



Control Number: 31540



Item Number: 303

Addendum StartPage: 0

**DOCKET NO. 31540**

**PROCEEDING TO CONSIDER  
PROTOCOLS TO IMPLEMENT A  
NODAL MARKET IN THE  
ELECTRIC RELIABILITY  
COUNCIL OF TEXAS PURSUANT  
TO P.U.C. SUBST. R. 25.501**

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**PUBLIC UTILITY COMMISSION  
OF TEXAS**

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PUBLIC UTILITY COMMISSION

**ORDER**

This Order addresses the draft protocols submitted by the Electric Reliability Council of Texas (ERCOT) pursuant to P.U.C. SUBST. R. 25.501. The protocols, as submitted by ERCOT and as modified by this order, are approved.

**I. Procedural History**

ERCOT is the independent system operator that oversees the power region located entirely within Texas, excluding portions of west, northwest, and east Texas. The scheduling, operating and planning policies, guidelines and procedures are contained in the ERCOT protocols, which implement ERCOT's management of the ERCOT power region. P.U.C. SUBST. R. 25.501 required that ERCOT develop draft protocols to implement a nodal, wholesale-market design. The rule required that the draft protocols be developed with consideration of microeconomic principles, and that the draft protocols promote economic efficiency, support wholesale and retail competition, support the reliability of electric service, and reflect the physical realities of the ERCOT electric system.

On September 23, 2005, ERCOT submitted draft protocols incorporating changes required by P.U.C. SUBST. R. 25.501 to create a nodal, wholesale-market design within ERCOT. P.U.C. SUBST. R. 25.501 sets various requirements for the development of a new nodal, wholesale-market in ERCOT, including permitting market participants to self-arrange for energy and ancillary services, operating a voluntary day-ahead market, using

nodal energy prices for resources, zonal energy prices for loads, and providing for congestion revenue rights.<sup>1</sup>

The rule also required that ERCOT use a stakeholder process to develop the market design, and that ERCOT submit the protocols to the Commission for final approval. Following the approval of the rule, the Texas Nodal Team (TNT) was created at ERCOT to design a wholesale market that followed the requirements of P.U.C. SUBST. R. 25.501.<sup>2</sup> The TNT was made up of stakeholders of various segments of the electric industry, including retail electric providers, electric generators, consumer groups, and regulated utilities. The Commission also initiated Project No. 28500 to examine issues related to the development of the nodal market in a Commission forum.<sup>3</sup> In the course of this Project, the Commission received comments and held workshops on various issues related to the nodal market.<sup>4</sup> Project No. 28500 provided a forum at the Commission, separate but in conjunction with the TNT process, for the Commissioners, Commission Staff, and other interested entities to receive information on issues related to the creation of a nodal market and participate in the TNT process. As a result of the TNT process at ERCOT, the protocols were developed to meet the requirements set out in P.U.C. SUBST. R. 25.501. As required in P.U.C. SUBST. R. 25.501(m), the draft protocols were submitted to the Commission for approval on September 23, 2005.<sup>5</sup>

Prior to the submission of the draft protocols, the Commission initiated this proceeding to examine the draft protocols in a contested-case hearing. Several entities sought and were granted party status in this proceeding.<sup>6</sup> The Commission issued a

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<sup>1</sup> *Rulemaking Proceeding on Wholesale Market Design Issues in the Electric Reliability Council of Texas*, Project No. 26376, Order Adopting New § 25.501 as Approved at the August 21, 2003 Open Meeting (Sept. 23, 2003).

<sup>2</sup> T CPA Ex. 4, Certified Copies of Texas Nodal Team Meeting Minutes 2003-2005.

<sup>3</sup> *Activities Related to the Implementation of a Nodal Market for the Electric Reliability Council of Texas*, Project No. 28500 (closed Sept. 6, 2005).

<sup>4</sup> T CPA Ex. 8, List of Documents from Project 28500.

<sup>5</sup> Submission of Texas Nodal protocols by The Electric Reliability Council of Texas (Sept. 23, 2005). P.U.C. SUBST. R. 25.501(m) was amended to require that ERCOT file the draft protocols with the Commission by March 18, 2005. The draft protocols were filed by ERCOT on that date on Project No. 28500. The filing by ERCOT on September 23, 2005 replaced the earlier filing.

