

PETITION OF ELECTRIC RELIABILITY	§	BEFORE THE
COUNCIL OF TEXAS, INC., FOR	§	
APPROVAL OF PROTOCOL REVISIONS	§	PUBLIC UTILITY COMMISSION
AFFECTING NONCOMPETITIVE	§	
CONSTRAINT DESIGNATIONS	§	OF TEXAS

**ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.'S
PETITION FOR APPROVAL OF PROTOCOL REVISIONS AFFECTING
NONCOMPETITIVE CONSTRAINT DESIGNATIONS**

Electric Reliability Council of Texas, Inc. (ERCOT) files this petition pursuant to P.U.C. Substantive Rule 25.502(f)(4) seeking approval of revisions to its Protocols and other standards that would affect the designation of noncompetitive constraints in the ERCOT market. As discussed herein, these revisions have been unanimously approved by the necessary stakeholder groups and are scheduled to be implemented in ERCOT's computer systems beginning June 10, 2013. ERCOT therefore requests the Commission's expedited review of this petition with a proposed consideration of the item at the Commission's open meeting on June 6, 2013.

I. BACKGROUND AND RELEVANT FACTS

Public Utility Commission ("Commission") Substantive Rule 25.502(f)(4) requires that ERCOT submit to the Commission "for oversight and review" any amendments to its Protocols affecting the designation of competitive and noncompetitive constraints. The rule also provides that these amendments "shall not take effect unless ordered by the Commission."

ERCOT has recently approved changes to its Protocols and other standards governing the designation of noncompetitive constraints.¹ Most significantly, the ERCOT Board of Directors ("Board") approved Nodal Protocol Revision Request (NPRR) 520 at its March 19, 2013, meeting, following stakeholder review and discussion at the ERCOT Wholesale Market

¹ In addition to those amendments described in this document, ERCOT also made changes to the non-competitiveness test through NPRRs 469 (effective in part on August 1, 2012, and in part on February 13, 2013 following system changes) and 472 (effective on February 13, 2013 following system changes). NPRR 469 did substantially revise multiple sections of the Protocols describing the constraint competitiveness test, but it ultimately had little effect on real-time mitigation because the conditions under which the new standards applied (namely, the activation of Commercially Significant Constraints or Closely Related Elements in economic dispatch) have only rarely occurred. NPRR 472 provided minor modifications to the constraint competitiveness test to more precisely account for DC Ties and certain outages. While ERCOT intends to provide notice of all such changes in the future, it submits that these NPRRs were relatively immaterial to the operation of the ERCOT market.

Subcommittee, Protocol Revision Subcommittee, and Technical Advisory Committee (TAC).² This NPRR was intended to narrow the circumstances in which real-time mitigation of generator offers would occur, as recommended by the Commission's Independent Market Monitor (IMM).³ This change is effectuated by the NPRR's introduction of a new real-time competitive constraint test, which considers several variables that determine whether a given transmission constraint will be deemed either competitive (in which case no mitigation would apply) or noncompetitive (requiring mitigation of certain generators' offers).

On May 2, 2013, ERCOT's TAC, under delegation of authority from the Board, approved a document entitled "Threshold Values for Competitive Constraint Test," which provides the values of certain essential variables in the constraint competitiveness test modified by NPRR 520.⁴ The Threshold Values document is classified as an "Other Binding Document" pursuant to paragraphs (2) and (5) of Section 1.1 of the ERCOT Protocols, and is thus recognized as a standard applicable to the operation of the ERCOT market.

ERCOT must request expedited Commission consideration of this petition because the normal contested case timeline would result in the delayed implementation of NPRR 520 and the Threshold Values document, imposing substantial and unnecessary costs on generators in the ERCOT market. The ERCOT Board approved NPRR 520 to be effective "upon system implementation"—*i.e.*, the date the software changes being developed to effectuate the NPRR are implemented. ERCOT is currently testing this software and is scheduled to begin implementation of the system changes for NPRR 520 on June 10, 2013, and to complete the changes on June 13, 2013. ERCOT must implement software changes according to a fairly rigid schedule of release dates due to the complexity and interaction of the many systems involved in administering the ERCOT market. If ERCOT is unable to implement the changes during the June 10-13 timeframe, it must either conduct an expensive and risky off-cycle release if and when the Commission approves this petition, or it must wait until the next on-cycle release of July 30-31, 2013. Delaying the effectiveness of this NPRR until that time would continue to

² NPRR 520 is attached as Exhibit A, and the associated Impact Analysis is attached as Exhibit B.

³ In its 2011 State of the Market Report, the IMM stated as follows: "We recommend a change to the automated mitigation procedures that are part of the real-time dispatch to eliminate the occurrences of over-mitigation we have observed. . . [W]e support introducing a test to determine whether a unit is either contributing to, or helping to resolve a transmission constraint and only subject the relieving units to mitigation."

⁴ The Threshold Values document is attached as Exhibit C.

result in excessive mitigation of generator offers during periods in which high demand is anticipated, resulting in further unnecessary suppression of prices.

II. STATEMENT OF JURISDICTION AND AUTHORITY

The Commission has jurisdiction over this matter pursuant to PURA § 39.151(d).

III. IDENTIFICATION OF APPLICANT

The name and address of the Applicant is: Electric Reliability Council of Texas, Inc., 7620 Metro Center Drive, Austin, Texas 78744.

The name, address, telephone, and facsimile numbers of Applicant's authorized representatives are as follows:

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IV. REQUEST FOR APPROVAL AND REASONS THEREFOR

ERCOT respectfully requests that the Commission issue an order approving NPRR 520 and the Threshold Values document. In adopting these standards, ERCOT stakeholders adhered to all applicable processes and requirements. NPRR 520 was unanimously approved by the ERCOT Board on March 19, 2013, and the Threshold Values document was unanimously approved by TAC on May 2, 2013.

ERCOT believes the changes to these standards are critical to addressing the concerns raised by the IMM regarding the excessive mitigation of generator offers in the real-time market. These developments should ensure that energy prices more accurately reflect the system conditions and constraints at issue.

Among the most important of these changes is the elimination of the monthly and daily competitive constraint analysis in favor of a real-time analysis (while retaining the annual analysis). The real-time analysis will allow ERCOT's Security-Constrained Economic Dispatch (SCED) engine to evaluate, during each five-minute SCED interval, the competitiveness of any constraint that has been activated in SCED. Generators influencing a constraint that has been deemed non-competitive in one interval will no longer have their offers needlessly mitigated during subsequent intervals that may be deemed competitive.

