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PUBLIC UTILITY COMMISSION

NOTICE OF VIOLATION BY CPS §  
ENERGY, AN AUTHORIZED §  
QUALIFIED SCHEDULING ENTITY §  
(QSE), OF PURA §39.151(d) AND (j), PUC §  
SUBST. R. 25.503(f)(2), ERCOT §  
PROTOCOLS §§6.5.7.6.2.3(4), RELATING §  
TO NON-SPINNING RESERVE SERVICE §  
(NSRS) DEPLOYMENT, 8.1.1.2.1.3, §  
RELATING TO NSRS QUALIFICATION, §  
AND 8.1.1.4.3(3)(b) RELATING TO NSRS §  
ENERGY DEPLOYMENT CRITERIA §

PUBLIC UTILITY COMMISSION  
OF TEXAS

**ORDER**

This order addresses the notice of violation brought on June 18, 2012 regarding CPS Energy's failure on February 2, 2011 to provide a non-spinning reserve service (NSRS) obligation of 48 megawatts from one of its Braunig combustion turbines. The matter was referred to the State Office of Administrative Hearings, and the hearing on the merits was conducted on January 22 through January 23, 2013. The administrative law judge issued a proposal for decision on May 6, 2013. The judge found that the violations occurred and that the penalty of \$25,000 was appropriate.

The Commission adopts the proposal for decision, including the following findings of fact and conclusions of law:

**I. Findings of Fact**

**Procedural History**

1. CPS Energy (CPS) is a municipally owned utility that is owned by the City of San Antonio, Texas.
2. The Texas Reliability Entity, Inc. (Texas RE) provided a letter from Paula Mueller, Manager Protocol Compliance Texas RE, dated September 8, 2011, notifying CPS of

possible violation of Protocols §§ 8.1.1.4.3, 8.1.1.2.1.3, and 8.1.1 of the Electric Reliability Council of Texas (ERCOT). Staff for the Oversight and Enforcement Division (Staff) of the Public Utility Commission of Texas (Commission) filed its notice of violation on June 18, 2012.

3. On September 21, 2011, CPS provided its response to the notice of protocol possible violation, confirming that Braunig CT5 did not reach its low sustained limit (LSL) within 25 minutes.
4. On December 19, 2011, Staff served a written pre-notice of violation to CPS, informing CPS that it was in violation of ERCOT Protocols §§ 6.5.7.6.2.3(4), 8.1.1.4.3(3)(b) and 8.1.1.2.1.3, Public Utility Regulatory Act (PURA) § 39.151(d) and (j) and P.U.C. SUBST. R. 25.503(f)(2), and that Staff was recommending the Commission impose an administrative penalty of \$25,000.
5. Staff and CPS had one or more settlement meetings that did not result in a resolution of this matter.
6. On June 18, 2012, Staff filed its notice of violation to CPS recommending that the Commission issue an order finding CPS in violation of ERCOT protocols, and recommending the Commission impose an administrative penalty of \$25,000.
7. The Commission referred this matter to the State Office of Administrative Hearings (SOAH) on July 10, 2012.
8. The Commission issued a preliminary order on August 22, 2012, identifying seven issues to be addressed in the proceedings at SOAH.
9. On January 22 and 23, 2013, a hearing on the merits was held at SOAH, where both Staff and CPS participated.
10. The parties filed their initial briefs on February 15, 2013, and their reply briefs, as well as proposed findings of fact and conclusions of law on March 8, 2013. The record closed on March 8, 2013.

