

Public Utility Commission of Texas

Memorandum

TO: Chairman Donna L. Nelson
Commissioner Rolando Pablos

FROM: Commissioner Kenneth W. Anderson, Jr.

DATE: September 27, 2012

RE: **September 28, 2012, Agenda Item No. 14, Project No. 40268: PUC Rulemaking to Amend P.U.C. Subst. R. 25.505, Relating to Resource Adequacy in the Electric Reliability Council of Texas Power Region, and Agenda Item No. 16, Project No. 40000: Commission Proceeding to Ensure Resource Adequacy in Texas.**

PROPOSAL FOR ADOPTION:

System-Wide Offer Cap (SWOC): I propose a few modifications to the proposal for adoption (PFA) in this rulemaking. First, I would raise the High System-Wide Offer Cap (HCAP) to \$6,000 effective June 1, 2013 and then to \$7,500 on June 1, 2014. For the time being, I would stop there until this Commission makes final decisions with respect to the structure of our energy markets. These decisions should be made before the end of this year. If we keep an energy-only market (with whatever other enhancements that we may decide upon), then no later than June of 2013, we can and should reopen Substantive Rule 25.505 and raise the HCAP to \$9,000 effective June 1, 2015, and consider going even higher if necessary.

If, however, my colleagues decide to move toward a centralized forward capacity market (CFCM) construct, then we will need to reconsider the whole issue of the HCAP. While I recognize and agree with those who would still like to see most resource revenue come from the energy market, and recognize that “over the long-run”¹ a certain equilibrium should occur that should smooth our consumer costs as demonstrated by Brattle,² I fear that in the early years of a CFCM, Texas might very well get the worst of both worlds with very high capacity prices coupled with very high energy prices. I am particularly concerned that this could occur in 2015, 2016 and 2017 because of time that it will take to set the CFCM in place, which in turn is likely to create market uncertainty. Furthermore, the first CFCM auction is unlikely to be held much before late 2014 at the earliest. The result is that no additional new generation not already announced would likely be on-line before 2017. The resulting combination of very high capacity and energy prices would be a disaster Texas consumers and for the Texas economy!

¹ JOHN MAYNARD KEYNES, A TRACT ON MONETARY REFORM, CH.3 (1923) (“Long run is a misleading guide to current affairs. In the long run we are all dead.”).

² PUC Proceeding Relating to Resource and Reserve Adequacy and Shortage Pricing, Project No. 37897, The Brattle Group’s Report on ERCOT Investment Incentives and Resource Adequacy at 54 (June 1, 2012) (Brattle Report).

Peaker Net Margin: While I was originally fine with raising the Peaker Net Margin (PNM) threshold to \$262,500 as provided in the PFA, I prefer to set the threshold at \$300,000 as recommended by Brattle.³ Furthermore, I would require ERCOT beginning in 2014 to set the PNM threshold at not less than three (3) times the cost of construction of a new peaking generation facility, as determined by ERCOT. Otherwise, I agree with Staff's proposal on this topic.

With the exception of these modifications, I would adopt the PFA as proposed by Staff.

OTHER RESOURCE ADEQUACY STEPS:

Although not the subject of this rulemaking, the following additional issues are deeply related to this rule-making and to Project No. 40000, and will need to be implemented regardless of whatever market improvements or design are ultimately selected by this Commission. Neither this Commission nor ERCOT and its stakeholders can wait to adopt these improvements. Each is integral to improve the energy market in ERCOT, whether or not other options are selected

Increase in Demand Response: I believe that we need to direct Staff to open a project to fully consider all aspects of the steps necessary to further encourage the development of price responsive loads, whether as part of ancillary services at ERCOT, deployed by Transmission and Distribution Utilities (TDUs), or created through innovative products offered by retail electric providers and other load-serving entities. Rather than trying to choose a particular construct or program, the focus of this project should be to examine, in conjunction with ERCOT, its stakeholders, the Independent Market Monitor (IMM), and the TDUs, how to best remove any impediments or other disincentives to the expansion of demand response. The focus should be on market based solutions, whoever administers the various programs, with particular attention to seeing that the deployment of the programs does NOT result in price suppression, but rather price formation.