NPRR 520 will also limit the competitiveness analysis to those players on the import side of a constraint (*i.e.*, the side to which power flows), which is the only side of the constraint over which a participant could exercise market power by physical or economic withholding. Generators on the export side (*i.e.*, the side from which power flows) will still be subject to mitigation based on the mitigated offer floor.

This NPRR also improves the responsiveness of market oversight by allowing the IMM to designate any constraint as competitive or non-competitive, irrespective of the application of ERCOT's constraint competitiveness test. In cases where the IMM's analysis shows that a constraint has been (or may be) unreasonably determined to be non-competitive, the IMM will be able to address that through such an override following notice to the market.

The Threshold Values document provides the values of the element competitiveness index (ECI) thresholds which, if exceeded, will cause the constraint to be deemed non-competitive. The document also establishes the minimum shift factor values that will require inclusion of a given generator in the competitiveness analysis, as well as the minimum percentage of capacity ownership that justifies imposing mitigation for any constraint deemed to be non-competitive. NPRR 520 grants TAC the flexibility to modify these values as necessary, rather than requiring ERCOT to modify the Protocols when the stakeholders agree that the values should be changed.

Given the unanimity of stakeholder support for these measures, the Commission should have great confidence in approving these revisions. A draft order approving the petition is attached as Exhibit D.

V. NOTICE PROVIDED BY ERCOT

ERCOT will provide notice of this petition by posting it on ERCOT's website at http://www.ercot.com/about/governance/legal_notices and by sending it via electronic mail to all recipients on the email exploder lists for the ERCOT Board, Technical Advisory Committee, Protocol Revision Subcommittee, and Wholesale Market Subcommittee, which are all of the ERCOT stakeholder groups that reviewed either the NPRR or the Threshold Values document.

VI. REQUEST FOR PROCEDURAL SCHEDULE

Because the changes proposed in NPRR 520 and the Threshold Values document are scheduled to be implemented in ERCOT's systems beginning June 10, 2013, ERCOT proposes the following expedited procedural schedule culminating with a Commission decision at its open meeting scheduled for June 6, 2013. ERCOT requests that the presiding officer waive all necessary procedural rules, including P.U.C. Procedural Rule 22.104(b) (which allows intervention up to 45 days from the date of application), and approve this expedited schedule for the reasons described above in Section I. This schedule assumes that the petition will be uncontested and that there are no requests for a hearing. ERCOT recognizes that any such request may require an extension of this schedule.

ERCOT posts petition to its website and provides notice (as described in Section V. herein)	May 3, 2013
<i>Texas Register</i> publication of the Commission's notice of petition	May 10, 2013
Deadline for intervenors/Commission Staff to intervene; deadline for all parties to comment and/or request hearing	May 16, 2013
If no hearing requested, proposed order filed by presiding officer pursuant to P.U.C. Proc. R. § 22.35(b)(2)	May 17, 2013
Consideration of proposed order at Commission open meeting	June 6, 2013

VII. CONCLUSION

ERCOT respectfully requests that the Commission issue an order approving NPRR 520 and the TAC-approved document titled “Threshold Values for Competitive Constraint Test,” and that the Commission adopt the procedural schedule requested by ERCOT in this petition and grant ERCOT all other relief to which it is entitled.

Respectfully submitted,

By: _____

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CERTIFICATE OF SERVICE

I certify that a copy of this document was served on all parties of record in this proceeding on May 3, 2013 in the following manner: by facsimile, email, or first-class U.S. mail.

Nathan Bigbee

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NPRR Number	520	NPRR Title	Real-Time Mitigation Rules and Creation of a Real-Time Constraint Competitiveness Test	
Timeline	Urgent	Action		Approved
Date of Decision		March 19, 2013		
Effective Date		Upon system implementation.		
Priority and Rank Assigned		Priority – 2013; Rank – 205		
Nodal Protocol Sections Requiring Revision		2.1, Definitions 3.19, Constraint Competitiveness Tests 3.19.1, Constraint Competitiveness Test Definitions 3.19.2, Element Competitiveness Index Calculation 3.19.3, Long-Term Constraint Competitiveness Test 3.19.4, Monthly Constraint Competitiveness Test 3.19.5, Daily Constraint Competitiveness Test 6.5.7.3, Security Constrained Economic Dispatch 6.5.7.4, Base Points		
Market Guide Section(s) Requiring Revision		None.		
Revision Description		The primary changes in this Nodal Protocol Revision Request (NPPR) are the following: <ul style="list-style-type: none">• The Monthly and Daily Constraint Competitiveness Tests (CCTs) will be replaced with a CCT that is performed as part of the Security-Constrained Economic Dispatch (SCED) process considering only those constraints that are active in SCED and using the current system conditions.• The Element Competitiveness Index (ECI) calculation for the Long-Term and SCED CCTs will only be performed on the import side of a constraint.• The designation of a constraint as competitive or non-competitive in the SCED CCT will not be dependent on the designation during the Long-Term CCT.• The Independent Market Monitor (IMM) is given the ability to designate constraints as either competitive or non-competitive, regardless of CCT results.• Only those Entities with decision making authority that have a significant impact in making a constraint non-competitive will be considered for mitigation in SCED.• Only those Resources that have a significant contribution in getting the Entity with decision making authority considered for mitigation for a Non-Competitive Constraint will have mitigation applied in SCED.		

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	<ul style="list-style-type: none"> The formula for mitigating energy offers in SCED is changed to include a small adder to the reference price from SCED Step 1 in order to minimize issues caused by the tie breaking logic. The use of Mitigated Offer Floors in the SCED process is removed.
Reason for Revision	<p>To address the following issues:</p> <ul style="list-style-type: none"> Mitigated prices or offers being applied in situations that are competitive or in which an Entity with decision making authority does not have a significant competitive advantage. Base Point oscillations that occur with changes in the reference Locational Marginal Price (LMP) and Resources being unnecessarily mitigated. Multiple Quick Start Generation Resources (QSGRs) being brought On-Line when not all needed due to having the same mitigated offer applied. <p>These were some of the issues raised in the January 15, 2013 IMM report to the ERCOT Board to “implement the changes necessary to address the SCED ‘over-mitigation’ issues.”</p>
Credit Impacts	ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR520 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Procedural History	<ul style="list-style-type: none"> ➤ On 2/6/13, NPRR520 and an Impact Analysis were posted. ➤ On 2/12/13, NRG Texas comments were posted. ➤ On 2/21/13, PRS considered NPRR520. ➤ On 2/25/13, ERCOT comments were posted. ➤ On 2/28/13, a second set of ERCOT comments were posted. ➤ On 3/7/13, TAC considered NPRR520. ➤ On 3/19/13, the ERCOT Board considered NPRR520.
PRS Decision	On 2/21/13, PRS unanimously voted to grant NPRR520 Urgent status. PRS then unanimously voted to recommend approval of NPRR520 as submitted with a recommended priority of 2013 and rank of 205. All Market Segments were present for the vote.
Summary of PRS Discussion	On 2/21/13, ERCOT Staff stated that important components of NPRR520 could be implemented by Summer 2013; that additional implementation details and operational examples would be presented at the 2/26/13 Congestion Management Working Group (CMWG) meeting; and that the appropriate thresholds for determining the competitive designation of constraints will be developed and approved by TAC.
TAC Decision	On 3/7/13, TAC voted to recommend approval of NPRR520 as revised by the 2/28/13 ERCOT comments and request that WMS provide a draft of the related Other Binding Document to TAC in April. There were three abstentions from the Independent Retail Electric Provider (IREP) Market Segment. All Market Segments

