PUCT PROJECT NO. 53298

WHOLESALE ELECTRIC MARKET DESIGN IMPLEMENTATION	**§** **§**	**PUBLIC UTILITY COMMISSION OF TEXAS**

JOINT COMMENTS ON ATTRIBUTES REQUIRED FOR RESOURCE ELIGIBILITY TO PROVIDE FIRM FUEL SUPPLY SERVICE

NRG Energy, Inc. ("NRG"), Calpine Corporation ("Calpine"), and Kinder Morgan, Inc. ("KM"), (collectively "Joint Commenters") appreciate the opportunity to comment on questions posed by Public Utility Commission of Texas ("PUCT" or "Commission") staff regarding the Firm Fuel Supply Service ("FFSS") that the Electric Reliability Council of Texas ("ERCOT") has proposed to create in nodal protocol revision request ("NPRR") 1120. Specifically, by this filing, Joint Commenters respond to Commission staff's Question No. 4: "What attributes should be required for a resource to be eligible to provide FFSS?" To that end, off-site gas storage capability with firm delivery to a generation resource should be an eligible source of FFSS and included in the procurement of FFSS this fall as part of NPRR 1120. Off-site gas storage capability with firm delivery currently exists throughout the ERCOT region. Joint Commenters believe that there is available off-site gas storage capacity at these existing facilities that generation resources can quickly access, without the time and expense of refurbishing dual fuel capability, constructing onsite storage facilities, or pursuing the necessary environmental permits. Therefore, off-site gas storage with firm delivery is the most cost-effective, readily available, and environmentally feasible way to firm up fuel supply for dispatchable generation resources in ERCOT. Discussions with gas partners such as KM, as well as operational experience with off-site storage deliveries, have led NRG and Calpine to feel confident that they could quickly arrange for additional off-site gas storage capability to increase fuel resiliency in the timeframe proposed by ERCOT for procurement ahead of the 2022-2023 winter.

The PUCT and ERCOT intend for FFSS to provide "additional grid reliability and resiliency during extreme cold weather and compensate[] generation resources that meet a higher resiliency standard."[1] Joint Commenters believe that off-site gas storage with firm delivery to a

[1] NPRR 1120 at 1 (Jan. 31, 2022).

generation resource can achieve that purpose and improve fuel resiliency for resource entities' natural gas-fired generation, provided it meets the following five criteria.

Firm Gas Storage and Withdrawal Contract

First, in order for its contracted firm natural gas delivery from off-site storage to qualify as FFSS, the resource entity should be required to have a firm gas storage contract, with gas injection and withdrawal rights for a volume of gas that supports the amount of generation awarded in response to an ERCOT Request for Proposal ("RFP") for FFSS or offered in support of a bid to provide the FFSS ancillary service. The resource entity would not be required to use the full quantity at all times, but would pay for the storage capacity and withdrawal rights to be available when it nominates a volume of gas up to its maximum daily quantity, thereby making the storage contract "firm."

Firm Gas Transportation Contract

Second, the resource entity should be required to have a firm gas transportation contract from the storage facility to the generation resource for the volume of gas that supports the amount of generation awarded in response to the RFP or offered in support of a bid to provide the ancillary service.

Weatherized Pipelines and Gas Storage Facilities

Third, the eligible gas pipeline and off-site gas storage facilities should be required to be weatherized. Gas pipeline and off-site storage facilities already enjoy a key "weather hardening" feature — they are primarily underground. It is standard industry practices for pipelines to be underground for safety reasons, and off-site gas storage facilities utilize naturally occurring underground caverns and depleted oil and gas wells. Since Winter Storm Uri, pipeline companies have made targeted investments to weather-harden any above-ground gas storage withdrawal facilities, as well as gas compression facilities, based on prior operating experience in cold weather.

Critical Gas Facilities Designations

Fourth, off-site gas storage and the corresponding pipeline facilities should be required to be designated as "Critical Gas Suppliers" and "Critical Customers," in accordance with Railroad Commission of Texas Rule 3.65.[2] Rule 3.65 works in harmony with the PUCT's substantive rule § 25.52(h)[3] to ensure that critical gas facilities are given priority in the event of any load shed event during an energy emergency. Operators that notify ERCOT of the resource's status are prioritized during any energy emergency load shed event. In addition, the PUCT has recently prioritized electric service to pipelines that directly provide natural gas to natural gas fired electric generation, underground natural gas transportation and storage facilities, and associated pipelines, compressor stations, and control centers, as Tier 1-A facilities in its guidance to utilities for developing and implementing their emergency power delivery and power restoration plans.[4]

Verification

Fifth, as part of the response to ERCOT's RFP for FFSS, the resource entity should be required to provide a sworn affidavit attesting to compliance with these criteria in a manner that supports the amount of capacity of FFSS the generator proposes to offer. The Commission already has the necessary enforcement authority to make this a meaningful attestation.[5] NPRR 1120 also provides for claw back of the Standby Fees, and potential decertification as an FFSS resource for those FFSS resources that fail to come on-line during an FFSS deployment.[6] This provides ERCOT with the means to penalize non-performance.