<sup>6</sup> See Finding of Fact 8.

preliminary order setting out the procedures for this proceeding, including the Commission's review of the draft protocols and the burden of the parties in challenging the protocols. Parties challenging the protocols were required to show "that the [draft] protocols are not in the public interest, why the protocols would be harmful to the market, that their solution is an improvement of the protocols, and that their solution is in the public interest."<sup>7</sup>

Commission administrative law judges (ALJs) were assigned to assist the Commission in processing this docket. The ALJs held prehearing conferences on October 6, November 16, and December 2, 2005 to consider procedural issues. The Commission held hearings on the draft protocols and the issues raised by the parties on December 5, 6, 9, and 13, 2005. The Commissioners received the written and oral testimony of several expert witnesses, many of whom also participated in the TNT process, and other evidence offered by the parties. The proceedings were concluded on December 13, 2005. Parties filed post-hearing briefs on January 13, 2006, and reply briefs on January 26, 2006.

## II. Discussion

### A. Draft Protocols

As stated in the preliminary order, the Commission acknowledges the contributions of the TNT members and the work done to create a market design that meets the requirements of P.U.C. SUBST. R. 25.501. The TNT process included more than a hundred individuals representing dozens of distinct stakeholders that represented different segments of the electric industry, including investor-owned utilities, municipalities, cooperatives, retail electric providers, and merchant generators.<sup>8</sup> The process, which involved hundreds of hours of discussion at scores of meetings, began in 2003 and continued through the submission of the draft protocols by ERCOT.<sup>9</sup> The

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<sup>7</sup> Preliminary Order at 2.

<sup>8</sup> TCPA Ex. 4.

<sup>9</sup> *Id.*

Commission recognizes that the TNT process was thorough and created a generally acceptable set of protocols that meet the requirements of P.U.C. SUBST. R. 25.501. One of the more important aspects of the TNT process that produced the draft protocols was the fact that all changes to the draft protocols had to be approved by a supermajority, or 67%, of the TNT market participants, taking into consideration the interests of a broad coalition of market participants to support any changes. Parties in support of the draft protocols noted that the protocol-development process produced a comprehensive, internally consistent system for the ERCOT wholesale market.<sup>10</sup> These parties recommended that the Commission adopt the draft protocols without any changes and noted that any changes to the draft protocols at the Commission could upset the comprehensive nature of the protocols. The Commission concludes that the TNT process comports with the stakeholder process required by P.U.C. SUBST. R. 25.501 and finds that the process resulted in draft protocols that meet the requirements set out in P.U.C. SUBST. R. 25.501.

Because of the comprehensive process used to develop the draft protocols, the Commission generally showed deference to the draft protocols. However, the Commission conducted an independent examination of the draft protocols to ensure that all requirements of P.U.C. SUBST. R. 25.501 were met, such as permitting the self-provision of energy and ancillary capacity services, creating a voluntary day-ahead market, setting nodal energy prices for resources and zonal energy prices for loads, and providing for congestion revenue rights. In addition, the Commission examined certain issues with a heightened level of scrutiny, including (1) matters that have major impacts on the fundamental design and competitiveness of markets (2) matters that have disparate impacts on particular types of market participants (3) matters that may unnecessarily create barriers to entry and (4) matters that may conflict with legislative or Commission policies.

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<sup>10</sup> Initial Brief of CPA Energy, the Lower Colorado River Authority and Austin Energy (January 13, 2006); Initial brief of the TXU Energy, Wholesale, and Power Companies (January 13, 2006).