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	were present for the vote.
Summary of TAC Discussion	On 3/7/13, ERCOT Staff reviewed NPRR520 and noted it will attempt to implement the Market Management System (MMS) portions of NPRR520 as soon as possible.
ERCOT Opinion	ERCOT supports approval of NPRR520.
Board Decision	On 3/19/13, the ERCOT Board approved NPRR520 as recommended by TAC in the 3/7/13 TAC Report.

Business Case		
Business Case	1	<i>This NPRR addresses the over mitigation issues by minimizing the set of Resources that are mitigated to only those Resources that have significant impacts to a Non-Competitive Constraint. This ensures that Resources that do not impact a Non-Competitive Constraint, when Dispatched up in SCED Step 2 to meet the power balance constraint, will set the price based on their competitive offers.</i>
	2	<i>This NPRR minimizes Base Point oscillations for Resources that become marginal due to offer price floors for Non-Spinning Reserve (Non-Spin) Service, Reliability Unit Commitment (RUC) and Reliability Must-Run (RMR) Service, high QSGR offers priced above the Reference LMP, or high offers submitted based on a voluntary Mitigation Plan above the Reference LMP.</i>

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Market Segment	Not applicable.

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Comments Received	
Comment Author	Comment Summary
NRG Texas 021213	Recommended that PRS grant NPRR520 Urgent status and requested a prioritization level that will ensure implementation prior to Summer 2013.
ERCOT 022513	Corrected an error in paragraph (2)(c) of Section 3.19.4 and

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	proposed additional clarifications.
ERCOT 022813	Proposed revisions based on discussions at the 2/26/13 CMWG meeting.

Comments

Please note that the following NPRRs also propose revisions to Section 6.5.7.3:

- NPRR444, Supplemental Reliability Deployments
- NPRR486, Calculation of Generation to be Dispatched
- NPRR508, Setting of Real-Time LMPs During EEA ERS/Load Resource Deployment

Please also note that the baseline Protocol language in the following sections has been updated as follows:

- NPRR469, Modifications to CCTs (unboxed in the February 14, 2013 Protocols)
 - 3.19
 - 3.19.1
 - 3.19.2
 - 3.19.3
 - 3.19.4
 - 3.19.5
 - 6.5.7.3
- NPRR472, Implementation Clarifications for Consideration of DC Tie Lines and Outages in CCTs (unboxed in the February 14, 2013 Protocols)
 - 3.19.1
 - 3.19.3

Proposed Protocol Language Revision

2.1 Definitions

Competitive Constraint

A contingency/limiting Transmission Element pair that is determined to be competitive by the Technical Advisory Committee (TAC).

[NPRR520: Replace the above definition “Competitive Constraint” with the following upon system implementation:]

A contingency and limiting Transmission Element pair or group of Transmission Elements associated with a Generic Transmission Limit (GTL) that is determined to be competitive using

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the process defined in Section 3.19, Constraint Competitiveness Tests.

Non-Competitive Constraint

A Transmission Element that is not a Competitive Constraint.

[NPRR520: Replace the above definition “Non-Competitive Constraint” with the following upon system implementation:]

A contingency and limiting Transmission Element pair or group of Transmission Elements associated with a GTL that is not determined to be a Competitive Constraint under the process defined in Section 3.19, Constraint Competitiveness Tests.

3.19 Constraint Competitiveness Tests

- (1) The Technical Advisory Committee (TAC) shall consider the results of the Constraint Competitiveness Tests (CCTs) and other relevant factors in reaching its determination as to whether or not a Transmission Element pair should be determined to be a Competitive Constraint. Any contingency/limiting Transmission Element pair not designated as a Competitive Constraint shall be deemed to be a Non-Competitive Constraint.
- (2) The appropriate TAC subcommittee may develop an alternative list through the analysis described below for determining Competitive Constraints.
- (3) The TAC shall perform the following analysis with the goal of developing an objective standard for determining Competitive Constraints:
 - (a) Contingency analysis – based on reasonable generation dispatch that would lead into a set of elements to be studied; and
 - (b) The Long-Term, Monthly, and Daily CCTs.
- (4) At a minimum, the CCT should be performed at least once per month and the results compared to the existing TAC-approved Competitive Constraints list. Based on the comparison, the TAC may evaluate alternative methodologies or alternative Competitive Constraints and report the results of these evaluations to the TAC.
- (5) The Independent Market Monitor (IMM) may suspend a Competitive Constraint from being designated as competitive for a specified period of time necessary to allow for analysis, but not to exceed 60 days and shall notify the market of the estimated time needed to conduct the analysis. The IMM shall also provide notification to the market prior to the suspension of any Competitive Constraint.

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- (6) TAC shall approve the Competitive Constraints one month prior to the long-term Congestion Revenue Right (CRR) Auction sequence. Prior to each monthly CRR Auction, TAC shall approve updates to the Competitive Constraints that are applicable for the following monthly CRR Auction.
- (7) ERCOT shall post the Competitive Constraints to the Market Information System (MIS) Secure Area at least five Business Days before any change takes effect. ERCOT shall post any Competitive Constraints that have been suspended and the duration of the suspension as soon as practicable to the MIS Secure Area.

[NPRR520: Delete paragraphs (1)-(7) above upon system implementation].