**Background**

11. Staff is responsible for conducting investigations concerning ERCOT protocol violations, prosecuting these cases, and bringing them before the Commission.
12. The Texas RE is a Texas nonprofit corporation authorized by the North American Electric Reliability Corporation (NERC) to enforce compliance with NERC reliability standards within the geographic boundaries of the ERCOT region.
13. Texas RE is also authorized through a contractual relationship with the Commission and ERCOT to act as the Commission's Reliability Monitor for the ERCOT region. As the Commission's Reliability Monitor, Texas RE: (a) monitors compliance with the reliability-related provisions of the PURA, ERCOT protocols, and ERCOT operating guides by ERCOT and ERCOT market entities; (b) initiates investigations based on monitoring activities; (c) investigates complaints and self-reported violations; and (d) investigates specific ERCOT reliability-related events and prepares reports.
14. Texas RE also assists and supports Commission enforcement activities by: (a) documenting and reporting potential compliance violations; (b) reviewing and analyzing remedial actions taken by market entities to address potential compliance violations; and (c) providing technical expertise and advice, including testimony services, in support of Staff's case in administrative penalty proceedings.
15. ERCOT manages the flow of electric power to 23 million Texas customers—representing 85% of the state's electric load. As the independent system operator for the region, ERCOT schedules power on an electric grid that connects 40,500 miles of transmission lines and more than 550 generation units. ERCOT is a membership-based 501(c)(4) nonprofit corporation, governed by a board of directors and subject to oversight by the Commission and the Texas Legislature. ERCOT's members include consumers, electric cooperatives, generators, power marketers, retail electric providers, investor-owned electric utilities (transmission and distribution providers), and municipally owned electric utilities.
16. The Texas RE and ERCOT are both contracted to act on behalf of Staff by assisting with the investigation and prosecution of ERCOT protocol violations.

17. Qualified scheduling entities (QSE) are entities qualified by ERCOT to participate in the day-ahead and real-time markets as the representatives of load serving entities (LSEs) and resource entities (REs). QSEs also perform financial settlements of market transactions with ERCOT. The requirements for registration and qualification of QSEs are set out in section 16 of the ERCOT protocols.
18. QSEs have many responsibilities and obligations related to both reliability-related activities and market transactions. QSE activities in the ERCOT market include the following:
  - (a) Submitting schedules to ERCOT reflecting planned energy sales and scheduled ancillary services on behalf of the entities they represent.
  - (b) Submitting to ERCOT detailed resource plans (called current operating plans (COP)) that are by specific unit and by hour for a rolling seven-day window. The COPs are submitted on a day-ahead basis and updated as needed. The COP is the mechanism that QSEs use to inform ERCOT of which specific units the QSE plans to use to supply ancillary services such as non-spinning reserve service (NSRS).
  - (c) Submitting offers to sell energy, bids to buy energy and/or offers to provide ancillary services in the day-ahead and real-time markets.
  - (d) Receiving dispatch instructions from ERCOT and insuring that their representative generation resources execute those instructions.
19. CPS is a QSE with generation resources in the ERCOT market.
20. Ancillary services are those services necessary to support the transmission of energy from resources to loads while maintaining reliable operation of the transmission system using good utility practice. As operator of the single control area, ERCOT is responsible for ensuring that the right amount of generation is available to service the system load and that there is sufficient transmission capacity to deliver the power to where it is needed.
21. Most electricity in ERCOT is bought and sold through private, bilateral transactions to which ERCOT is not a party. However, as the independent system operator, ERCOT is responsible for ensuring that there is sufficient generating capacity scheduled ahead of

time to meet the projected load, and also to ensure that sufficient generating capacity is available to balance generation with load in real time. During real time operations, unexpected changes in generation or load can cause the scheduled generation to be insufficient for time periods ranging from seconds to hours. ERCOT is responsible for responding to such reliability challenges and uses ancillary services for this purpose.