## B. Proposed Changes to Draft Protocols

### 1. Standards for Proposed Changes to Protocols

In addition, the Commission examined the recommended changes to the draft protocols. While several parties recommended that the draft protocols be adopted as filed, many other parties suggested various changes to the draft protocols. The Commission examined the proposals under the standards set out in the preliminary order.<sup>11</sup> Parties that proposed changes to the protocols had the burden to show to the Commission that their position was an improvement over that of the draft protocols. To meet this burden, “parties [had to] show that the [draft] protocols [were] not in the public interest, why the [draft] protocols would be harmful to the market, that their solution is an improvement of the protocols, and that their solution is in the public interest.”<sup>12</sup> In addition, parties were required to submit alternative language to support their proposals, provide testimony to support their proposals, address the costs and technical feasibility of amending the protocols, and describe how the change would affect other parts of the protocols and other market participants. The additional information would allow the Commission and other parties to evaluate the proposed changes properly.

In examining the proposed changes to the protocols, the Commission found that some proposals did not meet the requirements set out in the preliminary order to provide the necessary information to support the proposal.<sup>13</sup> Without this information, the Commission and other parties were not able to determine the specific method to implement these changes, and whether the recommendation could affect other portions of the draft protocols or other parties. Therefore, the Commission can not adopt these

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<sup>11</sup> Preliminary Order at 2.

<sup>12</sup> *Id.*

<sup>13</sup> *E.g.* recommendation to allocate congestion revenue rights, Direct Testimony of Dr. Frank Wolak, DME Ex. 2 at 16-22, Direct Testimony of Riley G. Rhorer, Public Utility Board of the City of Brownsville Ex. 1 at 14-15); NOIE Opt-in Zone proposal, Direct Testimony of Fred Sherman, City of Garland and GEUS Ex. 2 at 7-12; the dispatch and pricing of less flexible units, Direct Testimony of Dr. David Patton, Staff Ex. 1 at 35-41.

recommendations. Other proposals modified significant portions of protocols.<sup>14</sup> The parties advancing these changes did not meet the burden set in the preliminary order to show that the changes are in the public interest and better than the draft protocols. In addition, for the reasons stated above, the Commission is hesitant to implement large changes to the draft protocols that could adversely affect the comprehensive nature of the draft protocols.

None of the parties showed that proposed changes to the draft protocols would provide greater public benefit or are better than the draft protocols as filed with the Commission. The testimony offered in support of the draft protocols and against the various recommendations for changes support the Commission's conclusion that the TNT process produced draft protocols that are in the public interest. Therefore, based on the examination of the protocols in light of the requirements set out in P.U.C. SUBST. R. 25.501, the Commission finds that the draft protocols filed by ERCOT meet these requirements. The Commission also finds that none of the other changes proposed to the draft protocols are in the public benefit.

## **2. Protocol Modification Adopted**

Only one of the recommended changes meets the criteria that the Commission has established: to address the concerns that the protocols could adversely affect the tax-exempt status of municipalities, co-operatives, and other entities that issued tax-exempt bonds. The concern was that the method of dealing with ERCOT would adversely affect municipals and cooperatives in violation of PURA §§ 40.104 and 41.104. These sections state that nothing in PURA may impair the tax-exempt status of those types of entities or compel any entity to use its facilities in a manner that violates any restrictions applicable

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<sup>14</sup> *E.g.*, recommendation to change real-time mitigation from the "Texas-Two Step" to the conduct/impact test, Direct Testimony of David Patton, Staff Ex. 1 at 44-48; applying the same mitigation in the day-ahead market as is applied in the real-time market, Direct Testimony of John Meyer, Reliant Energy, Inc. Ex. 1 at 13-18, Direct Testimony of Kenan Ögelman, Office of Public Utility Counsel Ex. 1 at 7-8.

to facilities financed by tax-exempt debt. PURA § 40.104 applies to municipalities, cooperatives, and river authorities, while PURA § 41.104 applies only to cooperatives. However, language in both sections is similar.

To retain its tax-exempt status, the Internal Revenue Service (IRS) requires that it must obtain 85% of its income from its members. Based on the protocols as filed, there is concern that ERCOT would be considered a source of income for cooperatives and other entities under the proposed settlement system.<sup>15</sup> From a settlement perspective, the draft protocols require that electric-generating entities, including municipalities and cooperatives, send their energy to ERCOT, and then “purchase” the electricity for their end use customers. The transaction would show that all of the sales would be made to ERCOT.<sup>16</sup> While ERCOT does not take title to the electricity, this fact would not avoid the IRS’ regulations. In addition, IRS rules will not allow the electric provider to net the “sales” and “purchases” with ERCOT to come in below the 15% threshold.

