UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

JOINT COMMENTS OF CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION, ISO NEW ENGLAND, INC., MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC., NEW YORK INDEPENDENT SYSTEM OPERATOR, INC., PJM INTERCONNECTION, L.L.C. AND SOUTHWEST POWER POOL, INC.

In accordance with the Commission's February 15, 2012 *Notice Assigning Docket Nos. and Requesting Comments* ("*Notice*") in this proceeding, the California Independent System Operator Corporation, ISO New England, Inc., Midwest Independent Transmission System Operator, Inc., New York Independent System Operator, Inc., PJM Interconnection, L.L.C., and Southwest Power Pool, Inc. (together the "ISOs/RTOs") respectfully submit these joint comments. As the ISOs/RTOs indicated in an earlier letter,[1] these joint comments include responses to the questions posed by Commissioner LaFleur at the Commission's February 16, 2012 open meeting. In addition to these joint comments, a number of individual ISOs/RTOs are concurrently filing comments of their own.

The ISOs/RTOs appreciate the opportunity to address the increasingly important issues raised in this proceeding. The Commission can play a valuable leadership role in fostering communication and strengthening coordination between the gas and electric industries. There will likely be many gas-electric coordination issues that should be

[1] *See* Docket Nos. RM96-1-037 and AD12-12-000 - *Comments on Questions Raised by Commissioner LaFleur*, March 23, 2012.

considered at the national level, but not all national questions will lend themselves to uniform responses. Different regional electric systems have their own characteristics and priorities that will sometimes justify allowing region-specific responses to common questions. Other issues will likely be entirely regional in scope and will not warrant national discussion, but may require region-specific responses. Individual ISOs/RTOs are already in the process of identifying important regional gas-electric coordination issues and developing solutions to them.

The Commission should therefore begin by convening a series of technical conferences to bring gas and electric industry stakeholders, experts, and regulators together. The initial goal of the conferences should be to identify the issues that require attention and to distinguish those best addressed at the national level from those better left to individual regions. The conferences could also consider which "national" issues warrant uniform national responses and which do not. Finally, the conferences could identify the issues that require near-term action so that policies may be "advanced prior to the next heating season"[2] as necessary.

Sections I and II of these comments identify a number of potential topics that could be discussed at future technical conferences. They also provide the ISOs/RTOs' preliminary views concerning the national or regional nature of each topic. Section III includes specific responses to the individual gas-electric coordination questions that have been raised by Commissioners Moeller and LaFleur.

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[2] *See Request for Comments of Commissioner Moeller on Coordination between the Natural Gas and Electricity Markets,* February 3, 2012 ("Although comprehensive solutions may take longer to implement, we must make actual improvements to the system now. Thus, national and regional policies need to be advanced prior to the next heating season.") <http://www.ferc.gov/about/com-mem/moeller/moellergaselectricletter.pdf.> ("Moeller Request").

I. Gas-Electric Coordination Issues that Should Principally Be Addressed at the National Level

A. Examining Potential Impacts of the Commission's Standards of Conduct

Commissioner Moeller invited comments on whether its existing Standards of Conduct should be modified to support greater coordination between the gas and electric industries.[3] The ISOs/RTOs are independent transmission providers that do not have "merchant function" employees and thus are not directly subject to the Commission's standards of conduct under Order Nos. 717, *et. al*.[4] Nevertheless, the ISOs/RTOs have an interest in confirming that the standards of conduct will not discourage legitimate reliability-related communications among gas and electric industry stakeholders. The ISOs/RTOs recognize that the standards of conduct include a "reliability exemption"[5] that is meant to ensure that such communications are not impeded. Nevertheless, the ISOs/RTOs recommend that the Commission use the proposed national technical conferences to explore whether the standards have, or are likely to have, an unintended chilling effect on appropriate communications. If any problems are identified the Commission could then consider whether the appropriate remedy would be to clarify its

[3] Moeller Request at 2.