3.19.1 Constraint Competitiveness Test Definitions

- (1) The CCT checks the competitiveness of the constraint by evaluating Market Participant's ability to exercise market power by physical withholding, economic withholding, predatory pricing, etc. The CCT for a constrained Transmission Element evaluates whether the constraint can be overloaded given the system condition, if there is sufficient competition to resolve the constraint on the import and export sides by calculating the Element Competitiveness Index (ECI) on the import and export sides of the constraint, and determines the existence of a single Entity needed to resolve the constraint.
- (2) The competitiveness of a constraint is tested on a long-term, monthly, and daily basis. To conduct the test, various definitions are needed, including:
 - (a) "Available Capacity for a Resource" is defined as:
 - (i) The Seasonal Net Max Sustainable Rating of a Generation Resource, as registered with ERCOT, including a Switchable Generation Resource (except a Wind-powered Generation Resource (WGR)) for the Long-Term and Monthly CCTs or Current Operating Plan (COP) High Sustained Limit (HSL) for the Daily CCT.
 - (A) For WGRs:
 - (1) Long-Term CCT - on the export side, the Seasonal Net Max Sustainable Rating, as registered as specified in its ERCOT- approved Resource Asset Registration Form, and on the import side, zero MW.
 - (2) Monthly and Daily CCT - the expected on-peak wind generation output on the export side and zero MW on the import side.
 - (ii) The full import capability of the Direct Current Tie (DC Tie) lines on the export side and zero MW on the import side.

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- (3) “Managed Capacity for an Entity” is a Resource or Split Generation Resource for which the Entity or its Affiliates has the decision-making authority over how the Resource or Split Generation Resource is offered or scheduled (e.g., Output Schedules), in accordance with subsection (e) of P.U.C. SUBST. R. 25.502, Pricing Safeguards in Markets Operated by the Electric Reliability Council of Texas. Each Resource Entity that owns a Resource shall submit a declaration to ERCOT, using a form designated by ERCOT, as to which Entity has the decision-making authority for each of its Resources. The declaration shall be signed by the Authorized Representative of the Resource Entity. In addition, each Resource Entity that owns a Resource shall Notify ERCOT of any known changes in that declaration no later than 14 days prior to the date that the change takes effect or as soon as possible in a situation where the Resource Entity is unable to meet the 14-day Notice requirement. Upon ERCOT’s request, each Resource Entity that owns a Resource shall provide ERCOT with sufficient information or documentation to verify control of the Resource. ERCOT shall apply decision-making authority to Managed Capacity for an Entity effective the first Operating Hour of the Operating Day ERCOT satisfactorily confirms the Resource Entity’s most recent declaration, but not sooner than the effective date specified on the Resource Entity’s most recent declaration.
- (4) Shift Factors of all Electrical Buses are computed relative to the distributed load reference Bus.
 - (a) For voltage, stability, and thermal-limited constraints, as well as interfaces represented by thermal limits, the Shift Factors should be computed with no other contingencies removed from the electrical network.
 - (b) For contingency-limited constraints, the Shift Factors used should be computed with the contingencies removed from the electrical network.

3.19.2 *Element Competitiveness Index Calculation*

- (1) The ECI is one of several criteria used in the Long-Term, Monthly, and Daily CCTs to determine the competitiveness of a constraint.
- (2) To compute the ECI on the import and export side, first determine the “ECI Effective Capacity” available to resolve the constraint on the import and export sides, as follows:
 - (a) Determine the ECI Effective Capacity that each Entity contributes to resolve the constraint on the import side by taking, for each Managed Capacity for an Entity having negative Shift Factors with absolute values greater than the minimum of one-third of the highest absolute value of any Resource Shift Factor with a negative value and 2%, the sum of the products of (A) the Available Capacity for a Resource and (B) the square of the Shift Factor of that Resource to the constraint.
 - (b) Determine the ECI Effective Capacity that each Entity contributes to resolve the constraint on the export side by taking, for each Managed Capacity for an Entity having positive Shift Factors greater than the minimum of one-third of the highest

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positive Resource Shift Factor and 2%, the sum of the products of (A) the Available Capacity for a Resource and (B) the square of the Shift Factor of that Resource to the constraint.

- (3) Determine the ECI on the import and export side of the constraint, as follows:
 - (a) Determine the total ECI Effective Capacity by each Entity and its Affiliates on the import and export side.
 - (b) Determine the percentage of ECI Effective Capacity by each Entity and its Affiliates on the import and export side by taking each Entity and its Affiliates' ECI Effective Capacity and dividing by the total ECI Effective Capacity on the import and export side.
 - (c) The ECI on the import side is equal to the sum of the square of the percentages of ECI Effective Capacity by each Entity and its Affiliates on the import side.
 - (d) The ECI on the export side is equal to the sum of the square of the percentages of ECI Effective Capacity by each Entity and its Affiliates on the export side.

3.19.3 Long-Term Constraint Competitiveness Test

- (1) The Long-Term CCT uses 12 monthly peak Load cases for all calculations.
- (2) A constraint is classified as competitive for the year if it is competitive in any of the ERCOT-selected cases for the year. A constraint is competitive for a monthly case if the constraint can be overloaded in the monthly case and it doesn't meet any of the following conditions:
 - (a) The ECI is greater than 2,000 on the import side or the ECI is greater than 2,500 on the export side of the constraint; or
 - (b) The constraint cannot be resolved by eliminating all Available Capacity for a Resource on the import side, except nuclear capacity and minimum-energy amounts of coal and lignite capacity, that is Managed Capacity for an Entity or its Affiliates during peak Load conditions; or
 - (c) There are no positive Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have a value greater than or equal to 2%, and there are no negative Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have an absolute value greater than or equal to 2%.

[NPRR520: Replace Sections 3.19.1, 3.19.2, and 3.19.3 with the following upon system implementation:]

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3.19.1 *Constraint Competitiveness Test Definitions*

- (1) The Constraint Competitiveness Test (CCT) checks the competitiveness of a constraint by evaluating each Market Participant's ability to exercise market power by physical or economic withholding. The CCT for a constrained Transmission Element evaluates whether there is sufficient competition to resolve the constraint on the import side by calculating the Element Competitiveness Index (ECI) on the import side of the constraint and by determining whether a single Entity is needed to resolve the constraint.
- (2) The competitiveness of a constraint is tested both on a long-term basis and before each Security-Constrained Economic Dispatch (SCED) execution
- (3) The "Available Capacity for a Resource" is defined as follows:
 - (a) For Generation Resources, including Switchable Generation Resources, but excluding Intermittent Renewable Resources (IRRs):
 - (i) Long-Term CCT - the Seasonal Net Max Sustainable Rating, as registered with ERCOT.
 - (ii) SCED CCT - the telemetered High Sustained Limit (HSL) for Resources with telemetered Resource Status as specified in paragraph (4)(b)(i) of Section 3.9.1, Current Operating Plan (COP) Criteria, and zero for all other Resources.
 - (b) For IRRs:
 - (i) Long-Term CCT - the Seasonal Net Max Sustainable Rating, as registered with ERCOT, on the export side and zero MW on the import side.
 - (ii) SCED CCT - the telemetered HSL for Resources with telemetered Resource Status as specified in paragraph (4)(b)(i) of Section 3.9.1, and zero for all other Resources .
 - (c) For the Direct Current Tie (DC Tie) lines, the full import capability on the export side and zero MW on the import side for all CCTs.
- (3) "Managed Capacity for an Entity" is a Resource or Split Generation Resource for which the Entity or its Affiliates has the decision-making authority over how the Resource or Split Generation Resource is offered or scheduled (e.g., Output Schedules), in accordance with subsection (d) of P.U.C. SUBST. R. 25.502, Pricing Safeguards in Markets Operated by the Electric Reliability Council of Texas. Each Resource Entity that owns a Resource shall submit a declaration to ERCOT, using a form designated by ERCOT, as to which Entity has the decision-making authority for each of its Resources. The declaration shall be signed by the Authorized Representative of the Resource Entity. In addition, each Resource Entity that owns a Resource shall Notify ERCOT of any known changes in that declaration no later than 14 days prior to the date that the change takes effect or as soon