Another concern for municipalities and cooperatives is that the IRS could treat any use of generation assets by ERCOT as private business use, but the proceeds of a tax-exempt bond must not be used for “private business use.” Tax-exempt bonds meet the private business test, and are taxable, if more than 10% of the bond's proceeds are to be used for any private business use. “Private business use means use, direct or indirect, in any trade or business carried on by any person other than a governmental unit.”<sup>17</sup> As ERCOT is not defined as a governmental entity, energy from generation assets sold to ERCOT could be considered private business use. The draft protocols currently make it difficult to allocate power sold or administered by ERCOT to any specific generation facility. Therefore, if it cannot be shown that the electricity generated from a generation facility was used by the customers of the municipality that owns the generation facility, the facility may fall under the private business use, and the formerly tax-exempt bonds associated with that facility would become taxable.<sup>18</sup>

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<sup>15</sup> Direct Testimony of James H. Smith, Brazos/STEC Ex. 1 at 21-27.

<sup>16</sup> CPS Energy’s Brief on Tax Issues, at 3 (November 10, 2005).

<sup>17</sup> *Id.* at 4.

<sup>18</sup> Smith Direct Testimony at 13-16.



The Commission received testimony that sought to reduce any adverse effects by the draft protocols on the tax-exempt status of municipalities and cooperatives.<sup>19</sup> The recommendations by Dr. Siddiqi make two main changes to the draft protocols: modifying several definitions related to ancillary services, and allowing for self-scheduling of generation and load in the scheduling with ERCOT.<sup>20</sup> Self-scheduling would allow for the separate determination of congestion charges or payments and Energy Imbalance Service charges or payments because self-scheduling entities would designate a source and sink for their transactions.<sup>21</sup> Importantly, no party objected to Dr. Siddiqi's recommended changes to the draft protocols that address this issue. The Commission agrees that these changes will help to resolve these tax issues and, therefore, adopts them.

### **C. Issues Requiring Additional Study**

#### **1. Co-optimization**

While the Commission does not propose any modifications to the draft protocols other than on the tax issue at this time, there were several issues raised during this proceeding that the Commission concludes need further study. Specifically, the issue of co-optimization of energy and reserves in the real-time market was raised as an issue that should be addressed at a later date as part of the implementation of the nodal market. This issue was raised by Commission Staff in Dr. Patton's testimony.<sup>22</sup> Other parties generally supported co-optimization, but stated that the stakeholders were not able to determine a way to implement it in the market as developed by the TNT.<sup>23</sup> It was suggested that ERCOT and the stakeholders should discuss whether co-optimization

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<sup>19</sup> Direct Testimony of Shams N. Siddiqi, Brazos/STEC Ex. 2.

<sup>20</sup> *Id.* at 10-11.

<sup>21</sup> *Id.* at 11.

<sup>22</sup> Direct Testimony of David B. Patton, Staff Ex. 1 at 23-28.

<sup>23</sup> Rebuttal Testimony of Gerald L. Ward, TXU Energy Ex. 1 at 14-16; Rebuttal Testimony and Exhibits of Shams N. Siddiqi, Lower Colorado River Authority/CPS Energy/Austin Energy Ex. 1 at 23-24.

could be included in the proposed nodal market with vendors during negotiations to develop the systems to run the nodal market.<sup>24</sup> The Commission recognizes that co-optimization could potentially produce benefits in the real-time market. Therefore, the Commission directs ERCOT and the ERCOT stakeholders to explore this issue, in both internal discussions within the ERCOT stakeholder group as well as with vendors, and address whether co-optimization could be implemented and the potential costs and benefits of implementing co-optimization. The Commission encourages ERCOT and the ERCOT stakeholders to conduct discussions in an expedited manner as the implementation date of January 1, 2009 will not be modified.

