

Memorandum

To: ISO Board of Governors

From: Nancy Saracino, Vice President, General Counsel & Chief Administrative Officer

Date: December 8, 2011

Re: Regulatory Update

This memorandum does not require Board action.

Regulatory Highlights

Convergence bidding at intertie locations (ER11-4384 and ER11-4580)

The ISO concluded that convergence bidding at intertie locations increases the real-time imbalance energy offset costs without any commensurate benefits such as convergence of the day-ahead and real prices. Accordingly, on August 26, 2011, the ISO requested a temporary waiver of the tariff requirement that would have obligated the ISO to increase the convergence bidding position limits at the interties as of October 1, 2011. An increase in the position limits would have further increased costs to be allocated through the real-time imbalance energy offset. FERC issued an order granting the waiver request on September 29, 2011. For the same reasons, the ISO filed a tariff amendment on September 20, 2011 to eliminate convergence bidding at intertie locations requesting an effective date of November 28, 2011. The Board authorized the tariff amendment at its August 25, 2011 meeting.

FERC issued an order accepting the ISO proposed tariff amendments, suspending them for a nominal period, making the tariff provisions eliminating convergence bidding at the interties effective November 28, 2011, subject to the outcome of a technical conference. FERC found that the ISO's proposal to eliminate convergence bidding at intertie locations may be unjust, unreasonable, unduly discriminatory or preferential. However, FERC also recognized that there is the potential for financial harm and risk associated with continuing to allow convergence bidding at interties and therefore accepted and suspended the proposal to eliminate convergence bidding at intertie locations. The technical conference is to explore issues related to convergence bidding at intertie locations and to supplement the existing record. After the technical conference and a comment period, FERC will issue further orders either accepting or rejecting the tariff amendments going forward.

Responsible attorney: Anna McKenna

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Regulation energy management tariff amendment (ER11-4353)

The ISO has filed amendments to its tariff to allow greater participation by non-generator resources in the ISO's ancillary services market. Non-generator resources are resources that can operate as generation or load, or both. These resources have the capability to be dispatched to any operating level within their operating range but are subject to constraints with respect to the amount of energy they can generate or curtail. Examples of these resources include battery storage, flywheels and dispatchable demand response. At its February 2011 meeting, the Board authorized the ISO to implement regulation energy management, which will allow non-generator resources to bid their capacity more effectively into the ISO's regulation markets. The ISO conducted a stakeholder process during the second quarter of 2011 and filed a tariff amendment on August 22, 2011. No party filed a protest of the ISO's tariff amendment and several parties submitted supporting comments. On September 27, 2011, the ISO filed an answer to comments submitted by the California Department of Water Resources and the California Energy Storage Association. On November 30, 2011, FERC issued an order accepting the ISO's tariff revisions.

Responsible attorney: Andrew Ulmer

• Generator Interconnection Procedures Phase 2 tariff amendment (ER12-502)

On November 30, the ISO filed its Generator Interconnection Procedures (GIP) Phase 2 tariff amendment, which was authorized by the Board at its August 25, 2011 meeting. This amendment contains 18 design components intended to further streamline the interconnection process and provide greater flexibility for interconnecting generators. Key design elements include (1) providing customers with a new "partial deliverability option" and which allows customers more flexibility to manage their network upgrade costs; (2) expanding customer access to the shorter independent study process and fast track when they make certain unit modifications concurrently with a "commercial roll over" to ISO participating generator status; and (3) creating a pathway to deliverability for new generators connecting within the ISO balancing authority area to non-participating transmission owner systems. The ISO has asked for a January 31, 2012 effective date to put the new provisions in place before ISO processes requests made through the next queue cluster application window.

Responsible attorney: Bill Di Capo

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Federal Energy Regulatory Commission and related Court of Appeals matters

Tariff amendments and orders

Flexible Ramping Constraint and Related Compensation (ER12-50)

On October 7, 2011, the ISO filed a proposed tariff amendment to address the ISO's continued periods of insufficient ramping capability and operational flexibility. The ISO proposes to implement a new flexible ramping constraint in the market optimization in all the real-time pre-dispatch runs. Under the flexible ramping constraint, unit commitment and dispatch will ensure the availability of a pre-specified quantity of upward-ramping capability requirement in the hour-ahead scheduling process, short-term unit commitment process, real-time unit commitment, and real-time dispatch. Enforcement of this constraint creates an opportunity cost for resources that participate in relieving the constraint. Therefore, the ISO proposes compensation based on the opportunity cost of the marginal resource relieving the constraint. Certain generators protested the filing seeking more robust market products and compensation for the provision of such services. Load serving entities protested the allocation of such costs to load serving entities alone. The ISO responded to the comments and protests and is awaiting a FERC decision, which is expected on or about December 8.

