



TO: ERCOT Credit Work Group Members

FROM : Bill Magness *Bm*
ERCOT Vice-President & General Counsel

DATE: August 11, 2011

ERCOT Staff has prepared the following draft documents as part of its planned submission to the U.S. Commodity Futures Trading Commission (“CFTC”) seeking an exemption from CFTC regulation pursuant to applicable provisions of the Dodd-Frank Act. These documents are in draft form, and remain subject to change prior to finalization and filing at the CFTC.

The documents compare ERCOT financial and credit Protocols and practices to provisions of the regulatory construct used by the CFTC to regulate Derivatives Clearing Organizations (“DCO”) and Swap Execution Facilities (“SEF”). The staff of the CFTC has advised ERCOT and other ISO/RTOs seeking Dodd-Frank exemptions that these comparison documents will assist in obtaining our requested exemptions, primarily by providing vehicles for explaining our markets, financial instruments, and policies in the parlance familiar to the CFTC. The documents identify the DCO and SEF “Core Principles” adopted by CFTC, and explain how ERCOT practices are consistent with each of the principles. In some sections, ERCOT notes that it is proposing changes in its policies (some of which are already pending in the stakeholder process) in order to facilitate exemption from regulation by the CFTC. The referenced changes are those that have been discussed in several forums, including CWG/MCWG, TAC, ERCOT Board, and PUCT meetings.

ERCOT expects that the final version of these DCO and SEF Core Principles comparisons will constitute the bulk of its exemption filing with the CFTC. The comparison documents include all references to the portions of ERCOT Protocols or policies that ERCOT believes it must consider in obtain an exemption from the CFTC. ERCOT is currently working jointly with other ISO/RTOs on a potential joint exemption filing, which will include DCO and SEF comparison inputs from all the other ISO/RTOs. If the CFTC filing is ultimately made jointly, it will also include a legal pleading that is currently being developed by outside counsel for ERCOT and counsel for the other ISO/RTOs. Once the legal pleading document is closer to final form, ERCOT will consider the timing of distribution of that document, subject to consultation with counsel and with the other ISO/RTOs.

ERCOT staff will continue to regularly update stakeholder groups on the progress of the CFTC exemption effort. Please be in touch with questions or comments.

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Attachment A

DCO Core Principle A: Compliance

(i) IN GENERAL.—To be registered and to maintain registration as a derivatives clearing organization, a derivatives clearing organization shall comply with each core principle described in this paragraph and any requirement that the Commission may impose by rule or regulation pursuant to section 8a(5).

(ii) DISCRETION OF DERIVATIVES CLEARING ORGANIZATION.—Subject to any rule or regulation prescribed by the Commission, a derivatives clearing organization shall have reasonable discretion in establishing the manner by which the derivatives clearing organization complies with each core principle described in this paragraph.

Responses:

The Requestors' practices are consistent with the Core Principles for DCOs. Given that the Requestors are principally regulated by FERC and the PUCT and the differences between the Requestors and registered DCOs, the Requestors in some cases achieve compliance with the Core Principles using different methods than those ordinarily employed by registered DCOs. This discretion is expressly permitted by Core Principle A(ii). As demonstrated below, the Requestors' practices and the comprehensive regulatory regime of FERC and the PUCT achieve the goals of and are consistent with the policies of the Act. Accordingly, the exemptions requested herein are in the public interest.

Attachment B

DCO Core Principle B: Financial Resources

(i) In General.—Each derivatives clearing organization shall have adequate financial, operational, and managerial resources, as determined by the Commission, to discharge each responsibility of the derivatives clearing organization.

(ii) Minimum Amount of Financial Resources.—Each derivatives clearing organization shall possess financial resources that, at a minimum, exceed the total amount that would—

(1) enable the organization to meet its financial obligations to its members and participants notwithstanding a default by the member or participant creating the largest financial exposure in extreme but plausible market conditions; and

(2) enable the derivatives clearing organization to cover operating costs of the derivatives clearing organization for a period of 1 year (as calculated on a rolling basis).

Responses:

Attachment B—DCO Core Principle B: Financial Resources

ERCOT

A. Organization and Resources

ERCOT's financial resources and related requirements are comparable to this Core principle. The PURA, PUCT Substantive Rules and the Protocols authorize ERCOT to collect fees that are adequate to fund its operations so that it can satisfactorily fulfill its duties. PURA Section 39.151(e) authorizes ERCOT to charge a fee to cover its costs:

[t]he commission may authorize an independent organization that is certified under this section to charge a reasonable and competitively neutral rate to wholesale buyers and sellers to cover the independent organization's costs.

Section 25.363(c) of the PUCT Substantive Rules implements this authority:

Allowable expenses. Expenses and capital outlays in the budget shall be based upon ERCOT's expected cost of performing its required functions as described in PURA § 39.151(a) and this chapter. To determine whether the costs are reasonable and necessary, the commission may consider the budget justification provided by ERCOT, the ERCOT long-term operations plan, costs incurred by market participants and other independent system operators for similar activities, costs incurred in prior years, capital projects identified in the budget, and to any other information and data considered appropriate by the commission. . . Only those expenses that are reasonable and necessary to carry out the functions described in PURA § 39.151 and this chapter shall be included in allowable expenses.

