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TEXAS ENERGY ASSOCIATION FOR MARKETERS'
INITIAL COMMENTS

The Texas Energy Association for Marketers (TEAM)¹ files its Initial Comments in this project regarding policy options on resource adequacy. These comments are made in response to the Notice of Workshop filed on June 27, 2012 and are limited to the topics identified in that notice.

I. Introduction

The ERCOT energy-only market has operated successfully in attracting participants to the competitive retail and generation segments for more than a decade during which there have been periodic concerns about future resource adequacy. While the Brattle Group Study² raises significant concerns that there will not be adequate generation supply of electricity to meet demand in coming years, any policy response to the study should be implemented cautiously and with careful study to maintain the ERCOT market's stability and credibility necessary to continue to attract investment. To address resource adequacy challenges, all policy options must be fully considered and the impacts of market adjustments must be comprehensively analyzed to provide some certainty that they will result in realized resource adequacy and to assess their full costs to the market.

Fundamentally, the concept of resource adequacy must be objectively defined so that the projected results of adopting any policy option can be quantified. While it is proper to consider

¹ The members of TEAM participating in this proceeding are: Accent Energy; Amigo Energy; Bounce Energy; Cirro Energy; DPI Energy (d/b/a Truesmart); Hudson Energy Services; Just Energy; Stream Energy; Tara Energy Inc.; and TriEagle Energy.

² *ERCOT Investment Incentives and Resource Adequacy*, The Brattle Group (June 1, 2012) (Brattle Group Study).

impacts to generator revenues as a means of incentivizing new or expanded generation capacity as has been done in Project Nos. 37897 and 40268, these impacts cannot be focused upon in isolation. There is inherent tension between policies encouraging competitive markets where prices are set efficiently and policies designed to provide one segment of the market with bolstered revenues. As demonstrated in Chairman Nelson's June 27, 2012 memorandum, retail electricity prices in the competitive areas of ERCOT have fallen dramatically since the restructuring of the market. While low natural gas commodity prices have been a significant factor in this reduction, the Commission's policies of favoring competitive pricing by generators and retail electric providers (REPs), encouraging energy efficiency, the development of fuel-efficient generation to replace older, less efficient units, and the transition from the zonal to nodal ERCOT market also must be given significant credit for the lower prices enjoyed by Texans in competitive areas.

The policy of achieving a set level of resource adequacy – whether defined as the maintenance of a specific reserve margin or otherwise – must be inclusive of all segments of the ERCOT market. As demand in ERCOT increases more rapidly than generation capacity is able to respond, demand response must increase as a component of resource adequacy. The Brattle Group Study correctly states that sufficient demand response penetration is likely years away, the same is true of new generation. Further, the low electricity prices resulting from the implementation of competition and the Commission's policies should not be made collateral damage of a resource adequacy policy unless there is no alternative to raising prices. Resource adequacy should be achieved through an analytical and methodological process, relying on the strengths of the ERCOT competitive market when possible. Based on the Commission's notice, these comments are limited to the issue surrounding the appropriate reserve margin level.

II. Long-term Reliability Objectives for ERCOT

The Brattle Group Study recommended consideration of these questions relevant to determining the fundamental design objectives of resource adequacy in the ERCOT market:

- 1. Is the current 1-event-in-10-years (1-in-10) reliability standard yielding the appropriate and efficient resource adequacy target around which to design the ERCOT wholesale power market?**

The Brattle Group Study is critical of this standard, noting that it is generally not given a specific justification and is not required by NERC guidelines.³ Additionally, the standard is not consistently applied throughout the electricity industry.⁴ In SPP, for example, the standard is defined to mean one day of outages due to resource shortfalls every ten years whereas in ERCOT it is defined as one outage per ten years. It would be helpful to compare the reliability standards of the NERC assessment areas on an “apples-to-apples” basis, using the same 1-in-10 definition. For example, by comparison to ERCOT’s anticipated 2012 Summer Reserve Margin of 13.5%, the neighboring Southwest Power Pool (SPP) and SERC Reliability Corporation West (SERC-W) have anticipated margins of 22.7% and 44.0% respectively.⁵ The 22.7% projected summer 2012 SPP reserve margin would scale to 15.7% using the same proportionate reduction resulting from a change from the one loss of load event (LOLE) event in ten years to one day of LOLE per ten years standard in the analysis referenced by the Brattle Group Study.⁶ This would indicate that ERCOT’s reserve margin does not lag SPP’s as significantly as indicated by the 2012 NERC Short-Range Adequacy Report, though the analysis does note that “most” resource adequacy planners use the one event in 10 years standard, suggesting that the reserve margins in many NERC assessment areas are directly comparable to ERCOT’s and in most areas the reserve margins are significantly larger.⁷

The one event in 10 years standard may overstate the value of maintaining strict reserve margins as the costs of doing so could be in the billions of dollars while producing results of only a few minutes less lost load for most customers, particularly when considering that customers experience far longer periods of lost load due to distribution outages unrelated to resource adequacy.⁸ It is certainly a valid and important exercise to determine precisely the amount of load shedding that is likely to occur from relaxed reserve margin standards, but such analysis cannot be purely economic. A market design that allows reliability-related outages with some

³ Brattle Group Study at 100-102.