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as possible in a situation where the Resource Entity is unable to meet the 14-day Notice requirement. Upon ERCOT's request, each Resource Entity that owns a Resource shall provide ERCOT with sufficient information or documentation to verify control of the Resource. ERCOT shall apply decision-making authority to Managed Capacity for an Entity effective the first Operating Hour of the Operating Day ERCOT satisfactorily confirms the Resource Entity's most recent declaration, but not sooner than the effective date specified on the Resource Entity's most recent declaration.

- (4) Shift Factors of all Electrical Buses are computed relative to the distributed load reference Bus.
 - (a) For voltage, stability, and thermal-limited constraints, as well as interfaces represented by thermal limits, the Shift Factors should be computed with no other contingencies removed from the electrical network.
 - (b) For contingency-limited constraints, the Shift Factors used should be computed with the contingencies removed from the electrical network.
- (5) As part of the Long-term and SCED CCT processes described below, there are several thresholds (SFP1, ECIT1, SFP2, ECIT2, SFP3, DMEECP, and SFP4) that are used in determining the competitive designation of a constraint and the Resources for which mitigation will be applied in SCED Step 2, as described in Section 6.5.7.3, Security Constrained Economic Dispatch. ERCOT shall define these thresholds and corresponding values in the TAC-approved Threshold Values for Competitive Constraint Test posted on the Market Information System (MIS) Public Area.

3.19.2 *Element Competitiveness Index Calculation*

- (1) To compute the ECI on the import side, first determine the "ECI Effective Capacity" available to resolve the constraint. The ECI Effective Capacity that each Entity contributes to resolve the constraint on the import side is determined by taking, for each Managed Capacity for an Entity having negative Shift Factors with absolute values greater than the minimum of one-third of the highest absolute value of any Resource Shift Factor with a negative value and SFP1, the sum of the products of (A) the Available Capacity for a Resource and (B) the square of the Shift Factor of that Resource to the constraint.
- (2) ERCOT will determine the ECI on the import of the constraint, as follows:
 - (a) Determine the total ECI Effective Capacity by each Entity and its Affiliates on the import side.
 - (b) Determine the percentage of ECI Effective Capacity by each Entity and its Affiliates on the import side by taking each Entity and its Affiliates' ECI Effective Capacity and dividing by the total ECI Effective Capacity on the import side.

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- (c) The ECI on the import side is equal to the sum of the squares of the percentages of ECI Effective Capacity for each Entity and its Affiliates on the import side.

3.19.3 Long-Term Constraint Competitiveness Test

- (1) The Long-Term CCT process is executed once a year and provides a projection of Competitive Constraints for the month with the highest forecasted Demand in the following year.
- (2) The Long-Term CCT performs analysis on a selected set of constraints.
- (3) A constraint is classified as a Competitive Constraint for the monthly case if it meets all of the following conditions:
 - (a) The ECI is less than ECIT1 on the import side of the constraint;
 - (b) The constraint can be resolved by eliminating all Available Capacity for a Resource on the import side, except nuclear capacity and minimum-energy amounts of coal and lignite capacity, that is Managed Capacity for an Entity or its Affiliates during peak Load conditions; and
 - (c) There are negative Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have an absolute value greater than or equal to SFP2.
- (4) Any constraint that is analyzed and does not meet the conditions in paragraph (3) above will be designated as a Non-Competitive Constraint for the monthly case.
- (5) ERCOT shall update and post the list of Competitive Constraints identified by the Long-Term CCT on the MIS Secure Area. The list of Competitive Constraints shall be posted at least 30 days prior to the first of the year.

3.19.4 Monthly Constraint Competitiveness Test

- (1) The Monthly CCT uses the peak case for the particular month for all calculations. The peak case must include planned transmission and generation Outages for the month.
- (2) Unless otherwise approved by TAC as a Competitive Constraint, the Monthly CCT shall change the treatment of a Competitive Constraint to a Non-Competitive Constraint for the particular month if the constraint meets any of the following conditions:
 - (a) The ECI is greater than 2,500 on the import side or the ECI is greater than 3,000 on the export side; or
 - (b) The constraint cannot be resolved by eliminating all Available Capacity for a Resource on the import side, except nuclear capacity and minimum-energy

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amounts of coal and lignite capacity that is Managed Capacity for an Entity or its Affiliates during peak Load conditions; or

- (c) There are no positive Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have a value greater than or equal to 2%, and there are no negative Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have an absolute value greater than or equal to 2%.

[NPRR520: Delete 3.19.4 above upon system implementation.]

3.19.5 Daily Constraint Competitiveness Test

- (1) The Daily CCT uses the peak hour of the particular day under test. The peak hour case must include planned transmission and Resource Outages for the day.
- (2) Based on the set of the Competitive Constraints as determined in the Monthly CCT, the Daily CCT shall change the treatment of a Competitive Constraint to a Non-Competitive Constraint for the particular day if the constraints meet any of the following conditions:
 - (a) The ECI is greater than 2,500 on the import side or the ECI is greater than 3,000 on the export side; or
 - (b) The constraint cannot be resolved by eliminating all Available Capacity for a Resource on the import side, except nuclear capacity and minimum-energy amounts of coal and lignite capacity, that is Managed Capacity for an Entity or its Affiliates during the peak hour of the day; or
 - (c) There are no positive Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have a value greater than or equal to 2%, and there are no negative Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have an absolute value greater than or equal to 2%.
- (3) ERCOT shall post the Competitive Constraints to the MIS Secure Area by 0600 in the Day-Ahead.

[NPRR520: Replace Section 3.19.5 above with the following upon system implementation:]

3.19.4 Security-Constrained Economic Dispatch Constraint Competitiveness Test

- (1) The SCED CCT uses current system conditions to evaluate the competitiveness of a constraint.

