Tariff amendment – energy storage enhancements (ER16-1735)**

On May 18, 2016, the ISO filed tariff revisions to expand options for energy storage participation in the ISO market. The two proposed enhancements would allow non-generator resources such as batteries to self-manage their state of charge and energy limits, and would implement three metering generator output methodologies developed by the North American Energy Standards Board to calculate demand response performance. The ISO requested an effective date of October 1, 2016.

- **Letter Order accepting tariff revisions – to consider in the market costs associated with rerates of minimum load (ER16-1265)**

On May 6, 2016, FERC accepted the ISO's March 23, 2016 tariff revisions to allow the ISO's market systems to reflect temporary increases in a resource's minimum load costs due to temporary changes in the resource's operational capabilities, effective May 23, 2016.

- **Tariff amendment – EIM Year 1 enhancements-phase 2 (ER16-1518)**

On April 28, 2016, the ISO filed tariff revisions to enhance functionality that will address issues encountered during the first year of the energy imbalance market operations. The proposed modifications, consist of: (1) revisions to the assignment of the real-time congestion offset to balancing authority areas to better reflect the contribution of each to congestion at the interties; (2) provision of outage information directly to the reliability coordinator; (3) clarification that the administrative costs included in the default energy bid and start-up cost and minimum load cost calculations for an energy imbalance market participant should include the applicable energy imbalance market administrative charges and not the charges reflected in the ISO's grid management charge; (4) specification that base schedules must include approved, pending, and adjusted etags for imports and exports; (5) clarification that implementing economic bidding at energy imbalance market external interties requires further development of appropriate market rules; (6) real-time local market power mitigation of transfers on energy imbalance market internal interties; and (7) enhanced tariff detail regarding calculation of the marginal losses component of the locational marginal price. The ISO requested that the tariff amendment become effective October 1, 2016 and that FERC issue its order by July 1, 2016 so that the ISO can include all approved functionality in the market simulation for the participation of Puget Sound Energy and Arizona Public Service Company in the energy imbalance market.

- **Tariff amendment – Frequency Response (ER16-1483)**

On April 21, 2016, the ISO filed tariff revisions to help ensure it can comply with the new frequency response requirements in North American Electric Reliability Corporation (NERC) Reliability Standard BAL-003-1 –*Frequency Response and Frequency Bias Setting*. The ISO requested an effective date of June 21, 2016. On June 17, 2016, the CAISO received a letter from the Director of the Division of Electric Power Regulation –

West at FERC requesting additional information. The CAISO will respond to the letter by July 18, 2016.

- **Order on Petition for limited waiver on timing of price correction (ER16-1019)**

On April 18, 2016, FERC granted the ISO's petition for limited waiver of the price correction timing provisions in section 35.2 of the tariff. The waiver allows the ISO to correct prices for various pricing locations and market intervals in the period between October 15, 2014 and April 30, 2015. The pricing errors occurred due to implementation issues with two significant enhancements in the fall of 2014: the full network model expansion and the integration of the first energy imbalance market entity.

- **Order accepting proposed tariff revisions – competitive solicitation for approved project sponsors (ER16-767)**

On March 25 2016, FERC accepted procedures for the competitive solicitation process through which the ISO selects approved project sponsors to construct certain regional transmission solutions included in the ISO's annual transmission plan, effective March 28, 2016. Among other things, this proposal streamlines the competitive solicitation process, eliminates undue delays, and eliminates a potential unfair advantage that exists under the current process for collaboration of project sponsors submitting a joint application.

Regulatory Agreements

- **EIM implementation agreement with Idaho Power (ER16-1541)**

On April 29, 2016, the ISO filed its implementation agreement with Idaho Power Company (IPCo) regarding IPCo's participation in the energy imbalance market. The ISO requested that FERC accept the implementation agreement effective July 1, 2016, so that the extension of the real-time energy market to include IPCo participation may proceed towards implementation on April 1, 2018.

- **Non-conforming large generator interconnection agreement with Mesquite Solar 3 (ER16-1548)**

On April 29, 2016, the ISO filed a non-conforming Large Generator Interconnection Agreement among the ISO, San Diego Gas & Electric Company, Mesquite Solar 3, LLC and SGS Development, LLC as interconnection customer co-tenants, to be effective June 1, 2016. This agreement provides for the interconnection of the Mesquite Solar 3 solar photovoltaic generating facility located in Maricopa, Arizona.

Reports filed

- **Status report on energy crisis proceeding (ER01-889-012, ER01-3013-004, and EL00-95-059)**

On May 16, 2016, the ISO submitted to FERC a status report as required by the Chief Judge's order continuing suspension of the proceedings. The ISO reported that there have been no changes since previous status reports, and that the procedural schedule in these proceedings should continue to be suspended pending the outcome of the California refund proceeding.

