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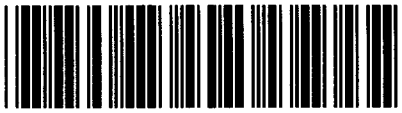

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PROJECT NO. 40000

PROCEEDING TO ENSURE RESOURCE ADEQUACY IN TEXAS	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

REPLY COMMENTS OF THE ERCOT RELIABILITY ADVOCATES FOR THE SEPTEMBER 6, 2012 COMMISSION WORKSHOP

The ERCOT Reliability Advocates include Calpine Corporation ("Calpine"), Exelon Generation Company, LLC ("Exelon") and NextEra Energy Resources, LLC ("NextEra") (collectively, the "Advocates"). We submit the following reply comments in response to the Public Utility Commission of Texas' ("Commission") request for comments on the policy options discussed at the September 6, 2012 workshop (the "Workshop).

The Advocates continue to strongly believe that the Commission must (1) set a planning reserve margin requirement and (2) order the implementation of a centralized forward capacity market based on the framework proposed in the Advocates' Initial Comments – the Forward Reliability Mechanism ("FRM").[1] The other options identified have attributes that may make them appealing on the surface, but they are flawed in varying ways and will not, in the end, resolve the looming resource adequacy issue. Only Option 5-based FRM will provide the transparency and stability needed to attract new investments in reliability resources at the least cost to consumers.

The purpose of these Reply Comments is to: (1) address comments made during the Workshop on the Policy Options, (2) to reiterate our support for the Commission to adopt the Advocates' Option 5-based FRM, and (3) provide a recommended path to adopt and efficiently implement the FRM.

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[1] *See* Appendix

3/11

I. Observations from the Workshop

Most of the Workshop discussion centered on Options 2, 3, and 5, so our comments focus on these three options (like most market observers, we consider Option 1 to be inadequate and Option 4 to be untenable). The Advocates believe that there are three key requirements against which the Options should be measured:

1. Will the option produce the necessary (13.75%) reliability level?

2. Is the Option economically efficient?

3. Will the Option mitigate investor regulatory risks?

Brattle recently provided a very good updated assessment of the Options discussed at the workshop[2], which considered these three requirements as well as several others. Based on the latest Brattle assessment, Options 2 and 3 are economically inefficient and are less likely than Option 5 to assure reliability or improve investor confidence.

1. Option 2 – Energy-Only with an Administrative Withholding thru Operating Reserves

Option 2 holds appeal to some because it builds on the existing market and can be quickly implemented. Consistency and simplicity, however, are not enough for the Advocates to recommend the Commission to support and adopt Option 2. By all estimates, Option 2 will not significantly increase the planning reserve margin. To this point, Brattle rates Option 2's Reliability as "Uncertain." Option 2, according to Brattle, also carries "...very high regulatory risk (from investor perspective) [that] may affect investment". Lastly, Brattle rates Investor Risks as "Very High" - the Advocates strongly agree. This Option will create a significant investment

[2] Brattle Group Follow-up/Updated Summary Table to Resource Adequacy Proposals Discussed at the September 6, 2012 Workshop (Sept. 11, 2012).

hurdle for developers. Further, this option, like Option 1, provides neither the predictability nor the sustainability needed when making investment decisions. Put simply, Option 2 will not support the investments required to maintain a planning reserve margin and assure reliability.

Brattle also expressed concern about Option 2's short and long-term viability. Brattle correctly states that "if investor risk is prohibitively high and the target reserve margin is not achieved, there is no time to implement Options 4 or 5" - the Advocates could not agree more. Texas's continued economic growth is not worth risking by implementing an untested option that has been described by Brattle as "operationally inefficient"

2. Option 3 – Energy- Only, plus Capacity Procurement (Backstop)

Option 3 has been divided into two variations. In the first variation, the capacity backstop procurement only would include Demand Response ("DR"), and the second would include both DR and new generation capacity. Brattle rightfully rates the Investor Risk as "High" and "Very High", respectively. In other words, incremental investments in DR and/or generation are unlikely.