22. In ERCOT, ancillary services used to balance generation with load include: (a) regulation service (up – URS and down – DRS); (b) responsive reserve service (RRS); and (c) NSRS.
23. NSRS is an ancillary service that is provided through use of the part of off-line generation resources that can be synchronized and ramped to a specified output level within 30 minutes (or load resources that can be interrupted within 30 minutes) and that can operate (or load resources that can be interrupted) at a specified output level for at least one hour. Non-spin may also be provided from unloaded on-line capacity that meets the 30-minute response requirements and that is reserved exclusively for use for this service.
24. NSRS is a stand-by capacity service dispatched by ERCOT. NSRS provides additional generating capacity that is available within 30 minutes of deployment if that scheduled generation is inadequate to meet demand.
25. NSRS is an important tool that ERCOT uses to ensure the reliability of the ERCOT grid.
26. There are three situations that will cause ERCOT to deploy NSRS: (a) detection of insufficient capacity for energy dispatch based on periodic checking of available generation capacity; (b) disturbance conditions such as a unit trip, sustained frequency decay, or sustained low frequency operations; and (c) security constrained economic dispatch (SCED) not having enough energy available to execute successfully.
27. The performance requirements of the ERCOT protocols describe three components that make up a successful NSRS deployment using an off-line generation resource. Failure to timely complete any of the following actions would result in the NSRS capacity not being available for dispatch by ERCOT:

(a) Within 20 minutes of deployment, the QSE must update the NSRS schedule for the unit indicating the deployment was applied to that unit (technically accomplished by the QSE reducing the NSRS schedule to zero for each unit). The schedule update is communicated via telemetry and makes the capacity available to ERCOT's SCED for dispatch via basepoint instructions to the units.

(b) Within 25 minutes of deployment, the generating unit must reach its LSL. The generating unit's LSL is communicated to ERCOT via telemetry.

(c) Within 25 minutes, the QSE must change the resource status for the generating unit from "OFFNS" (offline non-spin) to "ON." The resource status is communicated to ERCOT via telemetry and allows SCED to dispatch the unit from that point based on the required energy offer curve submitted by the QSE for that unit.

**February 2, 2011, Energy Emergency Alert (EEA) Event**

28. On February 1, 2011, CPS voluntarily offered to provide 96 megawatts (MW) of NSRS in the day-ahead ancillary services market and was awarded those services.
29. CPS is paid by ERCOT for NSRS.
30. On February 1, 2011, CPS submitted a COP to ERCOT that informed ERCOT that CPS planned to provide 96 MW of NSRS using two of the Braunig combustion turbines (Braunig CT5 and Braunig CT8) on the morning of February 2, 2011, for the time period 04:00 to 05:00.
31. In February 2011, Texas experienced record cold temperatures that caused numerous electric generating facilities to trip off-line or to fail.
32. Beginning January 27, 2011, ERCOT took steps, such as adjusting load forecasts, scheduling additional generation, adjusting reserve levels and cancelling or delaying planned maintenance outages for transmission facilities, in anticipation of the high energy demands expected between February 1 and February 3, 2011.
33. Additionally, ERCOT issued "operating condition notices" (including one issued on January 31, 2011, at 06:30, which warned QSEs that: "A cold front is approaching with temperatures anticipated to be in the mid to low 18 degree range and maximum

temperature expected to remain near or below freezing impacting 50% or more of the major metropolitan areas. Estimate starting time Tuesday 2/1/11 09:00.”

34. On February 2, 2011, freezing temperatures across the state caused a drop in available generation and increase in load causing ERCOT to deploy a total of 1,804 MWs of NSRS at 04:26 with the expectation that the full amount would be online and available to SCED no later than 04:51.
35. The failure or delay of more than 600 MWs of the 1,804 MWs of NSRS deployed by ERCOT contributed to the low levels of physical responsive capability (PRC). ERCOT took the necessary actions to maintain grid reliability, including declaring an EEA at 05:18 and eventual firm load shed to prevent widespread, sustained blackouts.
36. CPS's Braunig CT5 unit was one of the units that failed to start up and deploy in the required 25-minute time frame in response to the NSRS instruction that morning.
37. Between February 1, 2011, at 09:00 and February 3, 2011, at 18:00, a total of 225 generation units experienced a failure to start during freezing conditions.
38. At its lowest level, approximately one-third of the total ERCOT electric generation fleet was unavailable for deployment.
39. At 05:43 on February 2, 2011, ERCOT declared an EEA Level 3 and took action to reduce demand on the electric grid.
40. ERCOT simultaneously issued a verbal dispatch instruction calling on all emergency interruptible load service loads to curtail their consumption to the requisite amount, and initiated a round of state-wide rolling blackouts by ordering 1,000 MW of manual firm load shed.
41. Approximately two hours later, ERCOT ordered an additional 3,000 MW of firm load shed.
42. A joint report by the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation concluded that 3.2 million customers were affected by the rolling blackouts during the February 2011 event.



