PROJECT NO. 27917

RULEMAKING ON PRICING SAFEGUARDS IN ERCOT-OPERATED MARKETS	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

PROPOSAL FOR PUBLICATION OF NEW §25.502
AS APPROVED AT THE JUNE 9, 2004 OPEN MEETING

The Public Utility Commission of Texas (commission) proposes new §25.502, relating to Pricing Safeguards in Markets Operated by the Electric Reliability Council of Texas (ERCOT). The rule will establish mitigation procedures to prevent market abuse when prices cannot be determined by the normal forces of competition, establish disclosure requirements for certain energy and capacity offers by suppliers, establish limits on congestion revenue right (CRR) holdings, and establish an ERCOT Independent Market Monitor. Project Number 27917 is assigned to this proceeding.

Many of the issues that this rule addresses are also discussed in the Market Mitigation White Paper approved by the ERCOT Board of Directors on May 18, 2004. This white paper, one of 24 pertaining to various aspects of the new ERCOT wholesale market design required under §25.501, is the result of deliberations by ERCOT stakeholders participating in the Texas Nodal Team (TNT) process. Commission Staff has used the white paper as a starting point for this rule. Nevertheless, there are differences between the proposed rule and the white paper that reflect serious concerns on the part of Staff. The commission invites comment on these differences. Comments should address the substance of how a given problem should be addressed and should avoid relying solely on the fact that the white paper reflects compromises made by stakeholders.

Issue 1: System-Wide Price Safeguards

Subsection (i) is intended to place a reasonable constraint on prices when the market is not competitive system-wide and prices cannot be determined by the normal forces of competition. In particular, it would preclude a pivotal supplier or "hockey stick offer" from setting any clearing price. "Hockey stick pricing" is when a supplier prices most of its offer competitively, but prices a small, economically expendable portion exorbitantly high. The basic mechanism included in subsection (h), referred to as the Competitive Solution Method (CSM), was developed by Staff and first proposed in Docket Number 24770, *Report of the Electric Reliability Council of Texas (ERCOT) to the PUCT regarding Implementation of the ERCOT Protocols*. In that docket, the commission approved a limited form of CSM for quick implementation, and decided to defer further consideration of CSM to a rulemaking, such as this one, dealing more broadly with market failure mitigation. See Docket Number 24770, Order (August 22, 2003), pages 26-27. While CSM is designed to be automatic, the ERCOT white paper addresses hockey stick pricing by relying on the independent market monitor to identify and remove hockey stick offers on an ad hoc basis prior to market clearing. Another difference is that CSM automatically mitigates the influence of suppliers who are pivotal on a system-wide basis, while the ERCOT white paper does not. Please compare the automatic mitigation contained in the rule to the ad hoc mitigation in the white paper as well as practices in other markets (for example, New York's Automatic Mitigation Procedure), and explain why one is preferable over the others.

Issue 2: Offers Priced Above System-wide Cap

The system-wide mitigation approved by the commission in Docket Number 24770 allows mitigated offers to be paid at their offer price if selected, but prevents them from setting any market clearing price. By contrast, the proposed rule would preserve such treatment only for loads acting as resources, and would pay all other offers at the greater of the system-wide offer cap or their verifiable costs. An alternative approach would be to adopt the offer cap contained in the TNT Market Mitigation White Paper, which is intended to address local market power only. The TNT approach for mitigating local market power would cap offers at the greater of verifiable costs plus an adder based on the unit's historical capacity factor, or a general fixed heat rate equivalent. If the system-wide offer cap in subsection (i) is ultimately adopted by the commission, what is the best way to treat offers that are priced above that cap?

Issue 3: Congestion Revenue Rights

Market participants that own both resources and CRRs under certain circumstances can use the combination to enhance profits associated with causing congestion. The white paper directs the market monitor to review the interaction between ownership of CRRs and generation and take the appropriate remedial action, but imposes no pre-determined ownership limits. Subsection (k) of the proposed rule presents a specific, pre-determined approach to CRR holdings consistent with the general guidelines mentioned in the white paper, except that it establishes certain limitations on CRR holdings. Please compare the specific, pre-determined approach to CRR

holdings in the rule to the ad hoc approach in the white paper, and explain why one is preferable over the other.