[4] *See Standards of Conduct for Transmission Providers*, Final Rule, Order No. 717, 125 FERC ¶ 61,064, 73 Fed. Reg. 63,796 (Oct. 16, 2008), *order on reh'g*, Order No. 717-A, FERC Stats. & Regs. ¶ 31,297 (2009), *order on reh'g*, Order No. 717-B, 129 FERC ¶ 61,123 (2009), *order on reh'g*, Order No. 717-C, 131 FERC ¶ 61,045 (2010), *order on reh'g*, Order No. 717-D, 135 FERC ¶ 61,017 (2011).

[5] The standards of conduct, and the reliability exemption, apply both to gas transportation and to electric transmission, because the "definition of transmission in section 358.3(f) includes gas transportation as well as electric transmission. Therefore, information necessary to maintain or restore operation of the transmission system refers to pipelines as well as to electric transmission." Order No. 717 at P 187.

policies, *e.g.,* to assure stakeholders that compliance does not require excessive limits on legitimate communications, or to revise the standards themselves.

B. Studying the Impact of Greater Use of Natural Gas in Electricity Generation on Pipeline System Flows

Commissioner Moeller has asked whether the Commission should address the effects that the expanded use of natural gas to support electricity generation is likely to have on flows on the natural gas pipeline system.[6] The ISOs/RTOs agree that this expected change, along with other factors such as the emergence of previously untapped resources in shale gas rich regions, could substantially impact pipeline flows. It would be useful to ISOs/RTOs, and presumably to others, to know more, on an interconnection-wide if not national level, regarding the impact of shale gas development on pipeline flow patterns. The ISOs/RTOs do not, however, have the information, the nationwide vantage point, or the full range of expertise needed to predict how gas flows will change or the impacts that changes would bring. It appears that no other stakeholder, or class of stakeholders, would have the ability to study the issues and draw conclusions that stakeholders with competing economic interests would be willing to accept.

The ISOs/RTOs therefore recommends that the Commission consider conducting or sponsoring an independent study to evaluate the anticipated effects on pipeline flows of the increased use of natural gas in electric generation driven by shale gas production and other fundamental changes. A national study might also explore the potential supply chain consequences of such changes, including their impacts on gas-fired generation. The scope of the study, the timetable for its completion, and related issues could all be addressed at national level technical conferences. Ultimately, a national study would

[6] Moeller Request at 2.

benefit all stakeholders by informing their planning efforts, and, potentially, by laying a foundation for more detailed region-specific studies that might follow.

C. Encouraging New Pipeline Services and Rate Structures

Commissioner LaFleur sought comment on how the Commission could ensure that sufficient gas infrastructure is in place to support the electric industry's likely greater reliance on gas for generation.[7] The Commission should explore whether new pipeline services could be created, or established rate structures enhanced, in ways that would better accommodate natural-gas fired generation using existing pipeline infrastructure. The current framework of Commission-jurisdictional pipeline services and rates were developed chiefly with the needs of local gas distribution companies ("LDCs") in mind. LDC demand for natural gas generally peaks in the winter, concurrent with the home heating season, while electric load normally peaks in the summer. LDCs have an "obligation to serve" imposed by state laws and regulations and earn revenues governed by traditional cost-of-service ratemaking. Merchant electric generators have a different set of obligations and economic incentives. It is possible that more flexible pipeline services, such as hourly gas flows or "park and loan" services utilizing existing pipeline infrastructure will better meet the needs of gas-fired generation. New services could also recognize the disparities in the needs and use of pipeline products as between LDCs and electric generators.

The organized electricity markets provide structures that would allow for prompt recognition of innovative new pipeline products. Those markets were not in place when

[7] Commissioner Cheryl A. LaFleur *Statement on Standards for Business Practices for Interstate Natural Gas Pipelines*, Docket No. RM96-1-037 (February 16, 2012 ("LaFleur Statement").

the current firm and interruptible gas transportation services were standardized. Further, as ISOs/RTOs consider whether there is a need for additional market enhancements to incentivize resources to take actions to ensure sufficient access to fuel supply, there may be new corresponding pipeline services that align better with the wholesale markets. Participants in organized markets face competitive pressures and other requirements that may make the traditional "firm" and "interruptible" gas services, at best, a very imperfect match for their needs. Making new types of service available may thus be especially valuable to the electricity markets in these regions.

