ISO/RTO Gas-Electric follow-up questions:

**1. Many ISO/RTOs have ongoing stakeholder processes looking at various issues associated with gas-electric coordination issues. What are the specific recommendations emerging that can be implemented quickly (e.g., by January 2014), for example, without requiring expensive and time-consuming software changes, while stakeholders are evaluating longer-term solutions? Please explain whether these require tariff changes.**

*The primary stakeholder group in the ERCOT region that looks at gas-electric coordination issues is the Texas Energy Reliability Council (TERC), which is facilitated by the Texas Railroad Commission (RRC). Participants in this forum include Texas pipelines, gas distributors, gas producers, electric generators and ERCOT. TERC meets at least twice annually in addition to conference calls when there may be widespread gas supply challenges.*

*Presently, there are no specific recommendations for changes in short or long term gas–electric coordination procedures in the ERCOT region that are being discussed or endorsed by TERC.*

**2. Some of the challenges associated with gas-electric coordination occur when gas-fired generators are asked to obtain gas supply and pipeline transportation capacity, or additional gas supply and pipeline transportation capacity, on short notice or outside of the normal day-ahead nomination cycles. Is your ISO/RTO exploring ways to improve the day-ahead scheduling process to better reflect the expected real-time generation requirements? Are there “best practices” in this area that each ISO/RTO should be considering? ISO-NE recently implemented changes to its day-ahead schedule to better align the gas and electric trading days. Is your ISO/RTO considering similar modification for bidding and clearing in the day-ahead market?**

*Generators in the ERCOT region are required to provide their Current Operating Plans (COPs) for their generating units to ERCOT for a prospective seven day period. COPs can be changed at any time before the operating hour.*

*ERCOT executes its Day-ahead Reliability Unit Commitment (DRUC) to commit additional units for the next day if needed to maintain reliability based on COPs effective at 2:30 pm CPT. This occurs, after the ERCOT Day-ahead Market has cleared. Any DRUC commitments are communicated to the generators by 4:00 pm CPT. ERCOT also executes Hourly Reliability Unit Commitments (HRUC) for the remaining hours of the current day and next day. The purpose of the HRUC process is to procure resources necessary to address system changes that occur after the DRUC process. DRUC and HRUC processes utilize software that selects units on an economic basis relative to the system need (e.g. congestion relief or capacity). ERCOT ensures that units selected in DRUC or HRUC processes are able to meet the obligations by checking the COPs for those units. Regardless of the obligation (e.g. Day-Ahead, DRUC or HRUC), resources are responsible for managing the risk associated with those positions, including obtaining adequate gas supply.*

*In the ERCOT region the timing of the DA market and subsequent reliability commitment processes relative to the timing of the relevant gas markets has not presented operational problems related to the inability of generators to obtain gas supplies or pipeline capacity to meet their electric market obligations. This is arguably attributable to the abundant gas supply and pipeline capacity in the ERCOT region[[1]](#footnote-1) and the ability of generators to change their offer curves to reflect any increased costs of gas that may result from having to obtain it on short notice.*

*Since no significant problems exist in this regard, ERCOT is not considering changes to its day-ahead and reliability commitment processes.*

**3. What are the specific concerns that your region has for this coming winter? Are there specific actions the Commission can take to help address those concerns?**

*ERCOT will issue a preliminary Seasonal Assessment of Resource Adequacy (SARA) on September 1st and a final SARA on November 1st. These assessments will identify any resource adequacy concerns for the coming winter. In addition, TERC is expected to facilitate a conference call of its members in the October/November timeframe to discuss any gas supply or pipeline concerns. However, at this time ERCOT is not aware of any concerns, generally or specifically related to electric-gas issues.*

**4. There has been some discussion about shifting the start of the gas operating day ahead of the electric morning ramp. Would such a change improve gas-electric coordination in your region?**

*As discussed in response to question 2, electric-gas coordination matters have not presented operational issues in the ERCOT region. Again, given current gas supply and pipeline capacity in ERCOT, such a change is not needed in the region at this time. However, ERCOT will continue to monitor the electric-gas issues in all relevant forums and in concert with all relevant market participants and regulators to assess the impact of prospective market changes – e.g. demand changes and changes in gas supply or pipeline capacity.*

**5. Are gas system contingencies included in your ISO/RTO system planning? If so, what are they, how were they selected and how often are they updated?**

*Gas system contingencies are not currently reflected in the ERCOT planning procedures. However, the 2014 ERCOT budget includes funds to develop a model that would allow ERCOT to identify single points of failure on the gas supply system that would remove multiple generation resources from service. This information will be used in ERCOT planning analysis in accordance with NERC TPL standards. A secondary objective will be to identify the probability of occurrence for common mode gas supply system interruptions in order to quantify the risk to the ERCOT system.*

**6. What specific steps is your region taking to improve situational awareness of local conditions, such as planned or unplanned maintenance of natural gas pipelines? Are these steps on track to be implemented before the next winter heating season? What actions should the Commission consider taking to facilitate improvements in this area?**

*Generators are required to notify ERCOT of any fuel limitations that suppliers have indicated may limit the availability of their generating units. This includes planned or unplanned maintenance of pipelines. These limits are considered by ERCOT in the DRUC and HRUC processes, which, as discussed above, are reliability unit commitment processes conducted after the day-ahead market closes to ensure electric supply adequacy. Additionally, TERC’s pre-winter conference call will also discuss any planned pipeline maintenance that might have an effect on gas supply. We believe these provisions provide ERCOT with a sufficient level of situational awareness of with respect to how gas pipeline outages may impact generation resource availability.*

1. ERCOT commissioned Black & Veatch to prepare a report on electric-gas issues in the ERCOT region. As noted in ERCOT comments filed in this docket, that report determined that a significant percentage of gas-fired generation in ERCOT has gas supply and pipeline capacity in excess of its peak obligations. [↑](#footnote-ref-1)