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PUBLIC UTILITY COMMISSION
OF TEXAS

GROUP OF COMPETITIVE TEXAS GENERATORS' RESPONSE TO PUBLIC UTILITY COMMISSION OF TEXAS' PUBLIC NOTICE OF WORKSHOP ON PROPOSED CHANGES TO P.U.C. SUBST.R.25.505, RESOURCE ADEQUACY IN THE ELECTRIC RELIABILITY COUNCIL OF TEXAS POWER REGION, AND P.U.C. SUBST. R. 25.504, WHOLESALE MARKET POWER IN THE ELECTRIC RELIABILITY COUNCIL OF TEXAS

Calpine Corporation; IPR-GDF SUEZ Energy North America, Inc.; Luminant Energy Company LLC; Luminant Generation Company; NextEra Energy Resources, LLC; and NRG Energy, Inc. (collectively, a "Group of Competitive Texas Generators" or "Group") submit these comments in response to the Public Utility Commission of Texas ("PUCT" or the "Commission") request for comments on proposed changes to PUCT Substantive rules 25.504 and 25.505, relating to wholesale market power and resource adequacy in the Electric Reliability Council of Texas (ERCOT).

I. MARKET BACKGROUND

ERCOT is currently facing three challenges to long-term grid reliability: (1) low reserve margins, (2) forward prices that do not incent new generation, and (3) a set of price-mitigation mechanisms that interfere with market pricing and thus act to reduce margins for needed existing generation and that inhibit new investment.

It is clearly understood that the ERCOT market needs wholesale prices that more accurately reflect prices required to attract new generation. Current economics indicate that rational investors would expect to realize over time a range of average on-peak (5x16) wholesale electricity prices from approximately \$60/megawatt-hour (MWh) to \$66/MWh to earn a 9.6% return on plant investment.¹ Some investors may require higher

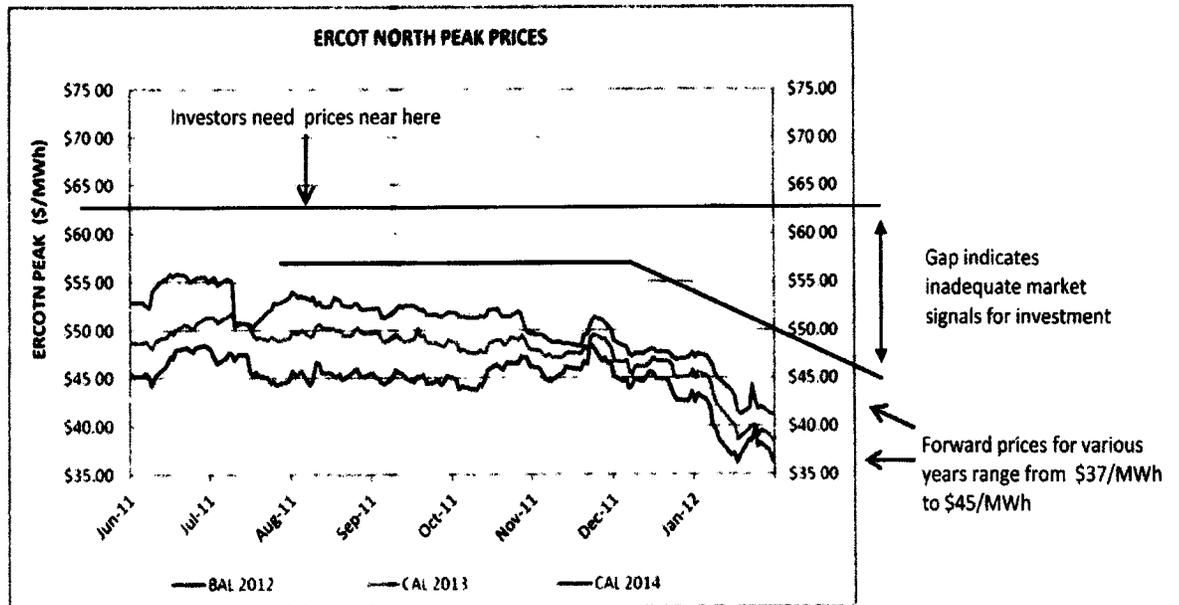
¹ Return criteria as assumed in ERCOT Long Term Planning as of August 2011: return of 9.61%; on-peak spark margin ranging from high \$20s per MWh to mid-\$30s/MWh, including variable operations and maintenance cost; natural gas price assumption of \$4/MMbtu; capital cost assumption of \$1,000/kW; fixed operation and maintenance cost of \$25/kW-yr; and heat rate of approximately 6,900.