Issue 4: Disclosure of Resources with High Offer Prices

Under the current market, ERCOT posts a list of all market participants who submit offers priced above $300 per megawatt-hour (MWh) for balancing energy service and $300 per megawatt per hour (MW/h) in the case of ancillary capacity services. The list is posted the following operating day. Subsection (d) of the rule continues this disclosure in the new market. In addition, any offer above $300 that actually causes a price to clear above $300 would also be identified as a price setter. Is extending the current disclosure practice an appropriate deterrent to hockey stick pricing?

Issue 5: Safe Harbor

Subsection (j) would provide market participants with a limited safe harbor against enforcement actions dealing with certain kinds of market power abuse. Please comment on the appropriateness and effectiveness of such a safe harbor.

Issue 6: Disgorgement of Windfall

Subsection (f) establishes a means by which the commission can correct any misallocation of costs or payments caused by flaws in ERCOT procedures. Please comment on the appropriateness of this subsection.

Issue 7: Reliability Must Run (RMR) Resources

Subsection (g) is intended to ensure that a generation resource that ERCOT has determined is required for reliability remains in operation. In addition, it is intended to provide an orderly process to resolve a dispute between the supplier and ERCOT that prevent the signing of an RMR agreement. Finally, it is intended to ensure that the supplier receives reasonable compensation for providing RMR service. This issue was discussed in ERCOT's RMR Task Force and Protocol Revision Subcommittee in the context of Protocol Revision Request 507, but no consensus was achieved. A generation resource that ERCOT has determined is required for reliability has market power, because ERCOT must take the steps that are necessary to ensure that the generation resource remains in operation. This situation gives the generation resource owner bargaining power to demand excessive compensation from ERCOT to provide RMR service. Consequently, price protections are needed. The commission is addressing this issue at this time because ensuring that reliability is maintained is essential; addressing the issue involves the creation of wholesale price protections, which is the primary subject of this rule; the proposed subsection involves action taken by the commission; and there is considerable

disagreement among Staff and a number of stakeholders concerning resolution of the issue. Please comment on the appropriateness of this subsection.

In addition to the provisions mentioned in the foregoing questions, subsection (g) deals with mitigating local market power. In the TNT discussions, stakeholders studied a methodology to distinguish competitive and non-competitive constraints. Local market power would be mitigated in part by simulating the power flow of the system without enforcing non-competitive constraints, and using the results of the simulation to determine reference prices. Many stakeholders indicated that they wanted to see the formula for measuring local competitiveness applied to a large sample of ERCOT transmission elements. Due its computational intensity, this analysis was not completed prior to the time TNT took a final vote on its market mitigation white paper. Stakeholders directed a task force to continue the analysis, and subsection (g) allows for the completion of this analysis. The subsection sets forth principles for guiding the development of local market power mitigation, and requires that any methodology must be explicitly approved by the commission.

Subsection (h) establishes an Independent Market Monitor (IMM) who would be accountable to the independent members of the ERCOT Board of Directors. The subsection describes how the IMM would coordinate activities with the commission's Market Oversight and Legal and Enforcement Divisions.

When commenting on specific subsections of the proposed rule, parties are encouraged to describe "best practice" examples of regulatory policies, and their rationale, that have been proposed or implemented successfully in other states already undergoing electric industry restructuring, if the parties believe that Texas would benefit from application of the same policies. The commission is only interested in receiving "leading edge" examples which are specifically related and directly applicable to the Texas statute, rather than broad citations to other state restructuring efforts.

Dr. David Hurlbut, Senior Economist in the commission's Market Oversight Division (MOD), has analyzed the effects of the rule. Dr. Hurlbut has determined that the effects of the rule will largely begin with the start of the new ERCOT wholesale market design, which §25.501 requires ERCOT to implement by October 1, 2006. For the first years following that date and beyond, the public benefit expected as a result of adoption of the rule will be to reduce inefficient and unreasonable wealth transfers from electricity customers to electricity suppliers. The inefficiencies addressed by this rule arise when wholesale prices in markets operated by ERCOT in the ERCOT power region are not determined by the normal forces of competition, due to reasons such as market power, limited supply margins, and defects in ERCOT procedures, combined with the highly inelastic demand in these markets; i.e., when there is market failure.

