**UNITED STATES OF AMERICA**
**BEFORE THE**
**FEDERAL ENERGY REGULATORY COMMISSION**

| | |
|---|---|
| **Coordination between Natural Gas and Electricity Markets** | **Docket No. AD12-12-000** |

## Comments of the California Independent System Operator Corporation

## I. Introduction

The California Independent System Operator Corporation files these comments in response to the Commission's December 7, 2012 notice of request for comments and technical conference concerning information sharing and communications issues between entities in the natural gas and electric power industry. The ISO supports the Commission's efforts to foster a dialog regarding coordination between wholesale natural gas and electricity markets, especially as this coordination pertains to planned and forced outages of facilities as well as imminent or actual system emergencies.

The ISO has implemented what it believes to be best practices for information sharing with natural gas pipelines, but remains willing to examine additional steps to enhance efficient communications to promote reliable electric and natural gas operations. The ISO recommends that the Commission catalog industry practices for information sharing and publish a description of each as part of a post-technical workshop report in this proceeding.

## II. Natural gas is often the marginal fuel source for the California's ISO's resource fleet.

The ISO operates the high-voltage transmission system that makes up approximately 80 percent of California's power grid. Reliance on natural gas generation in California underscores the importance of coordination between natural gas and electricity infrastructure operations and markets. Approximately 60 percent of the installed capacity in the ISO's balancing authority area uses natural gas as fuel. In 2011, natural gas-fired generating facilities interconnected to the ISO grid supplied approximately 28 percent of electricity to the ISO's balancing authority area and gas-fired generation is the predominate resource to respond in emergencies due to its ramping capabilities.[1] The ISO also imports power, a portion of which is also sourced from natural gas-fired electric generating units.[2] Natural gas-fired generating facilities generally increase production during the higher load months of the year and the higher load hours of the day. These resources are often the marginal resource in the ISO system.

Given the significant role that gas-fired generation plays in the ISO's balancing authority area, the availability of gas-fired generation is critical to maintaining ISO system reliability and avoiding involuntary loss of load. Accordingly, the ISO has taken steps to improve coordination with gas pipeline

---

[1] 2011 Market Issues and Performance Annual Report of ISO Department of Market Monitoring, April 2011 at 33. http://www.caiso.com/Documents/2011AnnualReport-MarketIssues-Performance.pdf

[2] Seasonal changes in demand served by the ISO as well as the amount of annual precipitation in California and in the Pacific Northwest may affect these average numbers. The exact fuel mix of import resources varies, with a significant portion provided by natural gas, hydro, and coal powered sources.

operators to identify potential problems as well as resolve real time issues. The ISO has described these steps in prior comments filed in this proceeding and references specific activities in its comments responding to the Commission's questions in Section III.

## III. Comments in response to questions

The California ISO provides the following answers to the questions posed in the Commissioner's December 7, 2012 notice.

1. During an emergency, what kind of verbal communications and data exchanges do and should take place between the natural gas and electric industries? What are the industries' current "best practices" for these communications? How can today's best practices be improved? What should the Commission do, if anything, to facilitate the application of best practices between the industries?

When the ISO declares alerts/warnings/emergencies, natural gas pipeline operators receive notifications of these conditions. If issues became progressively worse on the electric system and those conditions translate into changes in operation of generating units using natural gas, the ISO will contact pipeline operators to inform them of changes in forecast burn rates or identify the location of potential issues that may impact usage of natural gas. The ISO uses telephone and electronic mail for these communications. With respect to the receipt of information from natural gas pipeline operators, the ISO has developed an operating procedure to help guide the roles, communications and actions of ISO personnel related to natural gas transmission reductions or curtailments and

impacts to the electric system in immediate and planned timeframes.[3] This procedure describes communication steps and actions of ISO-related entities as well as gas pipeline operators in connection with natural gas transmission reductions or curtailments and their impacts to the electric system. The ISO also has adopted operating procedures governing activities the ISO takes to prevent a system emergency and to stabilize the system should a system emergency occur. [4]

One potential outcome of the February 13, 2013 technical conference would be for the Commission to collect and publish a survey of communication approaches in use throughout the electric and natural gas industries. This effort will permit entities to review a library of practices as they examine refinements to their approaches to coordinate communications during an emergency. If there is consensus on a best practice for emergency communications between electric and natural gas operators, the Commission may want to identify that practice while recognizing that it could evolve as electric and natural entities gain more experience coordinating with each other. The ISO does not believe the Commission should convert a best practice into a regulation but instead encourage the use of best practices to achieve expected performance levels across the electric and natural gas systems.

---

[3] *See* ISO Operating Procedure 4120 http://www.caiso.com/Documents/4120.pdf.