## **2. Load Participation**

In addition to co-optimization, several parties raised the issue of load participation in the nodal market and suggested changes to the draft protocols to address this issue. Generally, load participation is the ability of load to participate in the market with energy and capacity services and to encourage the demand side of the market to respond better to wholesale price signals. While the Commission will not make any changes based on the recommendations suggested in this proceeding, the Commission recognizes that participation by loads is beneficial to the wholesale and retail markets and should be encouraged. Based on the recommended changes, the Commission is concerned that the protocols as adopted by this Order may not allow full participation by loads. Therefore, the Commission directs that a separate project be implemented to examine load participation in the new nodal wholesale market, including an examination of the issues that were raised in the current proceeding, as well as other methods of including and encouraging load participation in the ERCOT markets. Recommendations produced by this project will be examined by the Commission, ERCOT, and stakeholders, and if found to be feasible and implementable, future revisions to the protocols will be necessary.

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<sup>24</sup> *Id.*

### **3. Creating and Changing Load Zones**

Finally, the Commission concludes that a separate project should be initiated to examine the issues of creating and changing load zones in the nodal market. The protocols should ensure that there is a well defined process to evaluate whether existing load zones should be modified or new load zones created, including any new load zones created by non-opt in entities (NOIEs) as allowed by the protocols adopted by this Order. The processes should allow parties who believe that the creation or modification of load zones will have a detrimental impact to have a forum to protest the creation or modification, and whether such protests should be made at ERCOT or at the Commission. Establishing specific criteria for the creation or modifications of load zones will ensure that these changes are made properly and consistently, and will not adversely affect other parties or the overall market.

#### **D. Development of Draft Protocols**

The Commission notes that the process for creating the draft protocols took place over the last year and a half at ERCOT in the TNT process. In the process, parties had time to submit and evaluate recommendations on specific provisions of the draft protocols. Parties also had the opportunity at the Commission in Project No. 28500 to raise and examine various issues related to the draft protocols.

Parties have had considerable opportunities to raise and address issues during development of the draft protocols. As a result, the draft protocols were thoroughly vetted prior to submission by ERCOT to the Commission. It is appropriate for the Commission to recognize the considerable amount of effort undertaken in these other proceedings that led to the draft protocols as filed. The Commission set a high standard for proposing changes to the draft protocols in part because of this significant amount of time that was dedicated to creating a wholesale market that met the requirements of P.U.C. SUBST. R. 25.501. In addition, parties had several months in this proceeding to evaluate the draft protocols as submitted by ERCOT and prepare testimony as required in the preliminary order prior to the hearing. Based on the former proceedings and the amount of time given at the current proceeding, the Commission finds that parties have

had sufficient opportunities to rise their concerns and to inform the Commission of these concerns.

The Commission recognizes and commends all entities that participated in the creation of the draft protocols. The draft protocols provide a comprehensive, integrated system to implement the wholesale market, where the separate components work together to produce the results required under P.U.C. SUBST. R. 25.501. Except for the changes to address the tax-related issues raised by the municipalities and co-operatives, the Commission approves of the draft protocols as filed by ERCOT. As discussed above, however, the issues relating to co-optimization, load participation, and procedures to create or modify load zones require further examination to determine if and how the protocols as adopted by this order should be modified to address these issues.

### **III. Findings of Fact and Conclusions of Law**

The Commission adopts the following findings of fact and conclusions of law.

#### **A. Findings of Fact**

##### **Procedural History**

1. On August 23, 2005, the Commission Staff (Staff) initiated a proceeding to consider protocols to implement a nodal market in ERCOT.
2. On August 23, 2005, the Commission issued an order requesting a list of issues to be addressed in this docket from Commission Staff and interested entities, and requested that Commission Staff file a response on whether service of the order to all participants in Project No. 28500 was adequate.
3. On August 25, 2005, Commission Staff filed its response in which it stated that it also sent notice to all Texas Nodal Team (TNT) members, as not all TNT members participated in Project No. 28500.