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- (2) Before each SCED execution, CCT is performed for all active constraints in SCED. The SCED CCT shall classify a constraint as competitive for the current SCED execution if the constraint meets all of the following conditions:
 - (a) The ECI is less than ECIT2 on the import side;
 - (b) The constraint can be resolved by eliminating all Available Capacity for a Resource on the import side, except nuclear capacity and minimum-energy amounts of coal and lignite capacity, that is Managed Capacity for an Entity or its Affiliates. If the constraint cannot be resolved, then the Entity and its Affiliates will be marked as the pivotal player for resolving the constraint;
 - (c) There are negative Shift Factors corresponding to Electrical Buses with Available Capacity for a Resource that have an absolute value greater than or equal to SFP3; and
 - (d) The constraint was not designated as non-competitive by a previous SCED CCT execution within the current Operating Hour.
- (3) Any constraint that is analyzed and is not designated as a Competitive Constraint under the conditions outlined in paragraph (2) above shall be designated as a Non-Competitive Constraint by the SCED CCT.
- (4) A constraint that is determined to be a Non-Competitive Constraint by the SCED CCT within an Operating Hour will not be re-evaluated for its competitiveness status for the remainder of that Operating Hour. However, the SCED CCT will reevaluate the percentage of the ECI Effective Capacity on the import side for each decision-making authority and whether the decision-making authority is a pivotal player for the constraint. SCED will re-evaluate the competitiveness of the Non-Competitive Constraint starting with the first SCED interval of the next Operating Hour if the constraint remains active in SCED.
- (5) The Independent Market Monitor (IMM) may designate any constraint as a Competitive Constraint or a Non-Competitive Constraint. ERCOT shall provide notice describing any such designation by the IMM. The notice shall include an effective date, justification for the constraint designation by the IMM and the duration for which the IMM designation will be applied. Any such designation from the IMM shall override the competitiveness status determined by the SCED CCT for the dates for which the IMM override is effective.
- (6) Each hour, ERCOT shall post on the MIS Public Area whether each binding constraint was designated as a Competitive Constraint or as a Non-Competitive Constraint for each of the SCED executions during the previous Operating Hour.
- (7) Mitigation will be applied to a Resource in the SCED Step 2, as described in Section 6.5.7.3, Security Constrained Economic Dispatch, when all of the following conditions are met:

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- (a) A constraint has been determined to be a Non-Competitive Constraint by either the SCED CCT or the IMM;
 - (b) The Entity with decision-making authority for the Resource is either identified as a pivotal player for the constraint as described in paragraph (4) above or has a percentage of ECI Effective Capacity on the import side for the constraint greater than DMEECP; and
 - (c) The Resource has a shift factor on the import side of the constraint with an absolute value greater than SFP4;
- (8) Once mitigation has been applied to a Resource for a SCED interval, it shall remain applied for the remainder of the Operating Hour regardless of the conditions listed in (7) above.

6.5.7.3 Security Constrained Economic Dispatch

- (1) The SCED process is designed to simultaneously manage energy, the system power balance and network congestion through Resource Base Points and calculation of LMPs every five minutes. The SCED process uses a two-step methodology that applies mitigation prospectively to resolve network Non-Competitive Constraints for the current Operating Hour. The SCED process evaluates Energy Offer Curves and Output Schedules to produce a least cost dispatch of On-Line Generation Resources to the total current generation requirement determined by LFC, subject to power balance and network constraints. The SCED process uses the Resource Status provided by SCADA telemetry under Section 6.5.5.2, Operational Data Requirements, and validated by the Real-Time Sequence, instead of the Resource Status provided by the COP.

[NPRR257: Replace paragraph (1) above with the following upon system implementation:]

- (1) The SCED process is designed to simultaneously manage energy, the system power balance and network congestion through Resource Base Points and calculation of LMPs every five minutes. The SCED process uses a two-step methodology that applies mitigation prospectively to resolve Non-Competitive Constraints for the current Operating Hour. The SCED process evaluates Energy Offer Curves and Output Schedules to produce a least cost dispatch of On-Line Generation Resources to the total current generation requirement determined by LFC, subject to power balance and network constraints. The SCED process uses the Resource Status provided by SCADA telemetry under Section 6.5.5.2, Operational Data Requirements, and validated by the Real-Time Sequence, instead of the Resource Status provided by the COP.
- (2) The SCED solution must monitor cumulative deployment of Regulation Services and ensure that Regulation Services deployment is minimized over time.

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- (3) For use as SCED inputs, ERCOT shall use the available capacity of all committed Generation Resources by creating proxy Energy Offer Curves for certain Resources as follows:

- (a) Non-WGRs and Dynamically Scheduled Resources (DSRs) without Energy Offer Curves

ERCOT shall create a monotonically increasing proxy Energy Offer Curve as described below for:

- (i) Each non-WGR for which its QSE has submitted an Output Schedule instead of an Energy Offer Curve; and
- (ii) Each DSR that has not submitted Incremental and Decremental Energy Offer Curves.

MW	Price (per MWh)
HSL	System-Wide Offer Cap (SWCAP)
Output Schedule MW plus 1 MW	SWCAP minus \$0.01
Output Schedule MW	-\$249.99
LSL	-\$250.00

- (b) DSRs with Energy Offer Curves

For each DSR that has submitted incremental and decremental Energy Offer Curves, ERCOT shall create a monotonically increasing proxy Energy Offer Curve. That curve must consist of the incremental Energy Offer Curve that reflects the available capacity above the Resource's Output Schedule to its HSL and the decremental Energy Offer Curve that reflects the available capacity below the Resource's Output Schedule to the LSL. The curve must be created as described below:

MW	Price (per MWh)
Output Schedule MW plus 1 MW to HSL	Incremental Energy Offer Curve
LSL to Output Schedule MW	Decremental Energy Offer Curve

- (c) Non-WGRs without full-range Energy Offer Curves

For each non-WGR for which its QSE has submitted an Energy Offer Curve that does not cover the full range of the Resource's available capacity, ERCOT shall create a proxy Energy Offer Curve that extends the submitted Energy Offer Curve to use the entire available capacity of the Resource using the SWCAP above the highest point on the Energy Offer Curve to the Resource's HSL and the offer

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floor from the lowest point on the Energy Offer Curve to its LSL, using these points:

MW	Price (per MWh)
HSL (if more than highest MW in Energy Offer Curve)	SWCAP
1 MW above highest MW in Energy Offer Curve (if less than HSL)	SWCAP minus \$0.01
Energy Offer Curve	Energy Offer Curve
1 MW below lowest MW in Energy Offer Curve (if more than LSL)	-\$249.99
LSL (if less than lowest MW in Energy Offer Curve)	-\$250.00