- **Negotiated default energy bids and major maintenance adders (ER06-615)**

On April 7, 2016, May 9, 2016 and June 7, 2016 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 or modified for the months of March 2016, April 2016 and May 2016, respectively.

- **EIM transition period reports – NV Energy (ER15-2565)**

On April 1, 2016 and May 17, 2016 the ISO submitted to FERC its reports on the EIM transition periods for NV Energy for February 2016 and March 2016. The reports were submitted pursuant to FERC's October 29, 2015 order directing the ISO to report on the transition period of NV Energy during its first six months of participation in EIM. On March 22, April 14 and June 2, 2016, the Department of Market Monitoring submitted its independent assessments of the transition period of NV Energy, covering January 2016, February 2016 and March 2016, respectively.

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

On March 30, May 2 and May 31, 2016, 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 the degree of mitigation as required by tariff section 34.9.4. These reports covered December 2015, January 2016 and February 2016, respectively. On April 15, 2016 and May 16, 2016, the ISO submitted to FERC transactional data including incremental and decremental megawatt volume, duration, and location for exceptional dispatches occurring during the months of February 2016 and March 2016, respectively. 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.

- **EIM price waiver reports (ER15-402)**

On March 28 and May 10, 2016, the ISO submitted to FERC its reports on EIM performance for February 2016 and March 1-23, 2016, respectively. The reports were

submitted pursuant to FERC's March 16, 2015 order directing the ISO to refine the monthly reports to "assist the Commission and the parties in determining the extent to which the price spikes continue to be caused by transitional issues, and the extent to which they may be triggered by lack of adequate supply in the EIM." On March 23, 2016, the ISO implemented FERC's order on the available balancing capacity feature, marking the end of this monthly reporting requirement.

On March 22, April 6 and June 2, 2016, the Department of Market Monitoring submitted its assessments of the performance of the EIM, covering January 2016, February 2016 and March 2016, respectively.

- **Market disruption report (ER06-615 and ER07-1257)**

On April 15, 2016, and May 16, 2016, the ISO submitted to FERC its monthly market disruption reports for disruptions that occurred from February 16 through March 15, 2016 and March 16 through April 15, 2016. A market disruption is an action or event that causes a failure of the ISO market related to system operation issues or system emergencies.

- **AES Huntington Beach – hours of operation (ER13-351)**

On June 10, 2016 the ISO filed an informational report pursuant to FERC's January 4, 2013 order approving the Reliability Must-Run Agreement for synchronous condensers at AES Huntington Beach Generating Station Units 3 and 4, and the May 1, 2014 order granting modification of the reporting schedule.

California Public Utilities Commission matters

- **Comments regarding institution of an integrated resource planning process (R.16-02-007)**

On March 21, 2016, the ISO filed comments regarding institution of an integrated resource planning process. The ISO comments focused on three distinct, but interrelated issues: (1) categorization; (2) process alignment; and (3) modeling purposes and needs.

- **Comments on statewide marketing, education and outreach program and budget (A.12-08-007)**

On March 25, 2016, the ISO filed comments in support of directing SoCalGas to provide funding for marketing, education and outreach activities to reduce the risk of electricity and natural gas curtailments in the Los Angeles basin. Specifically, the ISO supports additional funding designed to utilize the existing Flex Alert program in light of the operational challenges posed by the gas leak at the Aliso Canyon natural gas storage facility.

- **Response to Administrative Law Judge’s Questions in February 17, 2016 ruling (R.14-10-010)**

On March 25, 2016, the ISO responded to questions regarding how the ISO assesses resources in local capacity areas to ensure that planned-for resources effectively resolve identified constraints in satisfaction of all applicable reliability standards and criteria.

- **Comments on revised resource adequacy proposals (R.14-10-010)**

On April 1, 2016, the ISO filed comments in the CPUC’s annual resource adequacy proceeding regarding the revised proposals for Track 1 of the proceeding filed by the Energy Division and Southern California Edison.

- **Comments on Proposed Decision re Funding – Flex Alert Program (A.12-08-007, -008, -009, -010)**

On April 15, 2016, the ISO filed comments regarding the proposed decision directing SoCalGas to provide funding for marketing, education and outreach activities to reduce the risk of natural gas and electricity curtailments in the Los Angeles basing this summer due to ongoing effects of the gas leak at the Aliso Canyon natural gas storage facility. The ISOs comments focused on the importance of maintaining a clear distinction between SoCalGas’ marketing, education and outreach for gas savings and the Flex Alert program, and the funding needed for supporting awareness for the Flex Alert program.