Responsible attorneys: Anna McKenna and David Zlotlow

Outage information sharing with natural gas utilities (ER12-278)

On October 31, 2011, the ISO filed a tariff amendment to permit the ISO to share generation and transmission outage information pursuant to a non-disclosure agreement with natural gas utilities in order to minimize risk to the reliable operations of the grid. Information sharing will allow the ISO and natural gas utilities to manage gas pipeline testing and maintenance as well as gas supply curtailments and shortages, while ensuring sufficient gas supplies for reliable operation of the grid. The Board authorized the filing of this amendment at its October 27, 2011 meeting.

Responsible attorney: Sidney Davies

• Bid cost recovery revisions and petition for waiver (ER11-3149 and ER11-3713)

On December 2, 2011, FERC issued an order in response to the ISO's June 3, 2011, motion for clarification or, in the alternative, request for rehearing of the FERC order on emergency revisions to the ISO's bid cost recovery tariff provisions and on the ISO's petition for limited waiver of its tariff provisions concerning the calculation of bid cost recovery payments from April 2009 to July 2010. The request for clarification and rehearing were filed in response to the Commission's order indicating that the ISO was to file for authority to issue resettlements of erroneous applications of the ISO's filed rate regarding bid cost recovery. The waiver petition was filed requesting a waiver for the ISO's tariff provisions that would have otherwise required the resettlement of bid cost recovery

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amounts due to the erroneous application of the metered energy adjustment factor in calculating market revenues used to offset bid cost recovery payments. The Commission granted the ISO's motion for clarification and denied the ISO's request for rehearing. The Commission also denied the ISO's waiver request.

Responsible Attorney: Anna McKenna

Local market power mitigation tariff amendments (ER12-423)

On November 16, 2011, the ISO filed a tariff amendment to comply with FERC's 2006 directive to use demand bids, rather than forecast demand, to determine which bids to mitigate for local market power within three years of implementation of the ISO's nodal market. In addition, the tariff amendment includes two significant improvements approved by the Board at its July 14, 2011 meeting. Specifically, the ISO is proposing to implement: (1) a more accurate and efficient method to determine mitigation through the use of a single pre-market run to determine which bids to mitigate (compared with the current process that uses two pre-market runs); and (2) a dynamic competitive path assessment that will also improve the accuracy of mitigation. The ISO is proposing to implement the new mitigation method in both the day-ahead and hour-ahead mitigation runs in April 2011. The dynamic competitive path assessment will be implemented only in the day-ahead market as of April 2011. The current static competitive path assessment will continue to be used in the hourahead mitigation run until a future tariff amendment that will introduce real-time bid mitigation every 15 minutes and implement the dynamic competitive path assessment in the hour-ahead and real-time mitigation processes. This second phase is targeted for implementation later in 2012.

Responsible attorney: Sidney Davies

Settlement process timeline change (ER11-4176)

On August 1, 2011, the ISO filed proposed tariff modifications to accelerate and improve the efficiency of the existing settlement process. On September 30, 2011, FERC accepted ISO's proposed tariff modifications effective October 1, 2011 subject to one compliance obligation. On October 31, 2011, the ISO submitted a compliance filing to clarify the tariff to indicate that, for purposes of determining whether the \$1 million threshold for issuing the unscheduled recalculation settlement statement has been met, the ISO will calculate the financial impact resulting from an error based on the dollar value of the charges that were mistakenly assessed due to the error.

Responsible attorney: Beth Ann Burns

• Resource adequacy requirements for system resources (ER11-4151)

On July 29, 2011, the ISO filed proposed tariff amendments to provide for generated bids and outage reporting for non-resource specific system resources with resource adequacy contracts. On September 30, 2011, FERC issued an order accepting the ISO's proposed

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tariff amendments subject to one compliance obligation. On October 17, 2011, the ISO submitted a compliance filing to modify the language in its tariff to refer to FERC's regulations that establish how the market monitoring units of independent system operators are to report or refer a market participant's behavior to the Office of Enforcement for investigation.