43. The report also concluded that if ERCOT had not acted promptly to reduce demand through firm load shedding, it would very likely have suffered widespread, uncontrolled, sustained blackouts throughout the entire ERCOT region.
44. The EEA was cancelled by ERCOT at 10:00 on February 3, 2011.
45. When ERCOT's reserve levels of electricity supply drop below adequate levels, ERCOT is required to declare an EEA, which allows implementation of various measures to increase supply and reduce demand to bring the grid into balance.
46. Deployment of NSRS is one step taken prior to implementing rolling blackouts.
47. CPS's failure to meet its NSRS performance obligations when called on before the February 2, 2011, emergency event inhibited ERCOT's ability to respond to emergency conditions and maintain the reliability of the grid.
48. The ERCOT protocols in effect on February 2, 2011, apply to the February 2, 2011, emergency event.
49. ERCOT Protocol § 8.1.1.2.1.3(5), relating to NSRS qualification, requires that each QSE shall ensure that each resource is able to meet the resource's obligations to provide the ancillary services resource responsibility. Each generation resource and load resource providing non-spin must meet specified additional technical requirements.
50. CPS received certification through ERCOT's grandfathered provision on or about December 10, 2010.
51. CPS is required to comply with ERCOT's dispatch instructions, as set out in ERCOT Protocol § 6.5.7.6.2.3(4).
52. On February 2, 2011, ERCOT issued a valid dispatch instruction at 04:26 requiring CPS to deploy 48 MW of NSRS from Braunig CT5 in accordance with its agreed NSRS obligation.
53. CPS's Braunig CT5 failed to reach its LSL in 25 minutes and come online within 30 minutes when NSRS was deployed on February 2, 2011.

54. Data provided by ERCOT's data historian confirmed that the Braunig CT5 failed to start and achieve the required minimum output in the required 25-minute timeframe.
55. CPS is not exempt from compliance with ERCOT's dispatch instruction on February 2, 2011, at 04:26 under either ERCOT Protocol §§ 6.5.3(1) or 6.5.7.9(1).
56. No risk to safety, bodily harm, or equipment existed when CPS attempted to operate the Braunig CT5 on the morning of February 2, 2011, because the unit automatically tripped pursuant to the permanent control system programmed into the unit after an alarm was detected indicating that the SCR tempering air fans were not operating as designed.
57. CPS is responsible for meeting the NSRS performance requirements, as set out in ERCOT Protocol § 8.1.1.4.3(3)(b).
58. CPS failed to demonstrate that the failure of Braunig CT5 to reach its LSL in 25 minutes and come online within 30 minutes when NSRS was deployed on February 2, 2011, was due to equipment failure beyond its reasonable control.
59. CPS had several opportunities to call in additional staffing prior to the hour ending 5:00 to ensure any start-up failures could be promptly addressed.
60. CPS failed to prove that it had provided adequate staffing levels at the Braunig site on February 2, 2011, in light of its choice to offer NSRS from unproven units.

## **II. Conclusions of Law**

1. CPS is a municipally owned utility under PURA § 11.003(11).
2. The Commission has jurisdiction over this matter pursuant to PURA §§ 14.051, 15.023, 15.024, and 39.151(d) and (j).
3. SOAH has jurisdiction over this proceeding pursuant to PURA § 14.053 and the Administrative Procedure Act, Tex. Gov't Code § 2001.051.
4. Proper notice was provided to CPS pursuant to Tex. Gov't Code §§ 2001.051 and 2001.052.
5. ERCOT Protocol § 6.5.7.6.2.3(4), requires that on receipt of a dispatch instruction, off-line generation providing non-spin must be on-line at an output level at least equal to the

resource's LSL within 25 minutes and must be able to dispatch to its non-spin resource responsibility within 30 minutes of the dispatch instruction. Once the generation resource is on-line, the QSE shall reduce the non-spin ancillary service schedule by the amount of the deployment to make the capacity available for SCED to dispatch.

