Control Number: 24770

Item Number: 142

Addendum StartPage: 0

DOCKET NO. 24770

REPORT OF THE ELECTRIC RELIABILITY COUNCIL OF TEXAS (ERCOT) TO THE PUCT REGARDING IMPLEMENTATION OF THE ERCOT PROTOCOLS	§ § § § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

COMMISSION STAFF'S REPLY COMMENTS PURSUANT TO ORDER NO. 13[1]

Order No. 13 seeks comments on three questions, which are repeated below along with Staff's reply comments.

1. Are price caps on load appropriate? If so, are the specific caps established by this order reasonable? Any party advocating that load and generation receive different treatment should explain the policy reasons supporting its position and provide a reasoned justification for any proposed alternative price cap.

No opposition was expressed to $1,000 safety-net bid caps for both load and generation resources. Staff believes that the safety-net bid caps should be periodically reviewed to ensure that they do not become too low (or too high) and thereby adversely affect generation investment and other market decisions. Staff anticipates reviewing the safety-net bid caps as part of a Commission annual "state of the wholesale market" report and review, beginning next year.[2]

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[1] This pleading uses the following abbreviations: Commission – Public Utility Commission of Texas; ERCOT - Electric Reliability Council of Texas; FERC – Federal Energy Regulatory Commission; Frontier – Frontier Associates; ISO – independent system operator; l. – line; LSE – load serving entity; MCP – market clearing price; MOD – Market Oversight Division of the Public Utility Commission of Texas; MWh – megawatt-hour; Nucor – Nucor Steel-Texas; OPC – Office of Public Utility Counsel; p. – page; Oxy – Occidental Chemical Corporation and Occidental Permian, Ltd.; QSE – qualified scheduling entity; Staff – staff of the Public Utility Commission of Texas; TIEC – Texas Industrial Energy Consumers; UK – United Kingdom; VOLL – value of lost load.

[2] MOD has established three projects to review the performance of the market this year: Project No. 26330, *Lessons Learned: Evaluation of the Performance of the ERCOT Wholesale Market*; Project No. 26331, *ERCOT Markets Operational Problems and Solutions*; Project No. 26390, *MOD Report on the ERCOT Wholesale Market: The First Year.*

OPC suggested that the purpose of allowing load resources to participate in the ancillary service markets is to lower the price for the ancillary services at all times compared to the provision of ancillary services by generators only.[3] This suggestion is erroneous. The basic purpose of different bid caps for generators and load resources is to differentiate between high prices caused by generator market power and those caused by scarcity. A bid cap above $1,000 for load resources would permit load resources with value of lost load (VOLL) above $1,000/MWh to participate in the markets and be selected during times of scarcity, for example, during times with high generator forced outages. As a result, reliability would be improved.

OPC also suggested that the use of two-tiered bid caps is flawed because it would benefit one type of resource over another.[4] This suggestion is likewise erroneous. If a load resource bids above the generator bid cap and is selected as the marginal bid, then the load resource bid sets the MCP, which is paid to all resources providing the service, including the generators. The purpose of two-tiered generator and load resource bid caps would be to increase supply while mitigating the adverse effects of market failure in the generator sector. Supply could be increased in two ways: first, through the participation of high-cost load resources; and second, through an MCP that is higher than the generator bid cap, which would send a strong price signal for additional generator investment. FERC included in its standard market design proposed rules, resource-specific bid caps to mitigate resources' predefined market power, resulting in two-tiered bid caps, the lower ones applying to resources with predefined market power and the safety-net bid cap applying to the other resources that compete to provide the service.[5] In any event, as stated in Staff's initial comments, Staff no longer supports two-tiered generator and load resource bid caps

[3] OPC comments, p. 1, last paragraph.
[4] OPC comments, p. 2, first paragraph.

for the portfolio-based ancillary services under consideration, because of the resulting gaming potential and system impacts.

OPC recommended that ERCOT be allowed to enter into forward ancillary service contracts.[6] Staff proposes for further consideration a limited form of ERCOT forward contracting below, under question 3.