- **Final Local Capacity Technical Analysis and Final Flexible Capacity Needs Assessment for 2017 (R.14-10-010)**

On April 29, 2016, the ISO submitted its final report and study results of the Local Capacity Technical Study for the CPUC’s consideration in its 2017 resource adequacy requirements program. These results are also used by the ISO as local capacity requirements (minimum quantity of local capacity necessary to meet the local capacity criteria) and for assisting in the allocation of costs of any ISO procurement of capacity needed to achieve reliability standards notwithstanding the resource adequacy procurement of load serving entities.

- **Comments on Proposed Decision – West of Devers Upgrade Project (A.13-10-020)**

On May 2, 2016, the ISO filed comments in support of the proposed decision that grants Southern California Edison a certificate of public convenience and necessity to construct the West of Devers Upgrade Project.

- **Ruling adopting assumptions and scenarios for use in CAISO 2016-2017 transmission planning process and future commission proceedings (R.13-12-010)**

On May 17, 2016, the CPUC issued its ruling adopting the Assumptions and Scenarios for use in the ISO's 2016-2017 Transmission Planning Process and for use in the CPUC's next round of planning in its next Long-Term procurement Planning and integrated Resources Planning Rulemaking, R.16-02-007.

- **Comments on Draft Resolution E-4781 (R.13-12-010)**

On May 16, 2016, the ISO submitted comments regarding the importance of the continued availability of Mandalay 3, and the recommendation that the Commission approve the Mandalay 3 contract to ensure that Santa Clara sub-area capacity needs are met. It also recommends that the Commission act to ensure the Mandalay Generating Station does not retire prior to new replacement capacity coming online.

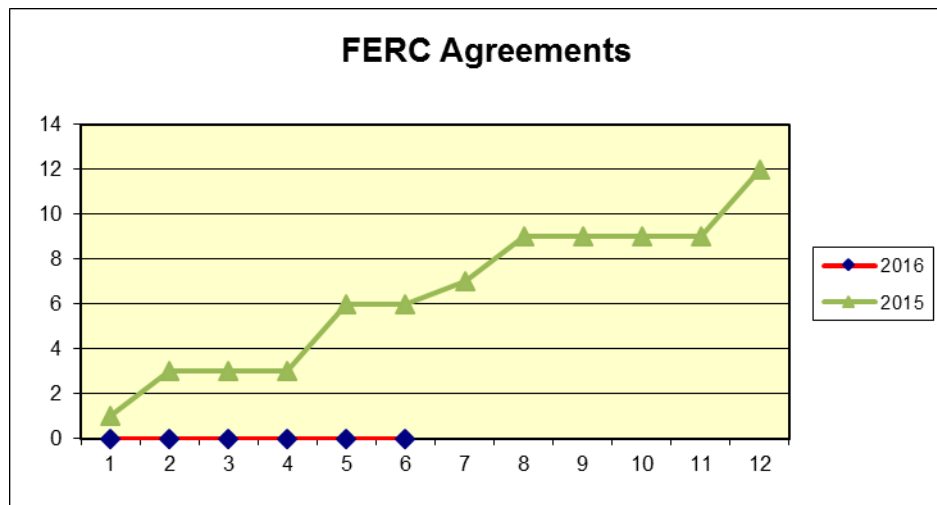
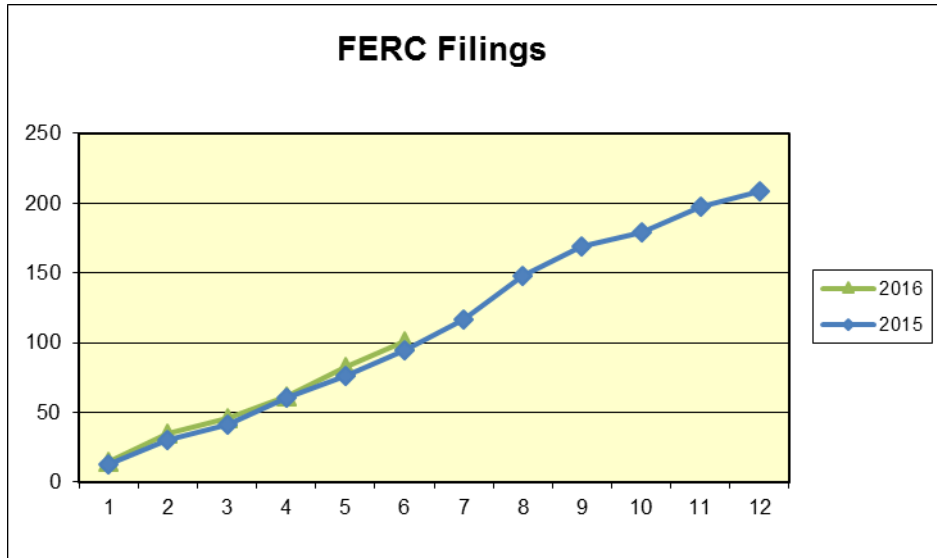
- **Comments on Draft Resolution E-4791 (Aliso Canyon)**

On May 19, 2016, the ISO submitted comments supporting the Commission's draft resolution ordering Southern California Edison Company to hold an expedited competitive solicitation for storage contracts to address electrical reliability risks in the Los Angeles Basin due to the moratorium on injections into the Aliso Canyon natural gas storage facility.