The consequences of market failure – and, conversely, the public benefit of mitigating market failure – are difficult to quantify with accuracy, but history can offer some guidance. In late February 2003, an extreme weather event in the ERCOT power region caused demand for

electricity and natural gas to rise suddenly, while at the same time natural gas scarcity reduced the supply of electric generation available to meet the inelastic demand. Prices naturally rise under such conditions, but the presence of a one-megawatt "hockey stick" balancing energy offer caused balancing energy prices to clear $500 to $700 per megawatt-hour higher than where they would have cleared had that one megawatt not been present. In its reports on the February 2003 extreme weather event, the commission's MOD estimated that the hockey stick offer added $17 million to the cost of balancing energy, and another $20 million to the cost of ancillary service capacity. (Additional costs such as increased credit requirements for retail electric providers were not quantified.) Clearing prices set by hockey stick offers produce unreasonable clearing prices. Consequently, a plausible minimum estimate of the expected benefit accruing from subsection (h) of the rule is at least $37 million whenever an extreme weather event or some other emergency compromises system reliability and requires the deployment of all available resources.

Another incident occurred in 2002, when a pivotal supplier was able to set the clearing price for Non-Spinning Reserve Service at $999 per megawatt per hour for a 12-hour period on April 30. Dr. Hurlbut estimates that CSM would have mitigated the price to around $225 per megawatt – still higher than the $70 per megawatt ERCOT was paying for spinning reserves at that same time, but reasonable relative to how non-pivotal suppliers were pricing their offers. The difference between the actual clearing price of $999 per megawatt and the $225 per megawatt that would have resulted under CSM equates to more than $6 million for that one-day incident.

Consequently, a plausible firm estimate of the benefits of applying CSM as described in subsection (h) is between $6 million and $37 million per year. This is a conservative estimate, using the actual direct costs associated with historical events of 2002 and 2003, the first two full years that ERCOT operated as a single control area. It assumes only one extraordinary event occurring per year, and does not take into account any indirect costs. In the extreme, however, the consequences of having no working price safeguards could reach into the billions, as demonstrated by the California electricity crisis of 2000.

The costs of implementing the system-wide offer cap are very small relative to the potential benefits. In Docket Number 24770, ERCOT estimated that the implementation costs for the current balancing energy market would be around $100,000. The implementation cost in the new nodal market (which will require new support software for most market operations) should be less than that amount, because it is generally less expensive to including functionality into software at the time the system is designed than it is to add the functionality later.

Another source of public benefit is the mitigation of local market power provided for by subsection (g). One of the expected benefits of the nodal market design required by §25.501 is reduced congestion management costs. This benefit arises in part from the efficiency gains caused by dispatching the most economical resources based on competitive offer prices. System conditions may be such that a resource does not have to be priced competitively in order to be selected, however. Transmission constraints may mean that one supplier is pivotal (i.e., the supplier is so large that without it, remaining supply would not be enough to meet demand) with

respect to delivering electricity to a particular location. Without local market power mitigation, pivotal suppliers could routinely be selected at offer prices at the $1,000 MWh or MW/h offer cap that the commission previously established in Docket Numbers 23220 and 24770. A plausible minimum estimate of the public benefit of mitigating local market power is about $40 million per year; this is the amount of additional energy payments (specifically, incremental out-of-merit energy payments) generators could have received to resolve local congestion in 2003 had they been able, as a result of local market power, to double the prices on which their congestion payments were based. Such localized price increases would be possible in a nodal or zonal market without local market power mitigation.

The cost of managing local congestion under the current zonal ERCOT market design was $174 million in 2002 and $246 million in 2003. Nodal pricing *under ideal conditions* will reduce the social cost of managing local congestion far below the levels experienced in 2002 and 2003; the magnitude of the potential savings in ERCOT is difficult to estimate at this time, but it is one question included in the cost-benefit analysis currently being conducted as directed by §25.501. Regardless of the potential savings under ideal conditions, however, local market power can negate some if not all of any efficiency gain.