4. The following parties filed a list of proposed issues for consideration in the preliminary order: Brazos Electric Power Cooperative, Inc., Texas Industrial Electric Consumers (TIEC); BP Energy Company; Committee of Concerned Load (COCL); Denton Municipal Electric (DME); the City of Garland; CPS Energy; Alliance for Retail Markets (ARM); GEUS, ERCOT; Office of Public Utility Counsel (OPC); Public Utility Board of the City of Brownsville (BPUB); the City of Austin d/b/a Austin Energy, Reliant Energy, Inc.; Lower Colorado River Authority; Texas Competitive Power Advocates (TCPA); Cities Aggregation Power Project, Inc. and South Texas Aggregation Project, Inc. (CAPP/STAP); Commission Staff; Tex-La Electric Cooperative of Texas, Inc.; Nucor Steel – Texas; South Texas Electric Cooperative, Inc. (STEC); Texas Genco; Chaparral Steel Company; Structural Metals, Inc.; TXU Energy; Wholesale, and Power Companies; and Texas Municipal Power Agency (TMPA).
5. On September 23, 2005, ERCOT submitted draft protocols.
6. On September 27, 2005, the Commission issued Order No. 1 requiring a recommendation on notice and the procedural schedule.
7. On September 30, 2005, the Commission issued a draft preliminary order.
8. Between August 29, 2005 and November 14, 2005, the following parties filed motions for intervention, all of which were granted: the OPC; GEUS; TIEC; ARM; Texas Genco; Brazos Power Electric Cooperative, Inc.; DFW Electric Consumer Coalition; CPS Energy; Occidental Power Marketing, L.P.; DME; City of Garland; City of Weatherford; BPUB; Reliant Energy, Inc.; LCRA; TCPA; Sempra Global; CAPP/STAP; Tex-La Electric Cooperative of Texas, Inc.;

CenterPoint Energy Houston Electric, Inc.; STEC; Nucor Steel – Texas; Chaparral Steel Company; Structural Metals, Inc.; TMPA; TXU Energy; Wholesale and Power Companies; City of Austin d/b/a Austin Energy; The Centrica Companies; Cap Rock Energy Company; Exelon Generation Company, LLC.; Golden Spread Electric Cooperative, Inc.; BP Energy Company; TXU Electric Delivery Company; Texas Energy Association for Marketers; TriEagle Energy; and Bryan Texas Utilities.

9. On October 4, 2005, the Commission issued Order No. 2 approving notice, setting intervention deadline, granting motions to intervene, and setting a prehearing conference for October 6, 2005.
10. On October 7, 2005, the Commission issued the preliminary order setting the procedures for the contested-case hearing, the list of issues to be addressed, and the list of issues not to be addressed.
11. On October 7, 2005, the Commission issued Order No. 3 memorializing the prehearing conference on October 6, 2005, setting out the procedural schedule.
12. On October 21, 2005, the Commission issued Order No. 4 clarifying the procedural schedule and framing the tax issue.
13. On October 26, 2005, the Commission issued Order No 5, correcting the date of the prehearing conference listed in Order No. 4.
14. On October 31, 2005, the Commission issued Order No. 6 granting additional motions to intervene.

15. On November 2, 2005, the City of Austin filed a motion for entry of protective order.
16. On November 9, 2005, the Commission issued Order No. 7 granting the motion for entry of a protective order.
17. On November 9, 2005, DME and the City of Garland filed a motion for continuance, stating that the short procedural schedule will cause considerable and irreparable injury and that parties should be given adequate time to develop their case.
18. On November 10, 2005, the Commission issued Order No. 8, requesting responses to the motion for continuance filed by DME and the City of Garland.
19. On November 14, 2005, the Commission issued Order No. 9 granting additional motions to intervene.
20. On November 10, 2005, the following parties filed initial testimony: OPUC; TCPA; Brazos Electric Cooperative, Inc. and STEC; Nucor Steel – Texas; City of Garland and GEUS; DME; Reliant Energy, Inc.; BPUB; TIEC; CAPP/STAP; and Commission Staff.
21. On November 28, 2005, the following parties filed rebuttal testimony: CPS, OPUC, ARM, Cities Aggregation, CAPP and STAP, DME, City of Garland, BTU, TXU Energy Wholesale, Staff, Nucor & Chaparral, Reliant, Brazos Electric, STEC, PUB, BP Energy, TCPA, LCRA, and the City of Austin.