[4] *See* ISO Operating Procedure 4420 http://www.caiso.com/Documents/4420.pdf

2. Please provide specific examples of other communications practices between the natural gas and electric industries that could be enhanced, including any communications regarding maintenance and construction planning, day-to-day operations, and other non-emergency situations. In providing examples, please explain whether there are regulatory or other barriers that would prevent good communications such as specific Commission regulations, tariffs or contractual provisions, legal precedents, or inadequate communications infrastructure.

The ISO periodically meets with gas transmission providers. The content of each of these meetings involves an array of subjects relevant to electric grid operations, including the level of gas inventory on hand, projected supplies, planned maintenance work on gas facilities, upcoming additions to the gas system, outages that could impact the availability or capacity of gas-fired generation, and long-range weather forecasts. In addition, the ISO confers with gas companies to assess fuel capabilities of gas-fired generation. The ISO does not believe regulatory or other barriers exist to these meetings or the sharing of information.

Communications between the ISO and gas pipeline operators also occur on a daily and real-time basis as needed. These discussions predominantly focus on more immediate operational concerns, such as changes to the electric grid that occur if the day ahead load forecast changes after the day-ahead market results are published, an unplanned outage of a generating facility that results in a need for additional gas-fired generation after the day-ahead market results are published, a weather forecast of extreme conditions in the form of either a heat wave or cold spell, an unplanned outage of major gas pipeline facilities that could impact gas supply and affect the capacity or availability of

gas-fired generation, and local supply issues when gas turbine units are dispatched and remain on-line for extended periods of time. In addition, the ISO daily sends to the major gas companies the aggregate burn rate per hour for each company based on the day-ahead market results of gas-fired generation in California.

In 2011, the Commission approved a tariff amendment providing the ISO with authority to exercise greater flexibility to share generation and transmission outage information with affected natural gas utilities to manage ongoing natural gas pipeline testing and maintenance along with gas supply shortages in a manner that ensures a sufficient gas supply for reliable operation of the electric grid. This tariff authority permits a greater degree of information sharing and is assisting in California's efforts to coordinate operations and maintenance outages of gas pipelines. As referenced in response to question 1, the ISO has also developed an operating procedure to incorporate information on gas transmission pipeline de-rates or outages into electric grid operations. The ISO is not currently aware of regulatory or legal barriers at the federal level that would prevent the ISO from obtaining access to information from pipelines relating to natural gas transmission reductions or curtailments, but welcomes a discussion of how to enhance its access to this information for purposes of electric grid operations.

3. Should natural gas pipeline and electric utility system operators be allowed to exchange information that is not publicly posted? If so, what kinds of information should be permitted to be shared and under what circumstances? If information is shared, is there a need for enhanced protections against the improper use of the material communicated and

what protections would be appropriate? Is the answer the same if a natural gas pipeline or its affiliate sells or buys wholesale electric power? If there are concerns that the increased communications might cause potential harm to industry participants, please explain those concerns. Please consider examples of information sharing that include both verbal and digital information.

The Commission should recognize the need to enable sharing of non-public information in both verbal and written formats between natural gas pipelines and electric system operators, especially under emergency conditions or conditions under which an emergency is imminent. Information that may be shared could include projected gas burns, pipeline, generator or transmission outage information, and minimum amounts of electric generation or natural gas supply needed to operate in transmission constrained areas over the course of an operating day or days.

The ISO believes entities should use standard protections when sharing non-public information such as non-disclosure agreements, limiting distribution of non-public information, and requiring the return or destruction of written non-public materials after a period of time. The Commission and all industry participants should take all reasonable steps to ensure that they do not disclose market sensitive data that could create economic harm for industry participants without adequate protections for that information.

The ISO urges the Commission to catalog how entities ensure that they maintain non-public information so as to avoid inadvertent or unnecessary disclosure that could harm an industry participant. By publishing this catalog, the

Commission will provide industry participants greater guidance on best practices for information sharing.

## IV. Conclusion

Natural gas is a critical fuel for electric generation in California and often is the fuel for the marginal resource in the ISO's electricity market. The Commission should continue to encourage information sharing between wholesale natural gas and electricity markets by fostering a dialog between industry sectors and promoting best practices for how both sectors share information to operate their systems in a reliable and efficient manner. The Commission can achieve this by compiling and publishing a list of best practices.

Dated: January 7, 2013

Respectfully submitted,

**By: *<u>/s/ Andrew Ulmer</u>***
Nancy Saracino
General Counsel
Anthony Ivancovich
Deputy General Counsel
Andrew Ulmer
Director, Federal Regulatory Affairs
California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (202) 239-3947
Fax: (916) 608-7222
aulmer@caiso.com

Attorneys for the California Independent System Operator

## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service lists for the above referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2011).

Dated at Folsom, California this 7th day of January 2013.

/s/ Anna Pascuzzo

Anna Pascuzzo