The benefits of subsection (d) mirror those of subsections (h) and (i), to the extent that transparency provides a psychological deterrent to the same harm that would be mitigated by subsections (h) and (i). Subsection (f) facilitates the commission's ability to correct any misallocation of revenue due to flaws in ERCOT procedures.

With respect to subsection (e), pertaining to control of resources, the primary benefit will be to facilitate accurate implementation of subsections (h) and (i) as well as any other ERCOT protocol pertaining to resource control. Staff expects no significant cost for compliance with this subsection, as the burden is placed on entities already responsible for providing ERCOT with information on the resources they represent.

With respect to subsection (g), pertaining to reliability must-run (RMR) resources, the public benefit will be consistent reliability of the electricity grid. RMR resources, which otherwise would be shut down permanently, are retained by ERCOT under special contracts to address specific contingency situations (e.g., prevention of overload or voltage instability in the event of a line outage that would result in local blackouts in the absence of the RMR resources). Subsection (g) would simultaneously ensure consistent reliability and ensure that customers would not over-pay for such reliability.

For the new nodal market, §25.501(j) states: "ERCOT shall apply pricing safeguards to protect against market failure, including market power abuse, consistent with direction provided by the commission." In addition, in proposing §25.501, the commission estimated the public costs of that rule, including the cost resulting from §25.501(j). Section 25.502 constitutes direction provided by the commission as contemplated by §25.501(j). Consequently, Dr. Hurlbut has determined that §25.502 will not impose significant new incremental economic costs on persons required to comply with the rule.

Dr. Hurlbut has determined that the economic effects on small businesses or micro-businesses as a result of the rule will not be proportionately larger than impacts to the largest businesses in any systematic way, using cost for each $100 of sales of electricity as the standard. Some retail electric providers (REPs) and power generation companies (PGCs) in ERCOT may be micro-businesses or small businesses. REPs will benefit from the lower cost of wholesale electricity resulting from the rule, while PGCs will not benefit from the rule because they will not obtain profits from market failure that is mitigated by the rule.

ERCOT's costs of implementing the rule (which as discussed previously are in fact costs associated with implementing §25.501) will be passed on to market participants, who will likely be able to pass the costs along to their customers, because market participants will be affected by ERCOT's cost increase in a similar way. In addition, reducing the effect of the rule on small businesses or micro-businesses would not be legal and feasible, because it would inappropriate to allow PGCs that are small businesses or micro-businesses to keep profits from market failure that is mitigated by the rule.

Dr. Hurlbut has determined that the rule will not have a direct effect on a local economy, including for each of the first five years that the rule will be in effect. However, the rule may have indirect effects. The indirect effects will be positive, because the rule will indirectly lower the cost of retail electric service throughout the ERCOT power region.

Dr. Hurlbut states that, generally, for the state and for local governments for each of the first five years that the rule will be in effect: there is no additional estimated direct cost expected as a result of enforcing or administering the rule; there is no estimated direct loss or increase in revenue as a result of enforcing or administering the rule; and enforcing or administering the rule does not have foreseeable direct implications relating to cost or revenues. Administering this proposed rule is expected to reduce the staff time required by the commission to pursue enforcement actions, as many opportunities for abuse and consequences of market failure will be mitigated automatically. The effect of the rule on the state will be that the commission will administer and enforce the rule using existing resources. There will be no direct effects of the rule on local governments, other than as market participants.

Initial comments on the rule (16 copies) may be submitted to the Filing Clerk, Public Utility Commission of Texas, 1701 North Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326, within 30 days after publication. Reply comments may be submitted within 45 days after publication. Comments should be organized in a manner consistent with the organization of the rule. The commission invites specific comments regarding the costs associated with, and benefits that will be gained by, implementation of the rule. The commission will consider the costs and benefits in deciding whether to adopt the rule. All comments should refer to Project Number 27917.

Requests for a public hearing on this rulemaking under the Administrative Procedure Act, Texas Government Code §2001.029 should be submitted by the deadline for initial comments. If

requested, the commission staff will conduct a public hearing at the commission's offices, located in the William B. Travis Building, 1701 North Congress Avenue, Austin, Texas 78701. The tentative date for a hearing, if requested, is Monday, August 2, 2004 at 9:30 p.m.