2. Does the proposal to allow a QSE that represents only load resources to offer prices in excess of the price caps established in this order adequately address the gaming concerns posed by QSEs that represent both generation and load resources expressed by ERCOT in Exhibit B of its July 23, 2002 filing? What are the potential benefits and problems associated with this proposal? With respect to the load-only QSE solution, specifically address anticipated systems related ERCOT implementation issues. Under this proposal, would load resources be able to establish a market clearing price in excess of the price caps applicable to generation resources and, if so, discuss the effect on the operation of the otherwise applicable price caps.

If the Commission maintains the $1,000 caps for all resources, consideration of higher caps for load-only QSEs or sub-QSEs is unnecessary. In addition, the comments suggest that there would be little interest by load resources in this option. Furthermore, ERCOT's comments indicate that there would be some non-trivial expenditure of resources to develop and administer this option. As a result, Staff recommends that this option not be pursued at this time.

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[5] FERC Docket No. RM01-12-000, Notice of Proposed Rulemaking (7/31/02), p. 226, second paragraph – p. 227 first paragraph.

[6] OPC comments, p. 3, last paragraph.

3. What other proposals would encourage the participation of load in the ancillary services market? Describe each proposal in detail and state whether it is intended to supplement or supplant the load-only QSE proposal set forth above. Compare the benefits and problems associated with each proposed alternative. With respect to each such proposal, specifically address anticipated systems related ERCOT implementation issues.

As indicated by Nucor, most load participation issues were severed from this docket and transferred to Project No. 24333, *PUC Activities Promoting Price-Responsive Demand for Electricity.*[7] Also as indicated by Nucor, there has been little visible activity in that project. Nevertheless, a substantial amount of effort has been devoted to load resource participation issues through ERCOT's demandside working group.[8] In addition, the Commission hired a consultant to recommend ways to encourage load participation in ERCOT markets, and the consultant's report is due August 31, 2002. Thus, not only are most load participation issues outside the scope of the current docket, they are also not yet ripe for consideration by the Commission. Staff strongly supports full participation by load resources in the ERCOT markets, and will continue to work towards encouraging load participation in ERCOT markets in a comprehensive manner.[9] In addition, to the extent that an entity believes that Protocol revisions should be made now to address a specific load participation issue, it can make a Protocol revision request which, if denied by ERCOT, is subject to appeal to the Commission pursuant to Protocols §21.4.9.

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[7] Nucor comments, p. 3, last paragraph – p. 4, first paragraph.
[8] *See* Frontier comments, p. 2, second paragraph.
[9] Staff comments, p. 9-10.

Frontier and Nucor identified the issue of the impact of load resources on planning reserves. This issue is under consideration by the Commission in Project No. 24255, *Rulemaking concerning Planning Reserve Margin Requirements.*

Frontier proposed to provide additional incentives for load resources located in transmission-constrained areas, but suggested that such additional incentives may not be necessary if ERCOT uses locational marginal pricing.[10] Staff notes that the use of locational marginal pricing will be considered by the Commission in Project No. 26376, *Transmission Congestion Issues in the Electric Reliability Council of Texas.* Locational marginal pricing for load resources could be achieved either through Staff's proposal to directly assign local congestion costs or through use of nodal energy pricing as is done by PJM.

TIEC and Oxy reiterated their opposition to Staff's recommendation that load resources providing replacement reserve service receive a capacity payment only if they are deployed to provide balancing energy service, and baldly asserted that Staff's recommendation would kill load resource participation in the responsive reserve market.[11] Staff will not repeat here the entire rationale for its recommendation,[12] but notes that, with a $1,000/MWh all-resource bid cap, many load resources bidding to provide replacement reserve service are likely to bid $1,000/MWh for balancing energy service, whereas generation resources are generally likely to bid much less. As OPC indicated in its comments, the point of load resource participation should be to provide additional net value to the market, not to provide payments to load resources with little in return.[13]

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[10] Frontier comments, p. 3.

[11] Oxy comments, p. 3, last paragraph; TIEC comments, p. 3, second-to-last paragraph.