Responsible attorney: Beth Ann Burns

Reliability demand response resource (ER11-3616)

On May 20, 2011, the ISO filed proposed tariff revisions to allow state emergency triggered demand response programs to participate in the ISO market as reliability demand response resources. On August 26, 2011, FERC issued a letter requesting additional information in order to process the filing. The ISO responded on September 21 with additional information about the dispatch process and the distinction between reliability demand response resources and proxy demand resources. However, on November 18, 2011, FERC issued a second deficiency letter requesting even more detail concerning the circumstances under which resources registered under the program would be "emergency triggered". The ISO response is due December 19, 2011. This delay constrains the transition process from a planned 6 months to less than 2 months, and it is not yet clear whether the utility programs will be fully transitioned by the ISO's planned reliability demand response resource implementation scheduled for April 1, 2012.

Responsible attorney: John Anders

Interconnection requirements for asynchronous generating facilities (ER10-1706)

The ISO filed a tariff amendment on July 2, 2010 to revise interconnection requirements applicable to large asynchronous generating facilities seeking to interconnect to the ISO grid. Among other requirements, the tariff amendments required wind and solar photovoltaic interconnection customers to provide reactive power capability and maintain automatic voltage regulation controls. The proposed amendments also required these resources to have the capability to curtail their output in increments of 5MWs or less. On August 31, 2010, FERC issued an order accepting in part and rejecting in part the ISO's tariff amendments. The ISO's proposed reactive power, voltage control and power management requirements were among the requirements FERC rejected. The ISO filed a request for rehearing of FERC's order. On November 17, 2011, FERC denied the ISO's request for rehearing but directed FERC staff to hold a technical conference to examine whether to reconsider or modify the reactive power provisions set forth in FERC Order No. 661-A that apply to wind resources. Currently, these requirements only allow a system operator to require a wind resource to provide reactive support based on a need demonstrated by an interconnection system impact study.

Responsible attorney: Andrew Ulmer

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• Dynamic transfers tariff amendments (ER11-4161)

On October 28, 2011, Powerex filed a request for rehearing of the September 30, 2011 FERC order accepting without change amendments to implement tariff provisions regarding dynamic transfers approved by the Board at its May 19 meeting. Powerex seeks rehearing of a single issue, arguing that intermittent resources (i.e., wind and solar resources) should be treated as interruptible rather than as resource-contingent. The ISO previously filed an answer opposing Powerex's arguments in the original proceeding, and FERC rejected Powerex's arguments in its order. The ISO filed these proposed tariff changes on July 29, 2011 to (i) add provisions for pseudo-ties, which are resources that are transferred from one balancing authority area to another by programming of the balancing authorities' energy management systems, (ii) refine the existing provisions regarding dynamic scheduling of imports, (iii) add provisions for dynamic scheduling of exports, and (iv) address special aspects of dynamic transfers from intermittent resources. FERC made these tariff revisions effective as of November 1, 2011, as requested by the ISO.

Responsible attorneys: Mike Dozier and John Anders

Amendment 60 allocation of must-offer costs (ER04-835)

In May of 2004, the ISO filed a tariff amendment proposing to apply cost causation principles to the allocation of "must-offer" costs. Following a series of filings and related actions, FERC issued two orders on September 16, 2011. In its order on rehearing, FERC rejected any further consideration of any reclassification of a constraint as local or zonal. In the second order, FERC accepted the ISO's two pending compliance filings filed in February 2007 and January 2008, respectively, and directed the ISO to submit an informational filing explaining how the ISO addressed Southern California's Edison's concern that the ISO had not published sufficient information on its website for it to validate its allocation of must-offer costs. The time period in issue is July 17, 2004 through March 31, 2009. On October 17, 2011, the ISO filed a motion for extension of time to and including May 15, 2012. By letter order dated November 9, 2011, FERC accepted the ISO's motion.

Responsible attorney: Sidney Davies

Rulemakings and related proceedings

Order 755 - Regulation compensation rulemaking (RM-11-7)

At its October 2011 meeting, FERC adopted a final rule in its notice of proposed rulemaking addressing frequency regulation compensation. The order finds that current compensation methods for regulation service in RTO and ISO markets fail to acknowledge the inherently greater amount of regulation service being provided by faster-ramping resources and that some RTO and ISO practices result in economically inefficient dispatch of frequency

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regulation resources. The final rule provides that ISOs and RTOs must provide a two part payment for regulation service: (1) a capacity payment which reflects the marginal unit's opportunity costs; and (2) a performance payment that accounts for the accuracy of a resource's response to a control signal. The final rule requires ISOs and RTOs to submit a compliance filing in April of 2012 and implement the requirements of the order by October 2012.