22. On December 5, 2005, the Commission issued an order denying the motion for continuance DME and the City of Garland, finding that the procedural schedule gave a sufficient amount of time for parties and the Commission to review the protocols and will not raise procedural due process concerns.
23. The Commission held a hearing on the merits on December 5, 6, 9, and 13, 2005.
24. On January 13, 2006, the following parties filed their initial post-hearing briefs: Brazos Electric, STEC, Nucor, Chaparral, DME, City of Garland, TMPA, OPUC, Reliant, ARM, CPS Energy, LCRA and Austin Energy, Staff, BTU, TXU Energy Wholesale, Texas Genco, Golden Spread Electric Cooperative, Tex-La, CAPP & STAP, TCPA, TIEC, BP Energy, GEUS, and PUB.
25. On January 26, 2006, the following parties filed their reply briefs: Golden Spread Electric Cooperative, Brazos Electric/STEC, OPUC, BP Energy, GEUS, CAPP, STAP, Reliant, Nucor and Chaparral Company, PUB, ARM, BTU, DME, TMPA, City of Garland, TCPA, Tex-La, TXU Energy Wholesale, City of Austin, TIEC, and Staff.

**Protocols**

26. P.U.C. SUBST. R. 25.501 requires the development of protocols to implement the various requirements of this section to create a wholesale market design in ERCOT.
27. P.U.C. SUBST. R. 25.501 requires the development of a wholesale-market design for ERCOT that permits market participants to self-arrange energy and ancillary



capacity services, create a voluntary day-ahead market, assign congestion rents to those entities that cause the congestion, use nodal energy prices for resources and zonal energy prices for loads, and provide for congestion-revenue rights.

28. P.U.C. SUBST. R. 25.501(m) requires ERCOT to use a stakeholder process to develop the wholesale-market design that complies with this section.
29. ERCOT initiated the Texas Nodal Team (TNT), composed of stakeholders in the electric industry, including retail electric providers, electric generators, consumer groups, and regulated utilities, to develop protocols that met the requirements of P.U.C. SUBST. R. 25.501.
30. The TNT met from 2003 to 2005 to develop the draft protocols.
31. The draft protocols developed by the TNT, as submitted by ERCOT on September 23, 2005, implement the requirements of P.U.C. SUBST. R. 25.501.
32. The protocols are scheduled to take effect on January 1, 2009.

**Changes to the Draft protocols**

33. The parties have raised concerns that draft protocols may adversely affect the tax-exempt status of municipalities, cooperatives, and other entities that issue tax-exempt bonds.
34. To maintain their tax-exempt status, cooperatives must obtain at least 85% of their income from their members. Because of the transactional and settlement

system, payments from ERCOT for energy, ancillary services, and the reliability unit commitment process (RUC) would be considered as non-member income, and would be in excess of the 15% allowed from non-members.

35. For a bond issued by municipalities to be tax-exempt, the bond must not be a private-activity bond. A bond is not a private activity bond if it meets the private business test, where less than 10% of the bond's proceeds are not used from any private business use. The draft protocols require that entities send power to ERCOT and then purchase power from ERCOT to serve its customers. ERCOT is not a governmental unit, and the IRS could treat any use by ERCOT as private business use, resulting in the interest on bonds associated with that unit becoming taxable.
36. Dr. Shams Siddiqi recommended several changes to the draft protocols that addressed the issues of non-member income and private-activity use of generation facilities.
37. The protocols should be modified as set out by Dr. Shams Siddiqi to prevent an adverse ruling by the IRS on the tax-exempt status of entities in ERCOT.

**Future Proceedings**

38. Co-optimization in the real-time market is designed to optimize the dispatch of generation resources that produce energy and those that provide ancillary services.
39. ERCOT and the ERCOT stakeholders should discuss the ability and the costs and benefits of implementing co-optimization of energy and ancillary services with

potential vendors in developing the systems for the new nodal wholesale market at ERCOT. In conjunction with discussions with the vendors, the stakeholders should determine what changes would be needed to the protocols to implement co-optimization.