(d) WGRs

- (i) For each WGR that has not submitted an Energy Offer Curve, ERCOT shall create a monotonically increasing proxy Energy Offer Curve as described below:

MW	Price (per MWh)
HSL	SWCAP
HSL minus 1 MW	-\$249.99
LSL	-\$250.00

- (ii) For each WGR for which its QSE has submitted an Energy Offer Curve, ERCOT shall create a monotonically increasing proxy Energy Offer Curve as described below:

MW	Price (per MWh)
HSL (if more than highest MW in Energy Offer Curve)	SWCAP
1 MW above highest MW in Energy Offer Curve (if less than HSL)	SWCAP minus \$0.01
Energy Offer Curve	Energy Offer Curve
1 MW below lowest MW in Energy Offer Curve (if more than LSL)	-\$249.99
LSL (if less than lowest MW in Energy Offer Curve)	-\$250.00

- (4) The Entity with decision making authority, as more fully described in Section 3.19.1, Constraint Competitiveness Test Definitions, over how a Resource or Split Generation

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Resource is offered or scheduled, shall be responsible for all offers associated with each Resource, including offers represented by a proxy Energy Offer Curve.

[NPRR240: Insert paragraph (5) and renumber accordingly upon system implementation:]

- (5) Energy Offer Curves that were constructed in whole or in part with proxy Energy Offer Curves shall be so marked in all ERCOT postings or references to the energy offer.

- (5) The two-step SCED methodology referenced in paragraph (1) above is:
 - (a) The first step is to execute the SCED process to determine Reference LMPs. In this step, ERCOT executes SCED using the full Network Operations Model while only observing limits of Competitive Constraints. Energy Offer Curves for all On-Line Generation Resources, whether submitted by QSEs or created by ERCOT under this Section, are used in the SCED to determine “Reference LMPs.”
 - (b) The second step is to execute the SCED process to produce Base Points, Shadow Prices, and LMPs, subject to security constraints (including Competitive and Non-Competitive Constraints) and other Resource constraints. The second step must:
 - (i) Use Energy Offer Curves for all On-Line Generation Resources, whether submitted by QSEs or created by ERCOT. Each Energy Offer Curve must be capped at the greater of the Reference LMP (from Step 1) at the Resource Node or the appropriate Mitigated Offer Cap and bounded at the lesser of the Reference LMP (from Step 1) at the Resource Node or the appropriate Mitigated Offer Floor; and
 - (ii) Observe all Competitive and Non-Competitive Constraints.

[NPRR520: Replace paragraph (5)(b) above with the following upon system implementation:]

- (b) The second step is to execute the SCED process to produce Base Points, Shadow Prices, and LMPs, subject to security constraints (including Competitive and Non-Competitive Constraints) and other Resource constraints. The second step must:
 - (i) Use Energy Offer Curves for all On-Line Generation Resources, whether submitted by QSEs or created by ERCOT. Each Energy Offer Curve must be bounded at the lesser of the Reference LMP (from Step 1) at the Resource Node or the appropriate Mitigated Offer Floor. In addition, each Energy Offer Curve subject to mitigation under the criteria described in Section 3.19.4, Security-Constrained Economic Dispatch Constraint Competitiveness Test, must be capped at the greater of the Reference LMP (from Step 1) at the Resource Node plus a variable not to exceed 0.01 multiplied by the value of the Resource’s Mitigated Offer Cap curve at the

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LSL or the appropriate Mitigated Offer Cap; and

- (ii) Observe all Competitive and Non-Competitive Constraints.

- (c) ERCOT shall archive information and provide monthly summaries of security violations and any binding transmission constraints identified in Step 2 of the SCED process. The summary must describe the limiting element (or identified operator-entered constraint with operator's comments describing the reason and the Resource-specific impacts for any manual overrides). ERCOT shall provide the summary to Market Participants on the MIS Secure Area and to the Independent Market Monitor (IMM).
- (6) For each SCED process, in addition to the binding Base Points and LMPs, ERCOT shall calculate a non-binding projection of the Base Points and Resource Node LMPs, Hub LMPs and Load Zone LMPs at a frequency of every five minutes for at least 15 minutes into the future based on the same inputs to the SCED process as described in this Section, except that the Resource's HDL and LDL and the total generation requirement will be as estimated at future intervals. The Resource's HDL and LDL will be calculated for each interval of the projection based on the ramp rate capability over the study period. ERCOT shall estimate the projected total generation requirement by calculating a Load forecast for the study period. ERCOT shall post the projected non-binding Base Points for each Resource for each interval study period on the MIS Certified Area and the projected non-binding LMPs for Resource Nodes, Hub LMPs and Load Zone LMPs on the MIS Public Area pursuant to Section 6.3.2, Activities for Real-Time Operations.

6.5.7.4 Base Points

- (1) ERCOT shall issue a Base Point for each On-Line Generation Resource on completion of each SCED execution. The Base Point set by SCED must observe a Generation Resource's HDL and LDL. Base Points are automatically superseded on receipt of a new Base Point from ERCOT regardless of the status of any current ramping activity of a Resource. ERCOT shall provide each Base Point using Dispatch Instructions issued over Inter-Control Center Communications Protocol (ICCP) data link to the QSE representing each Resource that include the following information:
 - (a) Resource identifier that is the subject of the Dispatch Instruction;
 - (b) MW output;
 - (c) Time of the Dispatch Instruction;
 - (d) Flag indicating SCED has dispatched a Generation Resource below HDL used by SCED;

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- (e) Flag indicating SCED has dispatched a Generation Resource away from the Output Schedule submitted for that Generation Resource; and

[NPRR520: Insert paragraph (1)(f) below and renumber accordingly upon system implementation:]

- (f) Flag indicating that the Resource is identified for mitigation pursuant to paragraph (7) of Section 3.19.4, Security-Constrained Economic Dispatch Constraint Competitiveness test, and paragraph (5) of Section 6.5.7.3, Security Constrained Economic Dispatch; and

- (f) Other information relevant to that Dispatch Instruction.

ERCOT Impact Analysis Report

NPRR Number	520	NPRR Title	Real-Time Mitigation Rules and Creation of a Real-Time Constraint Competitiveness Test
Impact Analysis Date	February 6, 2013		
Cost/Budgetary Impact	Between \$180k and \$200k		
Estimated Project Time Requirements*	<p>The timeline for implementing this Nodal Protocol Revision Request (NPRR) is dependent upon ERCOT Board prioritization and approval. Please see the Project Priority List (PPL) for additional information.</p> <p>Estimated project duration: Between 6 to 8 months</p>		
ERCOT Staffing Impacts (across all areas)	No impacts to ERCOT staffing.		
ERCOT Computer System Impacts	<p>The following ERCOT systems would be impacted:</p> <ul style="list-style-type: none"> • Market Information System (MIS) • Market Management System (MMS) • Enterprise Integration (EI) • Current Day Reports (CDR) • Network Modeling and Management System (NMMS) 		
ERCOT Business Function Impacts	No impacts to ERCOT business functions.		
Grid Operations & Practices Impacts	No impacts to ERCOT grid operations and practices.		