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returns depending on their assessment of market risk. However, even after the historic, extreme weather conditions of 2011, forward prices for the calendar year 2014 have remained well below the levels investors need to see to incent private investment.

**CHART 1
FORWARDS IN ERCOT NORTH AS OF FEBRUARY 1, 2012**

**Forward Power Prices
ERCOT NORTH
(as of Feb 1, 2012)**



Sources: IPGSNA assessment based on data aggregated from Kiindex, Intercontinental Exchange (ICE), GFI Market Data, and ICAP.

Despite ongoing efforts of the PUCT, ERCOT, and stakeholders to address these issues, we continue to see decline in the forwards. Forward prices for the balance of 2012 and the calendar years 2013 and 2014 are currently between \$37/MWh and \$45/MWh² – far below any level that could reasonably be expected to incent new private investment in greenfield generation.

Not only are recent on-peak average prices too low to motivate new investment, in many cases those prices are too low for operators to maintain existing generation. The

² IPGSNA assessment based on data aggregated from Kiindex, Intercontinental Exchange, GFI Market Data and ICAP.

December 2011 ERCOT Capacity, Demand, and Reserves (CDR) report indicated that plants representing over 2,870 MWs have been or will be taken out of service because the owners of those plants cannot justify their continued operation at current prices.³ In addition, the CDR report projected over 1,000 MWs of planned units that have been delayed or put on hold as investors await an improvement in wholesale electricity prices. The fact that existing generation is shrinking is reflective of the serious nature of the situation.

The steps that have already been taken by the Commission and ERCOT to address the current challenges to reliability can be bolstered by further changes to ERCOT market design protocols and rules. Such changes will likely result in pricing signals that help promote investment in both new and existing generation in ERCOT.

II. COMMENTS TO SPECIFIC QUESTIONS

1. **How have the recent changes to the protocols that affect reliability deployments of ancillary services affected your views on your proposed changes to these rules?**

Based on recent observation of forward prices, the Group of Competitive Texas Generators' answer to the above is that more *must* be done. It is the Group's view that the following market-based actions would address current challenges and build on the competitive market philosophy that has been consistently embraced by Texas policymakers:

- 1) Developing mechanisms that maintain scarcity prices when reliability reserves are deployed. This includes:
 - A. setting Reliability Unit Commitment (RUC) for capacity at the System Wide Offer Cap (SWOC),
 - B. dispatching Reliability Must Run (RMR) for capacity at the SWOC,
 - C. ensuring the dispatch of Emergency Interruptible Load Service (EILS) does not dampen scarcity price, and

³ CDR Report, Dec. 2011, originally stated 4,000MWs. Adjusted downward to 2,870 MW since Monticello units were not mothballed.