Beyond encouraging the more efficient utilization of existing pipeline capacity, the Commission should also consider whether policy initiatives to promote the development of new infrastructure are warranted. This too would be an area ripe for exploration at the national level.

To the extent that these discussions led to pipeline tariff changes it seems likely that they could be adopted universally in all regions.

D. Promoting Dual-Fuel Capability

The 2011 joint report on outages and curtailments in the Southwest emphasized the potential benefits of promoting dual-fuel capability and identified dual fuel capability as a point warranting further discussion.[8] National level technical conferences would be a suitable forum for discussing the appropriate follow-up regulatory response to these recommendations.

[8] *See Report on Outages and Curtailments During the Southwest Cold Weather Event of February 1-5, 2011: Causes and Recommendations, Prepared by the Staffs of the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation* (August 2011) at 193-94.

Although national discussion of the appropriate regulatory response would be appropriate, any such discussion should note that this is an area where regional differences should be taken into account as well. Some ISOs/RTOs operate in regions that have historically encouraged dual-fuel capability and believe that it is a proven, reasonably economical option. Other ISOs/RTOs operate in regions where increasing dual-fuel capability may be practically impossible for a host of environmental and land use reasons.

E. Creating New Reliability and Business Practice Standards

Commissioner LaFleur invited comments regarding the possible need for new reliability standards related to fuel supply.[9] Commissioner Moeller asked for input on the possibility of delegating new responsibilities to the North American Electric Reliability Corporation ("NERC") or North American Energy Standards Board ("NAESB").[10] The ISOs/RTOs are not aware of any immediate need for NERC or NAESB to take action related to gas-electric coordination. That is not to say that there may not be a role for NERC or NAESB in the future. National level technical conferences should consider whether there are areas where the development of new business practice standards or reliability standards, *e.g.,* regarding the adequacy of generator fuel supplies, would be helpful. To the extent that stakeholders and the Commission identify such needs NERC and NAESB should be directed to address them using their normal standards development procedures.

[9] *See* LaFleur Statement.

[10] *See* Moeller Request at 1.

II. Gas-Electric Coordination Issues that Should Principally Be Addressed at the Regional Level

A. Coordinating Gas and Electric Infrastructure Maintenance Schedules

As was noted above, LDCs and electric generators tend to experience peak natural gas loads in different seasons. This has the potential to create electric reliability issues to the extent that gas infrastructure outages are scheduled during peak electric demand periods in regions that are dependent on gas-fired generation. Some ISOs/RTOs have had to contact pipelines to request the re-scheduling of gas outages whose electric reliability implications had not previously been discussed. In other instances, ISOs/RTOs have successfully coordinated with pipelines, *e.g.*, to schedule gas infrastructure outages on weekends rather than weekdays (when electric loads are normally greater.) The ISOs/RTOs understand that recent changes in the federal laws and regulations governing pipeline maintenance and safety may reduce pipelines' flexibility to re-schedule outages in the future. The Commission should therefore encourage pipelines and electric system operators to discuss outage scheduling as often as necessary for effective coordination.

Because maintenance scheduling practices may differ from region-to-region this is a subject that likely does not warrant an in-depth national discussion. It should be sufficient for the Commission to direct individual regions to consider whether they need to make changes in this area and to develop improved outage-related communications and scheduling protocols to the extent necessary.

B. Coordinating Gas/Electric Scheduling and Market Timing

Commissioner Moeller encourages commenters to address the possibility that the Commission might act to more closely "harmonize" trading in natural gas and electricity markets.[11] Different regional electric systems, particularly those featuring independently-administered organized markets, have different requirements, procedures, and timetables for scheduling wholesale power transactions. The gas industry has its own scheduling, protocols, and conventions. These rule sets evolved over time to reflect the different needs of the gas and electric industries as well as individual ISO/RTO market designs. The Commission explored the possibility of closely coordinating the various scheduling rules five years ago.[12] In general, it concluded that there was little need for action at that time.