Alternatives for a More Efficient Implementation *(include explanation of impacts)*

None offered.

Evaluation of Interim Solutions *(e.g., manual workarounds)*

None offered.

Feasibility of Implementation

Impact on Resource Availability: N/A

Impact on Other Projects: N/A

Comments

ERCOT Impact Analysis Report

None.

Threshold Values for Competitive Constraint Test

Effective June 1st 2013

Document Revisions

Date	Version	Description	Author(s)
3/11/2013	0.1	Initial draft	ERCOT
	1.0	TAC approved changes	

1. Revision Process

Revisions to this document shall be made according to the approval process prescribed in paragraph (6) of Protocol Section 3.19.1, Constraint Competitiveness Test.

2. Threshold Values for Competitive Constraint Test

Protocol Section 3.19.1 requires ERCOT to develop thresholds to be used in determining the competitive designation of a constraint and the Resources for which mitigation will be applied in SCED Step 2. The definitions and thresholds are as follows:

Threshold	Definition	Value
SFP1	Minimum shift factor threshold for determining which Managed Capacity to include in the ECI calculation	2%
ECIT1	Maximum competitive threshold for ECI on the import side of a constraint for the Long-Term CCT process	2000
SFP2	Minimum shift factor threshold for a constraint to be eligible to be a Competitive Constraint as part of the Long-term CCT Process	2%
ECIT2	Maximum competitive threshold for ECI on the import side of a constraint for the SCED CCT process	2000
SFP3	Minimum shift factor threshold for a constraint to be eligible to be a Competitive Constraint as part of the SCED CCT Process	2%
DMEECP	Threshold for the ECI Effective Capacity for an Entity or its Affiliates to determine if their Managed Capacity is eligible to be mitigated as part of SCED Step 2	10%
SFP4	Minimum shift factor threshold below which a Resource will not have mitigation applied in SCED Step 2	2%

EXHIBIT D

DOCKET NO. _____

PETITION OF ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC., FOR APPROVAL OF PROTOCOL REVISIONS AFFECTING NONCOMPETITIVE CONSTRAINT DESIGNATIONS	§ § § § §	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS
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PROPOSED ORDER

This Order addresses the petition of Electric Reliability Council of Texas, Inc. (ERCOT), for approval of Protocols and other standards affecting the designation of noncompetitive constraints in the ERCOT market, filed pursuant to § 39.151 of the Public Utility Regulatory Act (PURA)¹ and P.U.C. Substantive Rule 25.502(f)(4). This docket was processed in accordance with applicable statutes and Public Utility Commission of Texas (Commission) rules. ERCOT and Commission Staff are the only parties to this proceeding. The petition is approved.

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

I. Findings of Fact

1. On May 3, 2013, ERCOT filed a petition for approval of Nodal Protocol Revision Request (NPRR) 520 and the accompanying “Threshold Values for Competitive Constraint Test” document (hereinafter, the “Threshold Values document”) pursuant to P.U.C. Substantive Rule 25.502(f)(4).
2. On May 3, 2013, ERCOT provided notice of the petition by (a) email delivery to subscriber lists for the ERCOT Board of Directors (Board), the Technical Advisory Committee (TAC), the Wholesale Market Subcommittee, and the Protocol Revisions Subcommittee; and (b) posting the petition on the ERCOT website.
3. On May 6, 2013, the Commission caused notice of this proceeding to be published in the May 10, 2013, edition of the *Texas Register*.
4. No request to intervene or request for hearing was filed.
5. Commission Staff and ERCOT are the only parties to this docket.

¹ Public Utility Regulatory Act, TEX. UTIL. CODE ANN. §§ 11.001-66.-16 (Vernon 2007 & Supp. 2011) (PURA).

6. NPRR 520 proposes revisions to existing Protocols that determine the competitiveness of transmission constraints within the ERCOT market. The Threshold Values document specifies the values of certain variables that determine when constraints will be deemed noncompetitive and when certain generators will be deemed to impact a given constraint. These changes are intended to reduce excessive mitigation of offers in the ERCOT real-time market.
7. The ERCOT Board unanimously approved NPRR 520 on March 19, 2013, following stakeholder review and discussion at the ERCOT Wholesale Market Subcommittee, Protocol Revision Subcommittee, and TAC.
8. The TAC unanimously approved the Threshold Values document on May 2, 2013.
9. No issues of law or fact are disputed by any party, and the decision to approve ERCOT's petition is not adverse to any party; therefore no hearing is necessary.
10. Pursuant to P.U.C. Procedural Rule 22.5(b), good cause exists to waive the requirements of P.U.C. Procedural Rule 22.104(b), allowing 45 days to file a motion for intervention, so that this proceeding may be considered at the Commission's regularly scheduled open meeting of June 6, 2013.

II. Conclusions of Law

1. The Commission has certified ERCOT as an independent organization pursuant to PURA § 39.151.
2. The Commission has jurisdiction over this matter pursuant to PURA § 39.151.
3. Reasonable and adequate notice of the petition was provided in accordance with P.U.C. Procedural Rule 22.55.
4. ERCOT's petition was processed in accordance with requirements of PURA and the Administrative Procedure Act, TEX. GOV'T. CODE ANN. §§ 2001.001-2001.902 (Vernon 2008 & Supp. 2011).
5. The requirements for informal disposition under P.U.C. Procedural Rule 22.35 have been met in this proceeding.
6. Pursuant to P.U.C. Procedural Rule 22.5(b), good cause exists to waive the 45-day intervention period required by P.U.C. Procedural Rule 22.104(b).

7. NPRR 520 and the Threshold Values document are reasonable revisions to the competitive constraint analysis under existing Protocols and should be implemented as scheduled.

III. Ordering Paragraphs

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

1. ERCOT's petition for approval of NPRR 520 and the Threshold Values document is hereby approved.
2. All other motions, requests for entry of specific findings of fact and conclusions of law, and any other request for general or specific relief, if not expressly granted here, are denied.

SIGNED AT AUSTIN, TEXAS on the _____ day of June, 2013.

PUBLIC UTILITY COMMISSION OF TEXAS

DONNA L. NELSON, CHAIRMAN

KENNETH W. ANDERSON, JR., COMMISSIONER