- D. starting the Power Balance Penalty Curve (PBPC) at no less than \$500/MWh and increasing quickly up to the SWOC, so that Power Balance Penalty Curve (PBPC) prices will not routinely undercut other competitive offers;
- 2) Expediting ERCOT action to address the system changes needed to correct the adverse impact of the “Zero-to-LSL” issue that is associated with EILS, non-spinning reserve service (NSRS), and RUC. These system changes can be implemented in conjunction with system changes that would ensure that EILS does not dampen scarcity pricing. They should be prioritized ahead of look-ahead security constrained economic dispatch;
 - 3) Immediately re-setting the Peaker Net Margin (PNM) threshold to 150% of the current PNM threshold of \$175,000/MW-Yr, and directing an independent third-party study to re-evaluate new-build costs and associated inputs into the calculation of a revised PNM that can be reset annually to three times the newly revised new entrant cost; and
 - 4) Clarifying existing regulatory and legal ambiguity regarding bidding rules.

In conjunction with other actions the PUCT and ERCOT are already considering, the foregoing actions would help create a sturdier and more durable competitive market – one that will help Texas maintain an economic and business climate that leads the nation in job creation and growth. Generators would have more regulatory certainty and better opportunities to realize earnings sufficient to invest in existing generation and incent new generation to be built. And, most importantly, consumers should continue to enjoy reliable electricity supplies and a wide range of competitive products.

2. **Should the Commission consider an increase in the System Wide Offer Cap (SWOC)? If so, on what schedule should any increase be implemented? What would be the impacts on forward price signals, and would those impacts be conducive to the development of new generation capacity in the ERCOT market?**

The Group of Competitive Texas Generators has been reluctant to support an increase in the SWOC because of potentially negative impacts on credit support requirements, unit contingent risk, and market volatility. The Group generally prefers a plan that results in

moderate prices over more hours. Depending on a very high SWOC to provide resource adequacy requires tolerance for extreme volatility – enough volatility to provide the needed price signals.

However, the Group does believe that if the Commission decides raising the SWOC is warranted, and once that increase in the SWOC is reflected in real-time clearing prices, there would be a positive effect on forward prices. In fact, a significantly higher cap should result in more forward hedging by load-serving entities, which would have a significant positive impact on resource adequacy. Overall, raising the SWOC should promote resource adequacy in the ERCOT market. If the Commission decides that it would be beneficial to increase the SWOC, the Group of Competitive Texas Generators recommends raising the SWOC to at least \$4,500/MWh in the very short term (i.e., before the summer of 2012).

The Group of Texas Generators believes that the Commission should also direct ERCOT to modify the current Power Balance Penalty Curve such that it starts at a higher level and increases along a steeper curve. Together these two changes will help prevent prices set by the PBPC from routinely undercutting other competitive offers while providing a price signal of adequate duration to which load and generation resources can respond. The Group recommends the PBPC start at no lower than \$500/MWh and increase quickly to the SWOC.

What would be the likely impact on contracting decisions by existing and prospective generation owners, retail electric providers, electric cooperatives, municipally owned utilities and retail customers?

An increase to the SWOC has the potential to create increased financial risk for market participants that are not properly hedged. However, these risks are warranted given the impending reserve shortages ERCOT faces. Further, tools currently exist so these market participants can take action to adequately manage their risks. Risks can be managed through hedging mechanisms such as long term forward contracts and by covering their load in the day-ahead market.

3. **Should the Commission raise or eliminate the Low System Offer Cap (LCAP) and its triggering mechanism? If so, on what schedule should the change be implemented? What would be the likely impact on contracting decisions by existing and prospective generation owners, retail electric providers, electric cooperative, municipally owned utilities and retail customers? What would be the impacts on forward price signals and would those impacts be conducive to the development of new generation capacity in the ERCOT market?**

The Commission should raise the Low System Offer Cap (LCAP) and its triggering mechanism as soon as is practicable.

The LCAP is based on the assumption that generators might receive inappropriate revenues if prices are at excessive levels for a sustained period. However, policy-makers' significant efforts in altering mitigation mechanisms to encourage investment could be thwarted if the SWOC is reset to an LCAP that is too low. Such a reset could destroy the incentive for load to participate during peak demand conditions. Demand Response is an important resource to help respond when system conditions become critical due to peaks in demand. If the price for power is reset to the LCAP of \$500 under any system conditions, then it is unlikely that Demand Response will participate as a resource to ensure grid reliability.