This rule is proposed under the Public Utility Regulatory Act, Texas Utilities Code Annotated §14.002 (Vernon 1998, Supplement 2004) (PURA), which provides the commission with the authority to adopt and enforce rules reasonably required in the exercise of its powers and jurisdiction; §35.004(e), which requires that the commission 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; §39.001(d), which requires the commission to order competitive rather than regulatory methods to achieve the goals of PURA Chapter 39 to the greatest extent feasible; §39.151(a)(1), which requires that ERCOT ensure access to the transmission and distribution systems for all buyers and sellers of electricity on nondiscriminatory terms; §39.151(a)(2), which requires that ERCOT ensure the reliability and adequacy of the regional electrical network; §39.151(a)(4), which requires that ERCOT ensure that electricity production and delivery are accurately accounted for among generators and wholesale buyers in the ERCOT power region; §39.151(c), under which the commission certified ERCOT to perform the functions prescribed by §39.151 for the ERCOT power region; §39.151(d), which requires ERCOT to establish and enforce procedures, consistent with PURA and the commission's rules, relating to the reliability of the regional electrical network and accounting for the production and delivery of electricity among generators and all other market participants, and which makes these

ERCOT procedures subject to commission oversight and review; §39.151(i), which permits the commission to delegate authority to ERCOT to enforce operating standards within the ERCOT regional electrical network and to establish and oversee transaction settlement procedures, and which permits the commission to establish the terms and conditions for ERCOT's authority to oversee utility dispatch functions after the introduction of customer choice; and §39.151(j), which requires a retail electric provider, municipally owned utility, electric cooperative, power marketer, transmission and distribution utility, or power generation company to observe all scheduling, operating, planning, reliability, and settlement policies, rules, guidelines, and procedures established by ERCOT.

Cross Reference to Statutes: PURA §§14.002, 35.004(e), 39.001(d), and 39.151.

§25.502. Pricing Safeguards in Markets Operated by the Electric Reliability Council of Texas.

(a) **Purpose.** The purpose of this section is to protect the public from harm when wholesale electricity prices in markets operated by the Electric Reliability Council of Texas (ERCOT) in the ERCOT power region are not determined by the normal forces of competition.

(b) **Applicability.** This section applies to any entity that buys or sells energy, capacity, or any other wholesale electric service in a market operated by ERCOT in the ERCOT power region; any agent that represents such an entity in such activities; and ERCOT. Entities shall not circumvent the applicability of this section's requirements through agreements or other forms of cooperation.

(c) **Definitions.** The following terms, when used in this section, shall have the following meanings, unless the context indicates otherwise.

(1) **Competitive constraint** – A transmission element on which no supplier possesses local market power with respect to the price of electricity. Prices on a competitive constraint are moderated by the normal forces of competition between multiple, unaffiliated resources.

(2) **Competitive offers** – Offers submitted by suppliers who are not pivotal or by a pivotal supplier whose offers account for less than 5.0% of the total offers.

(3) **95th percentile price** – The price at which 95% of the total competitive offer quantity would be paid at or above its offer price.

(4) **Noncompetitive constraint** – A transmission element on which a supplier possesses local market power with respect to the price of electricity. Prices on a noncompetitive constraint are not moderated by the normal forces of competition between multiple, unaffiliated resources.

(5) **Pivotal supplier** – A supplier and its affiliates from which ERCOT must purchase at least a part of its offer in order to meet the demand for the service.

(d) **Disclosure of offer prices.** No later than 8:00 a.m. on the market day following each market day, ERCOT shall publish on its market information system

(1) the identities of all resources and virtual offers for which the energy offer price was $300 per megawatt-hour (MWh) or higher, or the capacity offer price was $300 per megawatt per hour (MW/h) or higher, and the corresponding market intervals;

(2) the identity of a resource or virtual offer that sets a price for energy above $300/MWh (along with the corresponding market interval and the corresponding nodes) and the identity of any resource or virtual offer that sets a price for capacity above $300/MW/h (along with the corresponding market interval); and

(3) The identity of any resource that is paid more than the system-wide offer cap described in subsection (i)(2) of this section, in accordance with subsection (i)(3) of this section.