40. Load participation is a key element in well-functioning, competitive electricity markets.
41. It is appropriate to defer further consideration of load-participation issues to a subsequent project. The investigation of load participation in the wholesale and retail markets is necessary to ensure that the full benefits of these programs are included in the new wholesale market.
42. The examination of load-participation issues should include the issues raised in this proceeding, as well as other programs to encourage load participation.
43. It is appropriate to defer further consideration of defining and creating standards for the creation and modification of load zones to a subsequent project. The protocols require more specificity on the issue of standards for creating and modifying load zones. This specifically will ensure consistent procedures for new and modified load zones.

#### **B. Conclusions of Law**

1. The Commission has jurisdiction and ongoing oversight and review of the ERCOT protocols under PURA §§ 35.004(e), 39.001, and 39.151(d) and (i).
2. Adequate notice was provided in this proceeding, as required under P.U.C. PROC. R. 22.55.

3. Under PURA § 39.151(i), the Commission may delegate authority to ERCOT to enforce operating standards and establish and oversee transaction-settlement procedures within the ERCOT power region.
4. Under PURA § 35.004(e), the Commission must ensure that ancillary services necessary to facilitate the transmission of electric energy are available at reasonable prices with terms and conditions that are not unreasonably preferential, prejudicial, discriminatory, predatory, or anticompetitive.
5. The Commission has the authority to approve the ERCOT protocols pursuant to PURA §§ 35.004(e) and 39.151(d) and (i).
6. As an independent organization, ERCOT is sufficiently independent of any producer or seller of electricity that its decisions will not be unduly influenced, pursuant to PURA § 39.151(b). As a result, the Commission will generally show deference to ERCOT decisions. However, because the Commission is ultimately responsible for ensuring full and fair competition among all providers of electricity, pursuant to PURA §§ 39.001(b)(1) and 35.002, the following matters will be subject to heightened levels of scrutiny by the Commission: (1) matters that have major impacts on the fundamental design and competitiveness of markets; (2) matters that have disparate impacts on particular types of market participants; (3) matters that may unnecessarily create barriers to entry; and (4) matters that may conflict with legislative or Commission policies.

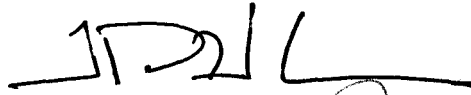
#### IV. Ordering Paragraphs

1. The Commission adopts the protocols as submitted by ERCOT on September 23, 2005, except as modified by this Order. ERCOT shall amend the protocols as required by this Order and shall take all actions as required by this Order.
2. The nodal market created by the protocols as adopted by this Order will be implemented by ERCOT no later than January 1, 2009.
3. ERCOT and the electric-market stakeholders shall determine whether co-optimization is feasible and beneficial to implement in the wholesale market as approved by this Order. Any modifications to the protocols required to implement co-optimization shall be brought to the Commission for final approval.
4. ERCOT shall modify the protocols as set out in the testimony of Dr. Shams Siddiqi to address the issue of preserving the tax-exempt status of municipalities, cooperatives, and other entities that issue tax-exempt bonds, and shall within 30 days file protocols consistent with this order.
5. The issue of load participation shall be considered in a future project, to give the Commission and interested entities an opportunity to evaluate the recommendations raised in this proceeding as well as any other options to include and encourage the participation of load in the nodal market.
6. The issues of the creation and modification of load zones should be addressed in a future project, to give the Commission, ERCOT, and interested stakeholders the opportunity to define the process of creating and modifying load zones.

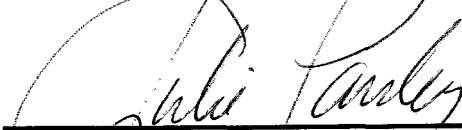
7. All motions, applications, and requests for entry of specific findings of fact and conclusions of law, and other requests for relief, general and specific, if not expressly granted herein are denied.

SIGNED AT AUSTIN, TEXAS on the 5th day of April 2006.


**PUBLIC UTILITY COMMISSION OF TEXAS**



**PAUL HUDSON, CHAIRMAN**



**JULIE PARSLEY, COMMISSIONER**



**BARRY T. SMITHERMAN, COMMISSIONER**