An increase in price responsive DR penetration is important to the Commission – the Advocates support this goal. DR is an important component in ERCOT's resource mix. However, relying on only DR as a backstop is risky. Brattle correctly identified that there may not be enough price responsive DR in ERCOT to satisfy future resource adequacy needs and that price reversals caused by DR deployments could actually deter future resource investments. While the advancement of loads in SCED will help bring some price responsive DR to the market, it will not be enough to keep up with ERCOT's continued robust load growth.

Further, an increase in capacity-based products only for load creates market distortions by offering products to one subset of the market, not dissimilar to a technology specific subsidy.

The second variation of using DR and only new generation as a backstop is equally problematic. Brattle correctly identifies that a program that procures and withholds only new generation is "operationally inefficient," and will ultimately lead to stranded investments. Further, new in-market developers will be reluctant to invest when market prices are being distorted by regulators procuring and essentially financing generation through a backstop. In the end this practice could lead to wide spread mothballing of generation which would have a snowball effect of out of market RMR contracts and a reliance on consumer backed generation. Brattle has highlighted the dangers of backstop mechanisms like those offered in the Tenaska and Occidental proposals:

> Creation of such targeted backstop measures to assure reliability and prevent the retirement of power plants to maintain reliability are often attractive initially. The measures can avoid the severe price spikes that would otherwise need to occur in energy-only markets to attract investments. By limiting additional capacity-like payments to only a few power plants, the measures also appear to be a less expensive solution than other options, such as system-wide capacity payments. The disadvantage of such backstop measures, however, is that they suppress market prices, which increases retirements of other existing plants, reduces the entry of new plants, and undermines or delays development of demand-response measures. These distortions grow over time and the need for backstop payments increases quickly as more existing resources retire and the development of new supply and demand side resources is delayed. Left in place over a number of years, these distortions decrease system efficiency, making it more difficult and expensive to eliminate the market distortions and transition to market-based solutions. Furthermore, such out-of-market solutions can be more costly even in the short-term; for example, system operators may opt to rely on RMR contracts with old generating units even in cases when a move toward demand response might have been a more cost effective alternative[3].

Brattle also concluded in the Workshop that Option 3 would be the least desired outcome of any of the policy options. In addition, the IMM offers only qualified support for a DR-only

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[3] See *A Comparison of PJM's RPM with Alternative Energy and Capacity Market Designs*, at p. 31. (Sept. 2009), *available at* http://www.brattle.com/_documents/UploadLibrary/Upload807.pdf.

backstop procurement, recognizing the limitations of a reserve target, discrimination and Brattle's concern whether sufficient DR will come to the market. The Advocates agree with Brattle's conclusion and the concerns highlighted by the IMM.

3. Option 5 – Energy Market plus Centralized Capacity Market

The Advocates believe maintaining an expected level of reliability through a required planning reserve margin is critical to the continued economic growth in the state. Option 5 is the best companion market mechanism to that requirement. According to Brattle, it is almost as economically efficient as an energy-only design and has the lowest Investor Risk rating of all the options.

In addition, Option 5 offers ERCOT the ability to procure needed forward capacity based on a reserve margin requirement, which, importantly, supports a robust retail market. The inherent competition of an auction and the transparency that comes from a well-designed forward market make it the best option for generation and load. It allows ERCOT to procure the supply needed (which includes generation, energy efficiency and demand response) at the lowest cost to consumers.

On the contrary, Option 4 cannot be designed with enough of a forward procurement to incent investment without effectively re-regulating the retail market and does not offer the transparency that guarantees that consumers are getting supply at the lowest competitive cost. Option 4's tenor of only one year does not solve the forward signal needed for investment. Conversely, requiring a bilateral requirement beyond one year to send a forward signal is detrimental to retail suppliers.