(e) **Control of resources**. An entity responsible for scheduling resources with ERCOT shall inform ERCOT as to who controls each resource it schedules, and provide proof that is

sufficient for ERCOT to verify control. In addition, an entity responsible for scheduling resources with ERCOT shall notify ERCOT of any change in control of a resource that it schedules no later than 14 days prior to the date that the change in control takes effect. For purposes of this section, "control" means ultimate decision-making authority over how a resource is scheduled, either by virtue of ownership or agreement. A controlling entity has a substantial financial stake in the resource's profitable operation. Any resource or specified portion of a resource shall be considered to have only one controlling entity. Resources under common control shall be considered affiliated.

(f) **Refund or surcharge due to flaw in procedures.** If the commission determines that a payment, or lack of payment, made by ERCOT in a wholesale electric service market operated by ERCOT was a result of a flaw in ERCOT's procedures, either directly or indirectly as a consequence of its effect on market participant behavior, the commission shall require ERCOT to refund or surcharge the under or over collected payments. The deadline to initiate a proceeding under this subsection is one year from the market day giving rise to the payment or lack of payment at issue.

(g) **Reliability must run resources.** Except for the occurrence of a forced outage, a supplier must notify ERCOT in writing no later than 90 days prior to the date on which it intends to cease or suspend operation of a generation resource for a period of greater than 180 days. In addition, a supplier shall not transfer a generation resource to an entity that does not have a resource entity agreement with ERCOT, unless ERCOT has determined that the generation resource is not required for ERCOT reliability. A supplier shall not

terminate its resource entity agreement with ERCOT if ERCOT has determined that its generation resource is required for ERCOT reliability. If, after 90 days following ERCOT's receipt of the supplier's notice, ERCOT and the supplier have not finalized a reliability must run (RMR) agreement for a generation resource that ERCOT has determined is required for ERCOT reliability, then the supplier may file a complaint with the commission against ERCOT, pursuant to §22.251 of this title (relating to Review of Electric Reliability Council of Texas (ERCOT) conduct). Pursuant to §22.251(d), absent a showing of good cause to the commission to justify a later deadline, the supplier's deadline to file the complaint is 35 days after the 90th day following ERCOT's receipt of the notice. If the supplier files such a complaint, the compensation ordered by the commission shall be effective the 91st day after ERCOT's receipt of the notice. If the supplier does not file a complaint with the commission, the supplier shall be deemed to have accepted ERCOT's most recent offer as of the 115th day after ERCOT's receipt of the notice. Until ERCOT and the supplier finalize an RMR agreement or, as a result of a complaint described herein the commission orders the supplier to provide RMR service, the supplier shall maintain the generation resource so that it is available for out of merit order dispatch instruction by ERCOT.

(h) **Local market power.** ERCOT, through its stakeholder process, shall develop and submit for commission approval procedures to mitigate the effects of local market power caused by congestion.

(1) The procedures shall specify a method by which noncompetitive constraints may be distinguished from competitive constraints.

(2) Competitive constraints and noncompetitive constraints shall be designated annually prior to the corresponding auction of annual congestion revenue rights (CRRs). A constraint may be redesignated on an interim basis, but the criteria for interim designation as a competitive constraint shall be more stringent than the criteria for annual designation as a competitive constraint.

(3) The procedures for mitigating local market power shall ensure that a noncompetitive constraint will not be treated as a competitive constraint.

(4) The procedures for mitigating local market power shall be submitted to the commission for approval by November 1, 2004. In addition, any future amendments to the procedures must be approved by the commission.

(i) **System-wide competitiveness.**

(1) An ERCOT system-wide offer cap shall be applied to the real-time energy market or an ancillary service capacity market operated by ERCOT if the market fails the two-part Competitive Sufficiency Test described in this paragraph. The test shall be applied each market interval, and the cap shall be applied only during the market intervals that fail the test. This procedure shall also be applied to any ERCOT-operated day-ahead energy market in which congestion costs are settled.

(A) **Quantity test**. A market fails the Competitive Sufficiency Test if the supply margin falls below the thresholds specified in this paragraph. “Supply margin” is the difference between the total quantity offered and the total quantity required, divided by the total quantity required.