⁴ *Id.*

⁵ North American Electric Reliability Corporation 2012 Summer Reliability Assessment, May 2012 at 1.

⁶ Brattle Group Study at 101 citing *The Economics of Resource Adequacy Planning: Why Reserve Margins Are Not Just About Keeping the Lights On*, National Regulatory Research Institute (April, 2011). The analysis compares the two 1-in-10 standards for a 40,000 MW system. SPP’s projected summer peak load is 64,392 MW thus the proportionate difference in reserve margin needed to meet the 1-in-10 standards may differ.

⁷ *The Economics of Resource Adequacy Planning: Why Reserve Margins Are Not Just About Keeping the Lights On*, National Regulatory Research Institute (April, 2011) at 6.

⁸ *Id.* at 7.

frequency – even if only for brief periods – is likely to draw strong public criticism that may result in political pressure for market adjustments. Further, the occurrence of involuntary load shedding should be analyzed both on an average basis over a period of years with normalized weather conditions as well as for years with extreme weather such as 2011. More frequent and sustained outages in periods of weather emergency are the types of events most likely to draw calls for market intervention. Consequently, though a relaxed reserve margin requirement could make perfectly good economic policy on an analytic level, it might result in high market uncertainty that could discourage market participation and investment.

There are direct economic costs of a diminished reserve margin that must be considered as well. Recent ERCOT market adjustments have raised the costs of deployment of RRS and RUC to the offer cap.⁹ Additionally, the PBPC causes the offer cap to be reached immediately once the reserve margin is reached. A smaller margin will mean that the PBPC is triggered more frequently, resulting in an increase of price volatility. This in turn increases the risk avoidance costs of hedging products and other wholesale purchasing strategies that REPs and other LSEs use to moderate risk. Figure 24 of the Brattle Group Study demonstrates that even in non-scarcity intervals prices rise considerably as the reserve margin is reduced, with a generator realizing revenues of under \$40,000 per MW-year with a 13.5% reserve margin and revenues over \$60,000 with a reserve margin of 6.5%.¹⁰ Over time, bilateral contracts will reflect higher spot market prices and price volatility overall; a reduced reserve margin will result in higher prices for consumers.

2. Should regulators determine the reliability target, or should the reliability level be determined solely by market forces?

There is significant theoretical advantage to determining reliability levels based on market forces rather than administrative requirement because this should result in the absence of involuntary load shedding as sufficient load will shed voluntarily as its value of lost load (VOLL) is exceeded by the market price of electricity to bring supply and demand into balance. As noted by the Brattle Group Study, however, for this theory to be realized there must be significantly

⁹ See Nodal Protocol Revision Requests (NPRRs) 427 and 435.

¹⁰ Brattle Group Study at 61.

greater penetration of demand response in the ERCOT market.¹¹ The development of increased demand response should continue regardless of what resource adequacy policy is ultimately adopted by the Commission. If there is ever sufficient demand response participation, market-based reliability standards may need to be reconsidered. In the foreseeable future, however, the development of demand resources is too uncertain to move away from administrative reliability requirements.

Without sufficient demand response in the market a market-determined reserve margin will not be predictable and will vary significantly throughout the year as load increases in response to weather extremes and other factors. This unpredictable reserve margin will greatly increase uncertainty for investors and is unlikely to incent new generation investment, particularly given that ERCOT would be the only market without a mandated reliability standard¹² and thus present a uniquely risky investment environment. Uncertainty will drive up the cost of risk avoidance strategies such as hedging products and will make it more difficult to hedge correctly as shortage intervals will be less predictable as will the costs of exposure to the spot market during those intervals.

The frequency of load shedding and severe shortage events increases with lower planning reserve margins.¹³ Lack of a minimum reserve margin also creates regulatory uncertainty as the prospect of year-to-year volatility that could be severe with sustained periods of extreme weather such as in 2011 will raise likelihood of additional administrative market intervention if a diminished reserve margin results in politically intolerable forced load reductions. To avoid these consequences, a regulatory reserve margin should be maintained, whether using ERCOT's current 1-in-10 standard or by a different methodology.

III. Questions for the Brattle Group and Topics for Panel Discussion

TEAM offers the following questions and topics of discussion for the Brattle Group, ERCOT, and the Independent Market Monitor (IMM) at the July 27, 2012 workshop.

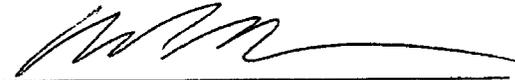
¹¹ Brattle Group Study at 103.

¹² Brattle Group Study at 103.

¹³ Brattle Group Study at 57.

1. Did the Brattle Group calculate what ERCOT's reserve margin would be using the SPP standard of 1 outage day per 10 years rather than one outage occurrence per 10 years?
 - a. If so, what is the ERCOT reserve margin using that standard?
2. Did the Brattle Group calculate what the reserve margins would be in other NERC assessment areas if ERCOT's 1-in-10 standard were used?
 - a. If so, what reserve margins would they achieve?

Respectfully submitted,



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