Further, Option 5 is the most flexible alternative. Brattle describes Option 5 as an "efficient and effective way to maintain the reserve margin requirement, even with challenging environmental regulations and as market conditions change". No one anticipated the impact of

advanced drilling and extraction technologies on natural gas prices and no one can predict the future of environmental regulations or other influencers on market conditions. Option 5 is the most adaptable and will maintain the expected level of reliability under all future scenarios, including changes in natural gas price, environmental regulations and technology changes. PJM has proved that an Option 5-style solution will bring new capacity to the market. PJM experienced a net increase in installed capacity of over 26 GW since 2007.[4]

Questions have been raised about Option 5's implementation complexity and cost. During the Workshop Brattle and the IMM correctly identified that the other options may not work and that the repercussion of then moving to Option 5 would be significant. Project implementation complexity and costs are considerations, but the Advocates assert that the certainty of effectiveness make Option 5 the best choice to ensure ERCOT's long-term resource adequacy at the lowest cost to consumers.

II. Option 5 Next Steps and Implementation

The Advocates believe the Commission must first mandate the planning reserve margin at some minimum level based on a comprehensive study by ERCOT Planning. Also, the Commission should direct ERCOT to continue its work on determining the appropriate planning reserve margin to maintain the one year in ten loss of load standard.

Texans expect and deserve a stable, reliable electric grid. Our continued growth and prosperity depend on it. The Advocates believe that Option 5, specifically the previously-outlined FRM proposal, is the only mechanism that will guarantee the desired result. The Advocates believe the FRM leverages those lessons learned from other markets and that it should be used as a starting point for the Commission.

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[4] See Initial Comments of the ERCOT Reliability Advocates at 7 (Aug. 30, 2012).

From there, the Advocates believe that the Commission should develop a very detailed, prescriptive capacity market framework which would streamline protocol development process. Further, once the protocols and rules are developed, the initial auctions could be performed using a simplified method. Therefore, initial and transitional auctions could be performed as ERCOT systems are being designed and built. The Advocates agree with Dan Jones, ERCOT IMM, who commented during the Workshop that the ERCOT systems needed for a centralized capacity market could be implemented as early as the summer of 2014.

Summary

The Commission should adopt a mandatory ERCOT annual planning reserve margin requirement, and should create a competitive market solution, in the form of the Option 5-based on FRM, to adequately meet the reserve requirement. Further, once protocols and rules are developed, the initial auctions could be performed using already available spreadsheet applications in advance of ERCOT's system upgrades.

Respectfully submitted,

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Appendix

Forward Reliability Mechanism

1. FRM Auction:
    - 3 to 5-years ahead, ERCOT will administer a competitive auction to secure enough capacity commitments from eligible resources to satisfy the ERCOT-determined reserve margin on a system-wide and local basis.
    - Generation and demand side resources, both new and existing, are eligible to submit offers to become committed capacity resources.
        - All committed capacity resources are subject to the same performance requirements, with similar penalties for non-performance.
        - All committed capacity resources have "must offer" obligation into ERCOT real time markets.
    - LSE's are required to participate in the FRM auction unless they qualify to opt-out through a "self-supply" mechanism.
    - Demand bids will be developed administratively by ERCOT based on net Cost of New Entry (Net CONE) for a Combustion Turbine.
        - Net CONE is the annualized capital cost of a CT, less "peaker net margin".
    - ERCOT will "clear" the market where the supply and demand curves intersect.
        - Load zones with binding transmission constraints will be cleared separately, from the rest of the market in order to provide a locational price signal.
2. Commitment Periods:
    - Resources would commit to provide capacity for at least one-year; however, the Commission also should examine acquiring a certain percentage of resources with 3-5 year commitments.
3. Annual reconfiguration auctions:
    - Conducted each year to allow participants to manage their position to deal with changes in resource availability.
4. Costs and payments:
    - Costs allocated to LSE's based on their share of coincident peak (net of self-supply.)
5. Market power mitigation:
    - Supply-side
        - Offers will be capped at some level to the extent the capacity market as a whole, or in specific load zones, does not pass the "3 pivotal supplier" test.
    - Demand-side
        - Offer floors for any new subsidized supply resource (e.g. a resource with a long-term PPA resulting from a discriminatory auction process.)
6. Transition: Full-implementation of the 3 to 5-year forward FRM auction would be preceded by transitional 1-year and/or 2-year forward "Transitional FRM Auctions".