(i) For the real-time energy market, the threshold shall be 1.0%, using all resources available for security-constrained economic dispatch and all demand on the system.

(ii) For all other ERCOT-operated markets, the threshold shall be 5.0%, using the energy or capacity offered into that market and the total quantity required in that market.

(B) **Pivotal supplier test**. A market fails the Competitive Sufficiency Test if any supplier is pivotal. A supplier is pivotal if removing all of its offers and those of its affiliates would cause total supply to be less than total requirements.

(2) The system-wide offer cap shall be the lower of (1) $1,000/MWh or $1,000/MW/h, as applicable; or (2) the 95th percentile price of all Competitive Offers plus an adder that is large enough to permit competitive supply pricing and small enough to mitigate non-competitive supply pricing. The adder shall be the greater of:

(A) $100; or

(B) 50% of the 95th percentile price.

(3) A supply offer shall not exceed $1,000/MWh or $1,000/MW/h. If a supply offer does exceed $1,000/MWh or $1,000/MW/h, it shall be set by ERCOT to $1,000/MWh or $1,000/MW/h, as applicable. A supply offer from a load acting as a resource that is above the system-wide offer cap and that is procured shall be paid its offer price, but shall not set any clearing price and shall not be paid more

than $1,000/MWh or $1,000/MW/h, as applicable. Any supply offer other than one from a load acting as a resource that is above the system-wide offer cap and that is procured shall have the option to be paid its verifiable costs instead of the system-wide offer cap, but shall not set any clearing price and shall not be paid more than $1,000/MWh or $1,000/MW/h, as applicable. ERCOT's cost for supply procured above the system-wide offer cap shall be allocated to the buyers of the service in proportion to the quantities that they purchased.

(4) Commission staff, in cooperation with the ERCOT Independent Market Monitor, shall review the specific parameters in this subsection on an ongoing basis to determine whether they should be amended.

(j) **Interrelationship between subsections (h) and (i) of this section and their effect on market power abuse remedy.**

(1) To the extent that both subsections (h) and (i) produce price protections for a particular market interval, the lowest prices produced by those subsections shall apply.

(2) If the commission finds that market power abuse, by an entity that did not have persistent market power, occurred due solely to offer prices subject to subsections (h) and (i) and finds that subsections (h) and (i) worked as intended, the commission's remedy for the market power abuse shall be limited to the price protections afforded by subsections (h) and (i).

(3) If the commission finds that market power abuse, by an entity that did not have persistent market power, occurred due solely to offer prices subject to subsections

(h) and (i) and finds that subsections (h) and (i) did not work as intended, the commission's remedy for the market power abuse shall be no more than payment by the market power abuser of an amount equal to the difference in what it was paid and what it would have been paid had subsections (h) and (i) worked as intended. In addition, and regardless of whether the market power abuse was committed by an entity with persistent market power, all other suppliers in the affected ERCOT-operated market that benefited from the market power abuse shall pay no more than an amount equal to the difference in what they were paid and what they would have been paid had subsections (h) and (i) worked as intended.

(k) **Congestion revenue rights.**

(1) ERCOT shall publish on its market information system the owners and beneficiaries of CRRs along with the corresponding CRRs. Owners of CRRs shall notify ERCOT of any change in ownership or beneficiaries no later than seven days after the effective date of the change, and ERCOT shall publish these changes on its market information system no later than two market days after receipt of the notice. In addition, owners of CRRs shall, no later than seven days of receipt of a request, provide proof that is sufficient for ERCOT or the commission's staff to verify ownership and beneficiary status.

(2) A supplier and its affiliates that control effective local resource capacity on the importing side of a constraint shall not own or be a beneficiary of CRRs pertaining to that constraint in excess of their local load minus their effective

local resource capacity. "Effective local resource capacity" is the sum of each resource's capacity multiplied by its shift factor relative to the constraint. "Local load" is all loads that can be served by energy that flows through the constraint. Any entity and its affiliates that own CRRs amounting to more than 25% of the constraint capacity shall provide ERCOT with sufficient information to confirm compliance with this subsection no later than seven days after exceeding this percentage.