6. ERCOT Protocol § 8.1.1.4.3(3)(b), requires that for off-line generation resources, 25 minutes following a deployment instruction, the resource must also have a resource status indicating that it is on-line with an energy offer curve and the telemetered generation must be greater than or equal to the resource's telemetered LSL.
7. Staff bears the burden of proving by a preponderance of the evidence that a market participant violated ERCOT protocols, Commission substantive rules, and PURA.
8. Staff has proven by a preponderance of the evidence that CPS violated ERCOT Protocols §§ 6.5.7.6.2.3(4) and 8.1.1.4.3(3)(b), P.U.C. SUBST. R. 25.503(f)(2), and PURA § 39.151(j).
9. A market participant that fails to comply with ERCOT dispatch instructions or protocol requirements has the burden to prove, in any Commission proceeding where failure to comply is raised, that it is entitled to an exemption from compliance with dispatch instructions or other protocol requirements, pursuant to the ERCOT protocols.
10. CPS bears the burden of proving by a preponderance of the evidence that it is exempt from compliance with ERCOT dispatch instructions and protocol requirements.
11. CPS failed to demonstrate by a preponderance of the evidence that it is exempt from compliance with ERCOT dispatch instructions and protocol requirements pursuant to ERCOT Protocol §§ 6.5.3(1) or 6.5.7.9(1).
12. CPS is not exempt from compliance with the NSRS performance requirements in response to ERCOT's dispatch instruction on February 2, 2011, at 04:26 under either Protocol §§ 6.5.3(1) or 6.5.7.9(1).
13. A market participant that fails to comply with ERCOT dispatch instructions or protocol requirements has the burden to prove, in any Commission proceeding where failure to

- comply is raised, that it is entitled to an excuse from compliance with dispatch instructions or protocol requirements under P.U.C. SUBST. R. 25.503(f)(2)(C).
14. CPS bears the burden of proving by a preponderance of the evidence that it should be excused from compliance with ERCOT dispatch instructions and protocol requirements.
  15. CPS failed to demonstrate by a preponderance of the evidence that it should be excused from compliance with ERCOT dispatch instructions and protocol requirements pursuant to P.U.C. SUBST. R. 25.503(f)(2)(C).
  16. CPS violated ERCOT Protocol §§ 6.5.7.6.2.3(4) and 8.1.1.4.3(3)(b) when Braunig CT5 failed to reach its LSL in 25 minutes and come online within 30 minutes when NSRS was deployed on February 2, 2011, to supply the voluntary NSRS obligation that CPS promised to ERCOT.
  17. CPS is not entitled to an exemption under the ERCOT protocols or an excuse under P.U.C. SUBST. R. 25.503(f)(2)(C).
  18. Violations of ERCOT Protocol §§ 6.5.7.6.2.3(4) and 8.1.1.4.3(3)(b) are class A violations pursuant to P.U.C. SUBST. R. 25.8.
  19. A \$25,000 penalty is reasonable for the ERCOT protocol violations found in this case due to the seriousness of the violations, which took place during the midst of an EEA event, a time when the ERCOT transmission system is heavily reliant on the provision of ancillary services, such as NSRS, to be available when called upon.

### III. Ordering Paragraphs


In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:

1. CPS shall pay a \$25,000 penalty for violating ERCOT Protocol §§ 6.5.7.6.2.3(4) and 8.1.1.4.3(3)(b).
2. All other motions, requests for entry of specific findings of fact and conclusions of law, and any other requests for general or specific relief, if not expressly granted, are denied.

SIGNED AT AUSTIN, TEXAS the 19<sup>th</sup> day of June 2013.

**PUBLIC UTILITY COMMISSION OF TEXAS**

  
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**DONNA L. NELSON, CHAIRMAN**

  
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**KENNETH W. ANDERSON, JR., COMMISSIONER**