Accordingly, the Group of Competitive Texas Generators recommend that the LCAP be raised to 50% of the SWOC, which is what the original LCAP-to-SWOC ratio was intended to be in 2007 (i.e., LCAP at \$500 when SWOC was at \$1,000). A narrower range between LCAP and SWOC will prevent extremely erratic market prices, while still allowing accurate price signals to occur.

4. **Does the Scarcity Pricing Mechanism that uses the Peaker Net Margin to monitor the adequacy of price signals to bring new generation to the ERCOT market still have value?**

Yes, the PNM concept has value as a consumer "guard rail" against unforeseen extreme market conditions.

Conceptually, the PNM has merit to protect consumers from extreme market conditions. However, as currently structured, the PNM is an immediate threat to forward prices. This

creates needless uncertainty for investment decision-makers at a time when certainty matters most. If the PNM is triggered, it might negate all the positive market reforms being put in place by the Commission. In this manner, the PNM would merely serve to create erratic price signals and further delay potential investment. The long-term risks for keeping the current PNM in place are far outweighed by the looming reliability impacts of tightening reserves.

To address this concern, we see a two-step response. First, the Commission should immediately increase the PNM threshold (prior to summer of 2012) to be 150% of the current \$175,000/MW-Yr threshold. This figure would reflect three times the targeted investment return used to develop the PNM cap in 2006. The rationale for adopting a three times target is to allow investors to recover returns on generation investments, considering revenue shortfalls experienced in prior years, and indicates to the market that it might be possible to recover investments in Texas.

Second, the Commission should direct an independent, third-party study be conducted regarding the current inputs into the PNM and whether the PNM should be eliminated altogether or revised. The PNM rule was originally adopted in mid-2006 for implementation starting in 2007. The cost estimates were from 2005. Construction costs of a generic peaking plant since that time have increased significantly, driven primarily by dramatic increases in costs of construction related materials, such as cement, iron, steel, and copper.

If the study results support keeping the PNM, the Group urges the Commission to set the threshold at a level three times the newly revised entrant cost. The Group also recommends an annual update of the independent, third-party review of the cost of new entry to ensure that the PNM is reflective of current economics.

5. **Should the Commission consider an increase in the amount of generation owned by a single generation entity in order for the entity to qualify for the exemption listed in P.U.C SUBST. R. 25.504(c)?**

All market participants should be allowed to offer in a manner that is not unreasonably limited to a narrow definition of short run marginal costs.

Should the Commission consider excluding new generation installed by an entity after January 1, 2012 in the calculation prescribed by that subsection?

The Group believes that appropriate improvements, as recommended above, to help ensure sufficiently high prices during periods of scarcity are a significant step in providing incentives for generation developers to invest in the ERCOT market. However, it will also be important to move beyond these administrative steps to ensure that competitive offers from new and existing resources are not unreasonably limited to a narrow definition of short-run marginal cost. Resource adequacy requires that, over time, investors in all new and existing units be able to recover their full economic costs, including a competitive return on their investment. Accordingly, any revisions to the 25.504(c) exemption should be accompanied by changes to the Commission's rules that also allow appropriate competitive bidding flexibility for all existing generators.

6. **Would the creation of a "safe harbor" with respect to a level of pricing that would not constitute an offer "substantially above ... marginal cost" according to P.U.C. SUBST. R. 25.504(d) provide benefits to the marketplace?**

Yes, a safe harbor would provide benefits to the marketplace.

All market participants should have a reasonable opportunity to recover full costs of owning, operating and maintaining generation assets, including a return on capital over time. An energy-only market depends on prices that are reflective of scarcity to function successfully and to incentivize new investment in generation resources. It is the Group's belief that energy-only markets should allow all market participants—including those with at least 5% of ERCOT-wide installed generation capacity—to contribute to the formation of accurate market pricing by bidding in a manner that reflects the full cost of owning, operating and maintaining a generating unit. Bidding behavior in the market today suggests that generators often do not bid above short-run marginal cost due to fears

of accusations of market power abuse through economic withholding. Fear of market power allegations further depresses the competitive bidding needed to set prices that allow adequate returns for investors in generation.