[12] Commission Staff's Initial Brief (1/25/02), p. 29 – p. 31, first paragraph; 7/19/2002 technical conference transcript, p. 25, l. 12 – p. 36, l. 7, p. 56, l. 12 – p. 58, l. 10.

[13] *See* OPC comments, p. 1, last paragraph.

With MOD in agreement, ERCOT is working towards relaxing the balanced schedule requirement, with an effective date as early as October 1st of this year. Relaxed balanced schedules will allow LSEs to intentionally rely on the balancing energy market to meet parts of their energy needs. The purpose of replacement reserve service is to make capacity available to provide balancing energy service, for use to remedy an ERCOT-wide available capacity deficiency or to clear zonal or local congestion.[14] Staff's understanding is that, although ERCOT has procured replacement reserve service to clear local congestion, it has not yet had to procure it to clear zonal congestion or to remedy an ERCOT-wide available capacity deficiency. However, relaxed balance schedules might result in ERCOT needing to procure replacement reserves to clear zonal congestion or to remedy an ERCOT-wide available capacity deficiency. It is easy to foresee a scenario where all of the ERCOT-wide or zonal replacement reserves would be provided by load resources, with corresponding balancing energy bids at $1,000/MWh, which result in higher, more volatile balancing energy prices. Because such replacement reserves are allocated to LSEs based on their use of balancing energy, the result could be to "kill" the achievement of one of the primary purposes of relaxed balanced schedules: allowing LSEs to cost-effectively rely on the balancing energy market to fill parts of their energy portfolios.

As discussed at the 7/19/2002 technical conference, the UK system operator enters into forward contracts for ancillary services, with substantial, apparent success.[15] Staff believes that this approach should be considered for the limited procurement of ancillary services from load resources by ERCOT. This approach may be able to successfully and simultaneously help address two major issues: mitigating generator market power and increasing load participation in

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[14] *See* Protocols §6.4.2(5).

[15] *See* 7/19/02 technical conference transcript, p. 115, l. 17 – p. 128, l. 17.

the ancillary service markets. Under this approach, ERCOT could procure replacement reserves from a load resource through a forward contract (e.g., an annual contract) that would allow ERCOT to deploy the resource for a specified number of times at a specified strike price (e.g., $100/MWh), in order to counteract high bids in the balancing energy market.[16] In addition, ERCOT could procure an ancillary capacity service (e.g., responsive reserves) from a load resource through a forward contract and use it for a specified number of times when capacity bids for the service in the ERCOT-operated spot market are high. Thus, this approach could complement the use of Staff's Competitive Solution Method under consideration in the current docket.

Staff views this approach as an additional, limited modification to the min-ISO paradigm used by ERCOT and generally supported by Staff. The basic principle of the min-ISO approach is to limit the ISO to system reliability functions and to avoid having the ISO function as "market maker", and instead rely on bilateral markets and private exchanges for market making functions. ERCOT has already deviated from this principle by allowing LSEs, without penalty, to have ERCOT procure ancillary capacity services on their behalf. In addition, further deviation will occur through relaxed balanced schedules.

Having ERCOT forward contract with load resources seems to have significant potential to increase load resource participation in the ancillary service markets by decreasing the barriers to entry by load resources and potentially increasing ERCOT's flexibility in how it defines the services that it procures from load resources. At the same time, this approach would not preclude load resources from providing ancillary services through existing means.

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[16] This approach would allow a load resource to receive a capacity payment without creating the gaming opportunity discussed above wherein a load resource is selected for replacement reserve service without any consideration of its balancing energy bid.

Much more study and development of this proposal needs to occur before it should be considered for adoption. Because load resource participation issues are generally outside of the current docket, the proposal can be considered further by the Commission in Project No. 24333, *PUC Activities Promoting Price-Responsive Demand for Electricity.*

Dated: August 13, 2002

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I, Keith Rogas, certify that copies of this document will be served on all parties on August 13, 2002, in accordance with Public Utility Commission of Texas Procedural Rule 22.74.

Keith Rogas