(3) For purposes of settling and derating CRRs, ERCOT shall treat each point-to-point option and each point-to-point obligation as portfolios of positive and negative power flows on all directional network elements created by the injection at the specified source point and the withdrawal at the specified sink point, in the quantity represented by the CRR.

(4) A transmission constraint for which the aggregate flowgate capacity contained in the outstanding CRRs exceeds the actual transmission capacity shall have its available transmission capacity allocated pro-rata among the affected CRRs for purposes of clearing and settlement. CRR holders shall be paid for the oversold capacity based on the lesser of the relevant shadow price of the impacted constraint or the greatest shadow price of the constraint in all previous CRR auctions that included the relevant time interval.

(l) **ERCOT Independent Market Monitor.** ERCOT shall have an Independent Market Monitor (IMM) by April 1, 2006. The IMM's operations shall be fully staffed and

equipped by the time ERCOT implements §25.501 of this title (relating to Wholesale Market Design for the Electric Reliability Council of Texas).

(1) The IMM shall report to the Independent Market Monitoring Committee (IMMC) of the Board of Directors, which shall comprise the independent members of the Board of Directors, and the director of the commission's Market Oversight Division (MOD) as an ex officio nonvoting member. The IMMC shall have sole authority to hire, discipline, or fire the IMM.

(2) The IMM shall have a staff comprising either ERCOT employees or contract consultants funded by ERCOT.

(3) The IMM shall work with MOD and other Public Utility Commission of Texas (PUCT) staff to ensure appropriate integration of IMM and PUCT oversight of the ERCOT wholesale market. No duty given to the IMM shall in any way affect PUCT staff's ability to conduct investigations or enforcement actions. The IMM shall develop public documents that briefly describe IMM functions, procedures, and processes.

(4) IMM wholesale market oversight duties shall include:

(A) All activities that are required of the IMM by the ERCOT Protocols;

(B) Monitoring, information gathering, and data analysis ordered by the ERCOT Board;

(C) Regularly monitoring any market screens and indices provided to the IMM by MOD, developed at the direction of the board, or created by the IMM in order to carry out his or her duties;

(D) Monitoring compliance with ERCOT operator instructions, tracking qualified scheduling entity (QSE) and other performance measures, documenting possible Protocol violations, and generally monitoring daily ERCOT operations and market activities;

(E) Reviewing ERCOT actions, practices, and procedures that have an impact on a market, including but not limited to whether ERCOT actions, practices, and procedures are consistent with the Protocols; and

(F) Reviewing actions on the part of a transmission service provider that has an impact on a market, including but not limited to, verification of transmission limits, and analysis of requests for outages of lines, transformers, and busses. When significant changes in nodal prices are observed, the IMM shall review them to determine the causes.

(5) The IMM shall provide MOD with information related to unusual offers or bids, unusual operational behaviors, or other questionable activities that have been detected, and shall inform MOD before contacting market participants to investigate the issue. The IMM, in cooperation with MOD, shall develop procedures to ensure prompt communication with MOD and timely resolution of issues.

(6) The IMM shall discuss with PUCT staff and ERCOT legal staff all identified instances of harmful behavior that cannot be resolved with the market participant informally or through ERCOT's dispute resolution processes; all repeated instances of ERCOT non-compliance; and protocol violations repeated within a 6-

month period. If necessary, either PUCT staff or ERCOT shall pursue an enforcement action.

(7) The IMM shall publish a "State of the Market Report" assessing the competitiveness of the ERCOT-operated markets and suggesting changes to commission rules or ERCOT procedures to improve market operation. This report shall include an assessment of the effectiveness of ERCOT transmission planning and expansion and the effectiveness and efficiency of ERCOT congestion management.

(m) **Development and implementation.** ERCOT shall develop and implement the requirements of this section in conjunction with its development and implementation of the requirements of §25.501 of this title, and shall therefore fully implement the requirements of this section by October 1, 2006.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

ISSUED IN AUSTIN, TEXAS ON THE 10th DAY OF JUNE 2004 BY THE PUBLIC UTILITY COMMISSION OF TEXAS
ADRIANA A. GONZALES