It could be beneficial to discuss inter-market scheduling and timing issues at national level technical conferences, although the costs versus benefits of different approaches in different regions versus a single nationwide approach needs to be weighed appropriately. To date, the Commission has not adopted a single, standardized electric market design and Commission policy clearly supports allowing for regional differences.

The Commission should therefore use any national level discussions as an opportunity for stakeholders, and the Commission itself, to learn more about how gas and electric scheduling systems interact in different regions. Better understanding of what is and is not working well would provide each region with potentially useful examples to consider or adopt as appropriate.

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[11] Moeller Request at 2.

[12] *California Independent System Operator, Inc., et al.* 120 FERC ¶ 61,206 (order terminating Section 206 proceedings for each Commission-jurisdictional ISO/RTO that had been initiated to examine "if additional procedures are needed to determine whether their scheduling and compensation mechanisms need to be revised to ensure that gas-fired generators can obtain gas when the gas-fired generation is necessary for reliability").

III. Specific Responses to Questions Raised by Commissioners Moeller and LaFleur

- ***"What role should have FERC have in overseeing better gas-electric coordination?"***
- ***"[C]oordination and communication between the gas and electric industry to maintain reliability during weather or outage events."***

The Commission has a substantial role to play in encouraging better communication and coordination between the gas and electric industries. The ISOs/RTOs recommend that the Commission begin by convening one or more national level technical conferences for the purposes discussed in Sections I and II above.

In particular, the Commission should focus on promoting better communication and coordination between the gas and electric industries outside of emergency situations. Emergency communication protocols have already been established under the auspices or Order No. 698 and appear to generally work well. There is more room for improvement, and presumably greater benefits to be achieved, in focusing on communications and coordination that could prevent emergencies from arising in the first place.

- ***What duties, if any, should be delegated to NERC, NAESB, or others?***
- ***[I]s there a need for new electric reliability standards, e.g., addressing fuel supply to support electric reliability?***

There does not appear to be any immediate need to delegate new duties to NERC, NAESB, or others or for NERC to be directed to develop new reliability standards on fuel supply or any other matter. This may change, however, as the discussions at national-level technical conferences proceed. To the extent that the conferences identify needs for new business practice or reliability standards, NAESB and NERC should be instructed to develop them in the normal way.

- ***To what extent should FERC defer to various regions in addressing these challenges?***

Through these comments, the ISOs/RTOs have attempted to propose an initial "sort" of which issues are deserving of national discussion and action versus those that should be left to regional solutions. Undoubtedly, this list may change as the discussion continues. But the ISOs/RTOs believe that it is time to initiate a public process for identifying, classifying, and acting upon gas-electric coordination issues.

Deferring to regional solutions when warranted does not mean that there would be no role for Commission to play. To the extent that a given issue is left for the regions to address, the Commission could direct them to report back on their progress, and to obtain any additional needed guidance. As was noted above, discussions of national issues may sometimes inform regional solutions. Conversely, learning more about regional approaches to common problems may enable the two industries and the Commission to identify best practices for all regions to consider.

- ***Should FERC view organized markets differently from bilateral (i.e., non-ISO/RTO markets)?***

As was discussed above, it seems possible that there will be relatively greater gains to be relieved from the development of innovative new pipeline services and rates in ISO/RTO regions. Organized markets provide the platforms and transparency that allow innovative supply services to be readily provided to the marketplace and award those entities that are able to capitalize on those opportunities to lower their bids and improve their generator availability. Participants in organized markets have greater flexibility, and more diverse opportunities, than was the case in the past. The Commission's gas rules have not evolved at the same pace. Especially as ISOs/RTOs consider whether there is a need for additional market enhancements to incentivize resources to take actions to ensure sufficient access to fuel supply there may be room for pipeline services to advance in ways that would provide greater flexibility to gas-fired generation and bring other benefits to both gas and electric markets.