Price Reversal Issues related to Emergency Response Service (ERS) and TDU load management programs (TDU Load Programs): Late last year and earlier this year, in addition to other reforms related to resource adequacy, we directed ERCOT to modify a number of their services so that price reversal did not occur in the real time energy market when ERCOT used those operational and reliability tools. As part of those efforts, this Commission did not address the price suppressing potential of ERS and TDU Load Programs because both of these programs were too small, individually and collectively, to have much effect on real time energy prices, particularly if all energy from ERCOT's Responsive Reserve Service (RRS) was priced at the SWOC. However, as ERCOT develops pilot programs with the objective of expanding ERS (or any other capacity-cost-based demand response service), this Commission needs to direct ERCOT to ensure that no price reversal occurs when those megawatts are actually deployed. TDUs also need to be instructed to work with ERCOT to ensure that price suppression does not

³ *Brattle Report* at 64.

occur, particularly if we grant waivers or otherwise encourage expansion of TDU Load Programs beyond 2011 levels.

Credit Implications of Clearing and Settlement. Particularly as we continue to make improvements to price formation in the energy market, ERCOT's Credit Working Group needs to continue to seek ways both to mitigate unnecessary collateral requirements and to reduce credit exposure to ERCOT and its participants. ERCOT can achieve significant improvements in both categories by working to shorten the real-time market settlement timeline from its current 9 days for invoice issuance down to five or even three days, as is common in other commodities markets. The deployment of advanced meters and IDR meters should make this a realistic possibility over the near to intermediate term.

Integrated Proxy Demand Curve (IPDC): Finally, I believe we need to direct ERCOT, the stakeholders and the IMM to come up with an Integrated Proxy Demand Curve (IPDC) that takes prices above a certain point, say \$500, \$700 or \$1000, to the HCAP and that can be used in conjunction with the Power Balance Penalty Curve (PBPC).

As the SWOC is increased, the instances when the cap is reached will need to be refined to ensure efficient results. As the Brattle Report notes, this can be achieved through an integrated proxy demand curve (IPDC) that sets increasing prices to correspond with the level of scarcity and to reflect the system reliability measures being taken.⁴ A properly structured IPDC will allow for more efficient outcomes due to facilitating more efficient load response and generation response at different price points on the curve.

Accordingly, if higher caps are adopted, the IMM and ERCOT should be instructed to work together to develop an IPDC proposal to apply under each of the different price caps adopted in the rule. The following general principles and guidelines should be observed in designing the IPDC.

1. The higher caps adopted should come into play only when or just before firm load shed would occur and the slope should be extended to allow for more efficient price formation. Higher caps are intended to approximate the value of lost load, so they should only be triggered at or near firm load shed, as discussed in the Brattle Report.⁵ For an incremental move to \$5,000, it may be that only minor adjustments are needed since the current cap is \$4,500. However, for the higher caps being considered, a more complete and robust IPDC should be developed.
2. The IPDC should incorporate all administrative reliability actions taken to address system-wide scarcity with appropriate pricing to reflect escalating scarcity conditions and diminished reserves. These include, in no particular order:
 - Deploying or borrowing from RRS, including Load Resources (formerly called Load acting as a Resource).
 - Relaxing transmission constraints

⁴ Brattle Report at 98-99.

⁵ Brattle Report at 79-80.

- Borrowing from Regulation-Up⁶
- Deploying other reliability load services

3. The IPDC should be structured to limit price reversal and facilitate efficient price formation. This has two implications:

- The IPDC should be structured to minimize price suppression when reliability measures are taken that correspond with scarcity. Here, as elsewhere, ERCOT and the IMM should develop simple solutions that do not require complicated model runs and after-the-fact resettlement.
- Scarcity prices should not be set for transient events or conditions that do not represent scarcity. This results in price spikes and subsequent reversals, and sends inefficient price signals to the market and imposes unnecessary costs on both resources and consumers.
 - Unless, the curve starts very low, Non-Spinning Reserve Service (NSRS) should not be incorporated in the curve.
 - A mechanism to smooth price formation during transient events should be maintained, similar to the function served by the current PBPC. This would likely be accomplished by the same temporary “borrowing from Regulation-Up” that occurs today, and could be kept as a separate mechanism (similar to the PBPC) or integrated into the lower end of the IPDC.

4. Extension of proxy offers at the SWOC should be studied. With a significantly higher SWOC, ERCOT and the IMM should consider and make a recommendation as to whether this approach is still necessary. If not, they should jointly develop an approach for extending offer curves at a lower level that more appropriately reflects the value of this energy.

Implementation of an appropriate IPDC should smooth out somewhat the price spikes that occur, but hopefully also extend the duration of periods of relatively higher prices; essentially trading high price spikes for steadily increasing prices of longer duration.

I look forward to discussing this issue with you at the open meeting.

⁶ Note. While borrowing from Regulation-Up can indicate scarcity, this is also done to address transient events that the Brattle Report properly notes are not scarcity-driven, as discussed in item 3. The IPDC should not be structured in a way that would send inappropriate and inefficient price signals in those instances.