Responsible attorneys: Andrew Ulmer and Anna McKenna

Regulatory contracts filings and orders

 California Oregon Intertie path operator and owners coordinated operating agreements (ER11-3865, ER11-3911 and ER11-4075)

On November 21, 2011, FERC issued an order accepting amendments to the Owners Coordinated Operation Agreement and the California Oregon Intertie Path Operator Agreement. These agreements govern the coordinated operation of the three line system referred to as the California Oregon Intertie. Amendments to these agreements were necessary to reflect that PacifiCorp will acquire a share of the California Oregon Intertie starting on January 1, 2012 pursuant to a settlement filed on December 20, 2007. This settlement, among other matters, accounts for PacifiCorp's transmission rights and the ISO treatment of those rights through December 31, 2028. FERC's order accepts a version of the Owners Coordinated Operation Agreement filed unilaterally by PG&E (supported by the ISO), and rejects a version filed unilaterally by PacifiCorp (supported by Western and TANC). FERC determined that PacifiCorp's proposed amendments exceed changes necessary to make PacifiCorp a party to the agreement and contravene findings related to the treatment of unscheduled power flows over the California Oregon Intertie that FERC made in connection with approving the ISO's integrated balancing authority area structure. In addition, FERC accepted the unexecuted version of the California Oregon Intertie Path Operator Agreement filed by the ISO, which incorporates changes that mirror the changes to the Owners Coordinated Operation Agreement filed by PG&E and accepted by FERC.

Responsible attorney: John Anders

Dynegy Oakland's annual reliability must- run filing (ER12-275)

Dynegy Oakland is the only resource currently under a reliability must-run contract. On October 31, 2011, Dynegy filed its annual update proposing changes in rates, terms and conditions. On November 18, 2011, the ISO joined with Pacific Gas and Electric Company to file a joint protest concerning two cost categories and generally indicating the need for additional time to review the rate filing. Joint parties requested FERC to defer hearing and settlement judger procedures until January 31, 2012 to allow parties an opportunity to resolve any issues.

Responsible attorney: Sidney Davies

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NextEra Genesis McCoy Solar interconnection agreement (ER11-4512)

On October 20, 2011, FERC issued an order accepting the non conforming large generator interconnection agreement (LGIA) for the NextEra solar generating project known as the Genesis McCoy Solar Project (and alternatively as the Blythe Desert Center Project). The ISO filed this LGIA with FERC on September 13, 2011. The generating facility is planned as a 500 MW, four unit project consisting of a two 125 MW solar thermal units (the Genesis Station) and two 125 MW solar photovoltaic units (the McCoy Station). The LGIA is a non-conforming agreement, as it contains provisions that are not included in the pro forma LGIA relating to (i) up-front funding of the network upgrades (which are part of Southern California Edison's Colorado River substation expansion and West of Devers reconductoring transmission projects), and (2) provisions that permit the interconnection customer to exercise a "partial termination" of the LGIA with respect to three units of the solar project.

Responsible attorney: Bill Di Capo

Report filings

Market disruption reports (ER06-615)

A market disruption is an action or event that causes a failure of an ISO market, related to system operation issues or system emergencies. The ISO reports these market disruptions to FERC on a monthly basis. On November 15, 2011, the ISO submitted its monthly report of market disruptions that occurred September 16 through October 15, 2011. Section 7.7.15 of the tariff authorizes the ISO to take one or more of a number of specified actions in the event of a market disruption, to prevent a market disruption, or to minimize the extent of a market disruption.

Responsible attorney: Anna McKenna

Exceptional dispatch reports (ER08-1178)

The ISO submits two monthly exceptional dispatch reports to FERC. On November 15, 2011, the ISO submitted transactional data including incremental and decremental MW volume, duration and location for exceptional dispatches occurring during the month of September, 2011. On October 30 and November 30, the ISO submitted MW hour data and cost data for exceptional dispatches occurring during the months of July and August 2011. An exceptional dispatch is a dispatch or a commitment issued by the ISO to a resource outside of the operation of the ISO markets due address operational needs that cannot be address by the ISO market.