25.504(d) should be amended to clarify that a narrow definition of short-run marginal cost is an inappropriate measure for pricing in an energy-only market. Offers should be permitted to reflect full cost, including those associated with risk, environmental and regulatory compliance, and other unit or resource-specific characteristics. Therefore, any “safe harbor” implemented by the Commission should allow appropriate competitive bidding flexibility for all existing generators to achieve the competitive goal of providing long-run cost recovery. 25.504(d) should be amended to give market participants assurance that making competitive offers that incorporate full costs is legitimate bidding behavior in ERCOT. In addition to revising the bidding rules to avoid restrictions that limit the ability of bidders to contribute to competitive price formation, the Commission should encourage all market participants to the use Voluntary Mitigation Plans (VMP)⁶, a “safe harbor” already incorporated in 25.504(e). VMPs are another tool to provide regulatory certainty for market behavior that may assist with resource adequacy goals while being mindful of market power oversight.

7. **Are there other changes to P.U.C. SUBST. R. 25.504 that would be conducive to ensuring that the market effectively signals and is conducive to the development of new generation capacity in the ERCOT market?**

The Group of Competitive Texas Generators has addressed this issue in response to Question 6 above.

III. CONCLUSION

The Texas approach to restructuring has been a success, but current challenges require immediate action from the PUCT and ERCOT to ensure continued success in the face of increased energy demand and shrinking reserves. These challenges to reliability can be met with logical enhancements to the market design consistent with the “energy-only” construct that is embedded in the existing ERCOT market design and the philosophy that has been consistently embraced by Texas policymakers. Such changes will create confidence in generation owners and potential investors to maintain existing marginal generation and to build new generation. Proposed changes include:

- 1) Developing mechanisms that maintain scarcity prices when reliability reserves are deployed. This includes:
 - A. setting Reliability Unit Commitment (RUC) for capacity at the System Wide Offer Cap (SWOC),
 - B. dispatching Reliability Must Run (RMR) for capacity at the SWOC,
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- 2) Expediting ERCOT action to address the system changes needed to correct the adverse impact of the “Zero-to-LSL” issue that is associated with EILS, non-spinning reserve service (NSRS), and RUC. These system changes can be implemented in conjunction with system changes that would ensure that EILS does not dampen scarcity pricing. They should be prioritized ahead of look-ahead security constrained economic dispatch;
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4) Clarifying existing regulatory and legal ambiguity regarding bidding rules.

The Commission should take immediate action to address the issues discussed not only because ERCOT is facing reserve shortages in the near term, but also because current low gas prices will help consumers absorb the necessary wholesale price increases.

The Group of Competitive Texas Generators appreciates the opportunity to provide comments regarding these important issues. Should clarification or further discussion of any of the above be warranted, the Group is ready, willing, and able to provide additional information.

Respectfully Submitted,

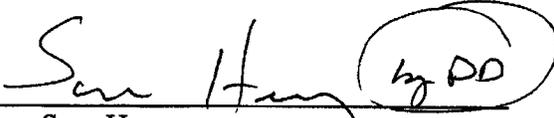
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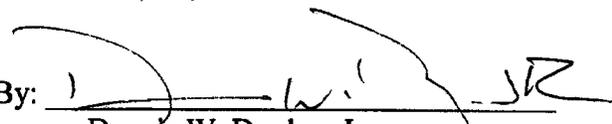
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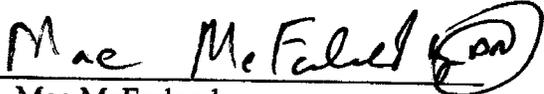
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