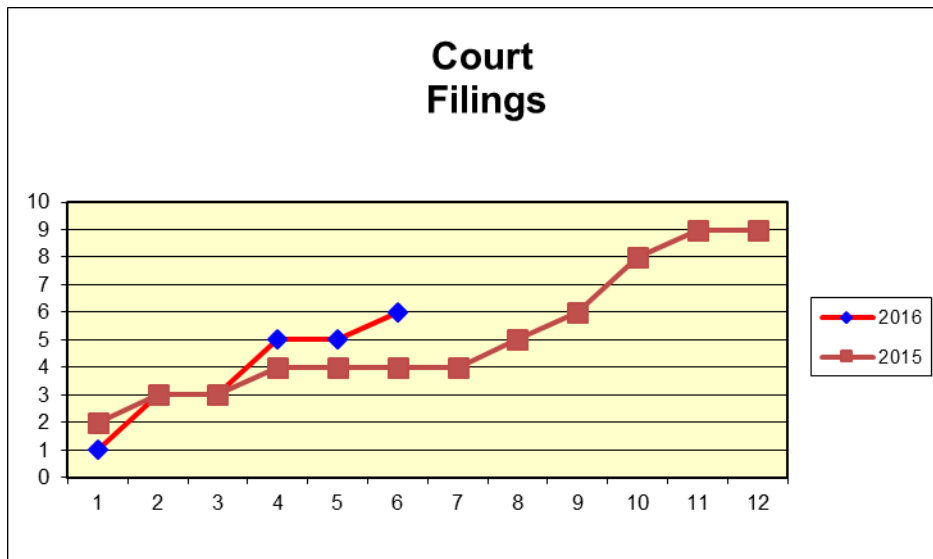
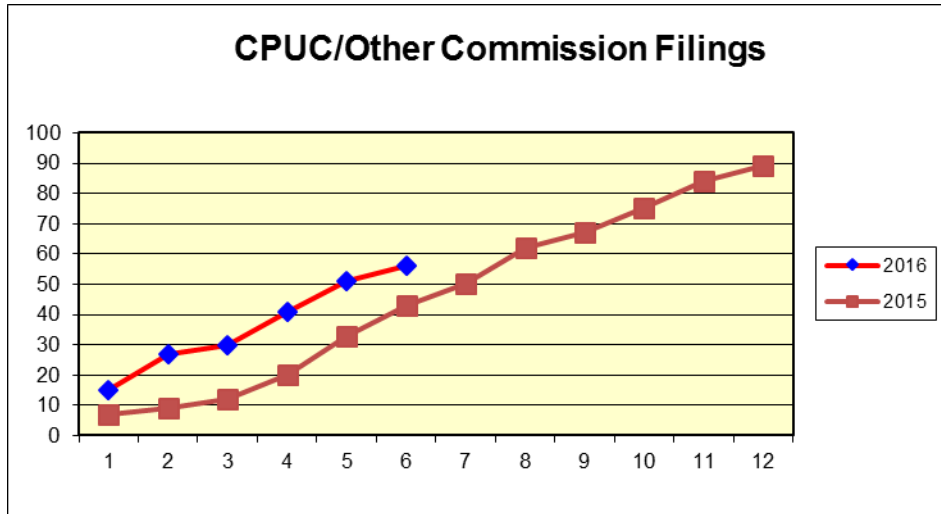
- **Comments on Proposed Decision (R.14-10-010)**

On June 9, 2016, the ISO filed comments in support of the *Proposed Track 1 Decision Adopting Local and Flexible Capacity Obligations for 2017 and Further Refining the Resource Adequacy Program* as a reasonable means of ensuring resource adequacy for 2017. The ISO's comments focused on these areas: (1) process recommendations for future ISO local capacity requirement and flexible capacity requirement studies; (2) the disposition and recommendations regarding 20-minute response requirement for a resource counting toward local resource adequacy needs; (3) the request that the ISO provide analysis of potential changes to the local resource adequacy program requirements for the Los Angeles Basin and San Diego sub-area based on future operations of the Aliso Canyon natural gas storage facility.

Regulatory Filings Through June 2016



Regulatory Filings Through June 2016



Regulatory Filings Through June 2016