- ***If regional deference is given, what role should FERC play to assure that regional agreements are adhered to?***

To the extent that the development of Commission-jurisdictional regional agreements is ultimately permitted or required, the Commission should play its traditional role. That is, it should review filings and accept (and enforce) those that it concludes satisfy the requirements of the Federal Power Act.

- ***The expanded use of natural gas for electricity generation is likely to change flows on the natural gas pipeline system. Does FERC need to address this issue?***

As discussed above, the ISOs/RTOs propose that the Commission should conduct or sponsor a study to examine the likely impacts on pipeline flows and their reliability and market consequences. The Commission is uniquely situated and qualified to undertake such a study and doing so would provide valuable information to market participants and system planners alike.

- ***Within each day, electricity trading differs significantly from gas trading. Similarly, on a day-to-day basis, the various gas markets may not be open on the same days as the corresponding electricity market, especially over Saturdays, Sundays, and Holidays. How should FERC help to harmonize these markets?***

Although this issue has been explored in the past, the ISOs/RTOs believe that an updated examination could be productive. There should not be a "going-in" conclusion on this issue let alone any pre-judgment as to whether national or regional changes are required. The Commission should instead explore the issue to gain a better understanding of what is and isn't working in different regions. Individual regions could then make changes to adopt successful approaches from others, provided that the benefits of doing so outweighed the costs in that region.

- ***What will be the impact of the expected retirements of coal and oil-fired generation on the need for gas and electricity coordination?***

The impacts are likely to vary from region to region. In some, the immediate impact may be very substantial. Even regions that are relatively less dependent on coal or oil today will likely have less fuel diversity in the future. Less fuel diversity will likely result in a greater need for gas-electric coordination and in greater price volatility in wholesale electricity markets driven by greater dependency on a single fuel source. In addition, it is possible that the manner, frequency, and timing with which regions look to natural gas for electricity generation may change even though the total amount of gas burned remains roughly unchanged. A national study, conducted or sponsored by the Commission, may help all stakeholder gain a better sense of what impacts retirements are likely to have.

- ***To what extent should FERC consider modifying its existing Standards of Conduct with regulated utilities-either on an emergency basis or in a more fundamental manner-to assure greater coordination of these industries?***

As discussed above, the Commission should use the proposed national technical conferences to explore whether the standards of conduct have, or are likely to have, an unintended chilling effect on legitimate reliability-related communications between the gas and electric industries. If problems are identified the Commission could then consider what remedies would be most appropriate.

- ***Will progress on this issue be faster if policies are addressed in several "baskets", such as communication, operation, contracting, and planning/contingency analysis? If so, what are the appropriate "baskets"?***

It would be advisable to distinguish between issues that need near-term attention and those that do not. It would be useful to ensure that any “basket” of issues accommodate discussion of communication, coordination, and long-term infrastructure issues.

- ***Should there be "[n]ew pipeline and storage service and pricing structures that might better meet the emerging needs of generators........ " or new "[s]cheduling protocols for gas pipelines and electric generation facilities."***

The Commission should explore new pipeline and storage service and pricing structures at the national level technical conferences proposed above. The ISOs/RTOs are not aware of any immediate national need for new or revised gas or electric communications (or scheduling) protocols but is open to discussing the issue at the proposed national technical conferences.

- ***"[H]ow we can improve the Commission's work on pipeline and storage infrastructure to ensure that the gas infrastructure is in place to support the nation's growing reliance on gas for generation.***

The Commission’s initial focus should be on fostering better communication and coordination including maintenance scheduling, long-term planning and infrastructure needs. Developing new gas pipeline services and rates could also result in existing gas infrastructure being used with greater efficiency during peak electric demand periods. Increased flexibility could reduce the need for new gas infrastructure to support the nation’s expected growing reliance on gas for generation. The Commission could also consider whether policy changes are needed to encourage the creation of new gas infrastructure.

IV. Conclusion

The ISOs/RTOs respectfully request that the Commission accept the recommendations set forth in these comments.

Respectfully Submitted,

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