Responsible attorney: Sidney Davies

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Comprehensive Report on Interconnection Queue Clusters 1 & 2

On November 21, 2011, the ISO filed a comprehensive report describing its processing and issues encountered during the interconnection queue clusters 1 and 2 interconnection study process. FERC placed the reporting requirement in its September 26, 2008 order accepting the ISO's cluster generation interconnection process. The ISO explained that various issues that have arisen since the ISO's implementation of the cluster interconnection process in 2008 resulted in the Generator Interconnection Process (GIP) Phase 1 tariff amendment in 2010 and the GIP Phase 2 refinements approved by the Board on August 25, 2011 and filed with FERC on November 30, 2011.

Responsible attorney: Bill Di Capo

Other FERC matters

Petition to distribute forfeited interconnection funds (ER11-4738)

On November 23, 2011, FERC issued a letter order accepting the ISO's proposed distribution of forfeited interconnection study deposit funds and financial security funds. Forfeiture of a portion of an interconnection customer's financial postings occurs when the customer withdraws a project. The ISO submitted its distribution proposal for these funds to FERC on September 30, 2011 for authorization to distribute forfeited funds in accordance with the tariff for calendar years 2009 and 2010. The purpose of the financial positing requirement is to reduce the number of non-viable projects in the ISO's interconnection queue. The tariff requires the ISO to distribute any forfeited funds in the same manner as the rules of conduct penalties, except that market participants with penalty violations are not precluded from the allocation. The total distribution amounts to \$13,352,391.

Responsible attorney: Bill Di Capo

California Public Utilities Commission matters

 Rulemaking to improve distribution level interconnection rules (R.11-09-011)

On October 24, 2011, the ISO submitted comments in response to the CPUC order instituting rulemaking that seeks to revise CPUC-jurisdictional Rule 21 generator interconnection rules and investor owned utilities distribution interconnection rules so as to establish a single interconnection process across the entire electrical distribution system (including interconnections to facilitate wholesale electric transactions). The ISO noted that it had conducted a stakeholder process with the investor owned utilities and numerous other stakeholders in 2010 to evaluate issues relating to interconnection to the ISO controlled grid and FERC-jurisdictional portions of the investor owned utilities' systems. A primary reason for this effort was the recognized need to align processes around

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engineering realities, timelines, and constraints when it came to attempted interconnection of various proposed generation facilities to a distribution and high-voltage transmission grid. The ISO encouraged the CPUC to build upon these efforts in fashioning a process in the rulemaking.

Responsible attorney: Bill Di Capo

PG&E, SDG&E and SCE demand response programs 2012-2014 (A11.03-001 et al.)

These consolidated proceedings review and approve the investor owned utility demand response programs and budgets for the tri-annual cycle 2012 to 2014. The CPUC issued a proposed decision in August. The ISO filed opening comments to the proposed decision on November 17, 2011 and reply comments on November 22. In its comments, the ISO advocated that the CPUC expand upon its finding in the proposed decision that the CPUC adopts the ISO's competitive procurement model as an end state for procurement of demand response resources and programs. Specifically, the ISO advocated that the CPUC open a new phase in the ongoing demand response rulemaking to develop rules for transition to a competitive market by the next cycle (2015-2018) of all demand response intended to count as resource adequacy or to satisfy a long term procurement need.

Responsible attorney: Bill Di Capo

Resource adequacy proceeding for 2013 and 2014

On October 27, 2011, the CPUC issued a scoping order initiating a rulemaking proceeding for the purpose of overseeing the resource adequacy program and establishing local procurement obligations for 2013 and 2014. The ISO filed comments on November 7, 2011 and reply comments on November 21, 2011 to provide input on the scope and priority of the candidate issues to be addressed in this proceeding as possible resource adequacy program refinements for the 2013 and 2014 compliance years. The ISO identified several priority issues as follows: (1) extend the standard capacity product to demand response in order to prepare for the integration of demand response that qualifies as resource adequacy capacity into the wholesale electricity market; (2) require procurement of flexible capacity in the 2013 year-ahead resource adequacy showings and separately consider modifying the program to reflect a proposal the ISO will develop through a stakeholder process to retain flexible resources; and (3) consider the replacement rule and potential modifications to the program that may be necessitated by its elimination.

Responsible attorney: Beth Ann Burns

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• Rulemaking proceedings regarding qualifying facility policy (R.04-04-003, etc.)