Finally, it is worth noting that forthcoming Railroad Commission reforms will enhance the reliability of gas delivery to electric generation. The Railroad Commission is currently proposing

---

[2] 16 Tex. Admin. Code § 3.65 ("TAC") (defining "Critical Gas Supplier" to include "natural gas pipelines and pipeline facilities including associated compressor stations and control centers" and "underground natural gas storage facilities," and "Critical Customer" as "a critical gas supplier for whom the delivery of electricity from an electric entity is essential to the ability of such gas supplier to operate.").

[3] 16 TAC § 25.52(h).

[4] *Critical Natural Gas Facilities and Entities*, Project No. 52345, Guidance Document for Power Delivery and Restoration During Energy Emergencies (Jan. 14, 2022).

[5] A market participant's bids of energy and ancillary services must be "available and capable of performing." 16 TAC § 25.503(f)(6). A market participant must "submit accurate and factual information" and is prohibited from submitting "false or misleading information" and from omitting material information in any communication with ERCOT or the Commission. *Id.* at § 25.503(f)(8). And the commission's existing enforcement authority provides a significant disincentive for a generator to misrepresent the commercial and operational arrangements it has made to support its proposed offer of FFSS ancillary services.

6 NPRR 1120 at 16-17 (ERCOT Nodal Protocol Section 8.1.1.2.1.7(5)-(9)).

to amend its Rule 7.455 and repeal its Rule 7.305 in order to elevate *all* gas-fired generation resources (not just generation that serves human needs customers) to the second highest tier of gas curtailment priority. By elevating the priority of firm gas deliveries to electric generation resources, the Railroad Commission's rule amendments will add a significant reliability backstop to firm gas delivery contracts with electric generation resources, which should give the Commission and ERCOT greater comfort that firm natural gas delivery from off-site storage will be available as a significant portion of the fuel source for the FFSS.

Conclusion

Natural gas delivery from off-site storage represents the most efficient way to create significant and cost effective FFSS capabilities for Texans, particularly given the abundance of existing off-site natural gas storage and delivery facilities in Texas, the ease with which generation resources have access to the storage and delivery facilities, and the avoided cost of lengthy permitting and retrofitting of existing generation to provide alternative sources of FFSS such as dual fuel and onsite storage. Moreover, the capital improvements to off-site gas storage and delivery facilities incentivized by inclusion in the FFSS would have the ancillary benefit of enhancing the gas deliverability system as a whole, including non-FFSS generators and local gas delivery companies. These capabilities would support reliability across the energy delivery chain, lessening the toll of future weather-induced emergencies. Accordingly, Joint Commenters respectfully request that generation resources with contracts for firm off-site natural gas storage with firm delivery service qualify to provide FFSS.

Respectfully submitted,

Bill Barnes

Bill Barnes
Sr. Dir. Regulatory Affairs
NRG Energy, Inc.
1005 Congress Avenue, Suite 950
Austin, Texas 78701
Telephone: (512) 691-6137
bill.barnes@nrg.com

ON BEHALF OF JOINT COMMENTERS

PUCT PROJECT NO. 53298

WHOLESALE ELECTRIC MARKET DESIGN IMPLEMENTATION	**§** **§**	**PUBLIC UTILITY COMMISSION OF TEXAS**

EXECUTIVE SUMMARY OF JOINT COMMENTS ON ATTRIBUTES REQUIRED FOR RESOURCE ELIGIBILITY TO PROVIDE FIRM FUEL SUPPLY SERVICE

Joint Commenters NRG Energy, Inc., Calpine Corporation, and Kinder Morgan, Inc. respond to Public Utility Commission of Texas staff's questions regarding the Firm Fuel Supply Service ("FFSS") that the Electric Reliability Council of Texas ("ERCOT") has proposed to create in nodal protocol revision request ("NPRR") 1120, specifically Question No. 4: "What attributes should be required for a resource to be eligible to provide FFSS?" NPRR 1120 should be amended to include contracts that provide for firm off-site natural gas storage and transportation as a firm "fuel supply arrangement." Off-site gas storage with firm delivery is the most cost-effective, readily available, and environmentally feasible way to firm up fuel supply for generation resources in ERCOT. Such contracts should be eligible to provide FFSS if they meet the following five criteria:

- First, the resource entity should be required to have a firm gas storage contract, with gas injection and withdrawal rights for a volume of gas that supports the amount of generation awarded in response to an ERCOT Request for Proposal ("RFP") for FFSS or offered in support of a bid to provide the FFSS ancillary service.

- Second, the resource entity should be required to have a firm gas transportation contract from storage to the generation resource for the volume of gas that supports the amount of generation awarded in response to the RFP or offered in support of a bid to provide the ancillary service.

- Third, gas pipeline and off-site storage facilities must be weatherized.

- Fourth, off-site gas storage and pipeline facilities should be required to be designated as "Critical Gas Suppliers" and "Critical Customers," in accordance with Railroad Commission of Texas Rule 3.65.

- Fifth, the resource entity should be required to provide a sworn affidavit attesting to compliance with these criteria in a manner that supports the capacity amount of FFSS the generator proposes to offer.