On October 20, 2011, the CPUC rendered a decision denying rehearing of issues raised by the City and County of San Francisco regarding the CPUC's original decision approving the settlement agreement establishing a global settlement of qualifying facilities issues. On October 6, 2011, the CPUC rendered another decision granting the joint petition filed on July 28, 2011 by California Municipal Utilities Association and the parties to the global settlement for modification of a subsequent CPUC decision that also approved the settlement agreement with slightly revised terms. The CPUC also ruled that the settlement would be effective only when both decisions approving the settlement are final and non-appealable. On October 11, CMUA withdrew its application for rehearing of the original decision approving the settlement, but the City and County of San Francisco still had a pending application for rehearing of that decision until the CPUC's October 20 decision. As no other party filed an application for rehearing or an appeal of the CPUC decisions by November 23, 2011, the global settlement of qualifying facility issues became effective as of that date.

Responsible attorney: Mike Dozier

Other regulatory filings

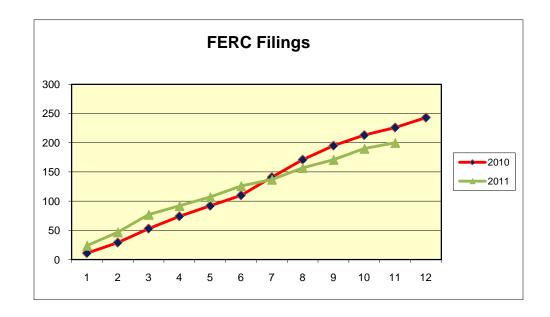
California Air Resources Board's cap and trade regulation

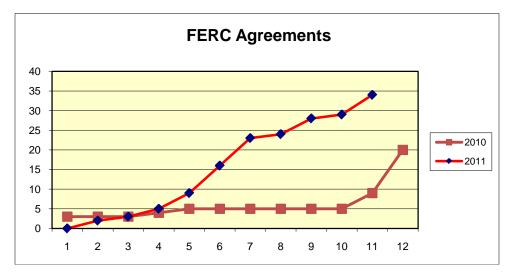
In October 2011, the California Air Resources Board adopted its cap and trade regulation as part of its implementation of Assembly Bill 32. The regulation is currently under review by California's Office of Administrative Law. Among other things, the cap and trade regulation clarifies that greenhouse gas emission compliance requirements apply to electricity importers that appear on the last segment of an Electronic tag's physical path with the point of receipt located outside the state of California and the point of delivery located inside the state of California. The ISO submitted comments into the ARB's record explain that in some circumstances when the ISO either provides or requests emergency assistance, the ISO may appear as a purchasing selling entity on an E-tag because there is not a scheduling coordinator to identify on the E-tag in those circumstances. Accordingly, the ISO requested that ARB incorporate specific language in its regulation to exempt the ISO from the definition of electricity importer. ARB did not exempt the ISO from the definition of electricity importer in the cap and trade regulation itself, but provided a written response as part of the record of its rulemaking that states ARB does not consider the ISO to be an electricity importer.

Responsible attorney: Andrew Ulmer

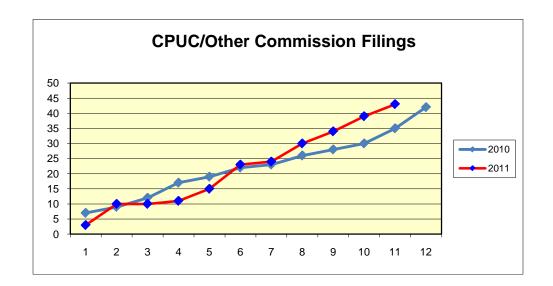
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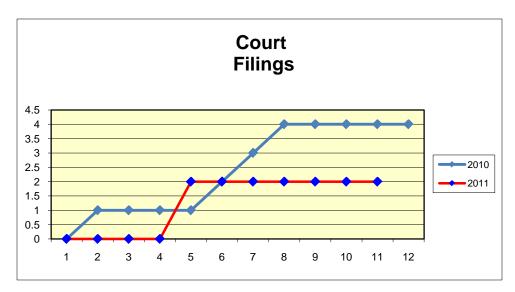
Regulatory Filings 2011 Cumulative Charts through November



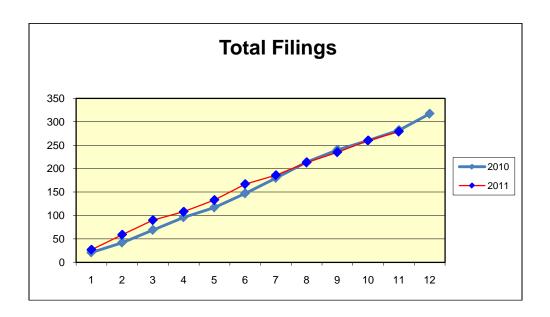


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