The fees authorized by PURA and the PUCT Substantive Rules are linked to ERCOT's functions, as established by both of those authorities. One of ERCOT's specifically prescribed functions is managing credit. ERCOT's other core functions, established pursuant to PURA § 39.151(a)(1)-(4), include:

1. ensuring access to the transmission and distribution systems for all buyers and sellers of electricity on nondiscriminatory terms;
2. ensuring the reliability and adequacy of the regional electric network;
3. ensuring that information relating to a customer's choice of retail electric provider is conveyed in a timely manner to the persons who need that information; and

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THE REQUESTORS, AS DEFINED HEREIN,
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Attachment B—DCO Core Principle B: Financial Resources

4. ensuring that electricity production and delivery are accurately accounted for among the generators and wholesale buyers and sellers in the region.¹

Paragraphs (1) and (4) above encompass the concept of equitable accounting for credits and charges, which necessarily assigns credit and/or obligations to the appropriate parties (*i.e.*, to those Market Participants entitled to credits and/or obligated to pay for charges). To facilitate this result, ERCOT must implement appropriate credit measures to make sure Market Participants can manage their obligations under reasonably foreseeable circumstances.

In addition, Section 25.361(b) of the PUCT Substantive Rules states, in relevant part:

Functions. ERCOT shall perform the functions of an independent organization under the PURA § 39.151 to ensure access to the transmission and distribution systems for all buyers and sellers of electricity on nondiscriminatory terms; ensure the reliability and adequacy of the regional electrical network; ensure that information relating to a customer's choice of retail electric provider is conveyed in a timely manner to the persons who need that information; and ensure that electricity production and delivery are accurately accounted for among the generators and wholesale buyers and sellers in the region. ERCOT shall . . . administer settlement and billing for services provided by ERCOT, including assessing creditworthiness of market participants and establishing and enforcing reasonable security requirements in relation to their responsibilities under ERCOT rules[.]²

Accordingly, because managing credit risk is one of its specifically prescribed functions, ERCOT is allowed to include the costs associated with performing this function in the fee charged to support the operations of the organization.

Moreover, ERCOT Executive Management, Human Resources and the ERCOT Enterprise Risk Management group, which includes the credit function, annually assess staffing and budget needs to ensure the Enterprise Risk Management group has adequate resources to perform its functions, as prescribed by the PUCT Substantive Rules, and specifically implemented by the ERCOT Protocols and other relevant documents, such as the ERCOT Credit Policy. Presently, the Enterprise Risk Management group is staffed with ten full time employees.

¹ PURA § 39.151(a).

² PUCT Substantive Rules § 25.361(b) (emphasis added).
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As discussed above, ERCOT's core functions drive the fee it charges to support its functions, including credit and risk management. Section 1.2 of the Protocol prescribe ERCOT's core functions and supports the fee charged by ERCOT to fund its credit and risk management functions. ERCOT submits its budget and associated fees to the PUCT for approval.

Section 9 of the Protocols provides procedures to mutualize default risk across ERCOT's markets. These procedures ensure that ERCOT can meet its financial obligations to its Market Participants. ERCOT members agree to be subject to the relevant settlement procedures by executing the Standard Form Market Participant Agreements, which binds them to comply with the Protocols, including the mutualized risk process (*i.e.*, short-pay and uplift) prescribed by Section 9.

ERCOT's Financial Corporate Standard is a Board-approved standard, but it is not referenced in the ERCOT Protocols. ERCOT's Financial Corporate Standard requires ERCOT to:

- Provide a five year strategic plan in conjunction with its annual budget;
- Maintain an investment grade rating;
- Fund at least 40% of its capital expenditures with revenues; and
- Maintain adequate liquidity to meet its operating needs.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361 and 25.363;
- ERCOT Protocol Section 1 and 9.

B. Minimum Amount of Financial Resources and Recovery of Operating Costs

ERCOT's requirements regarding its minimum amount of financial resources are comparable to this Core principle. ERCOT does not fund market defaults. Defaults are funded by market participants.

ERCOT collateralizes for the estimated exposure for Counter-Parties, including CRR Account Holders ("CRRAHs") through the application of credit rules approved by the market participants through the Protocol change process and ERCOT's Board of Directors. These rules require Counter-Parties to post collateral for 100% of a Counter-Party's estimated exposure, less any approved unsecured credit.

ERCOT updates its credit and collateral requirements on a daily basis based on recent historical data. Because financial transmission rights are sold based on the most updated system

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model at that time and are updated based on recent historical data, collateral obligations are always based on plausible system conditions.

If a default occurs and there is inadequate collateral (*e.g.*, possibly due to unexpected market conditions) for a particular participant, a short payment, if any, is handled in a two step process.

- First, all Invoice Recipients (Qualified Scheduling Entities (“QSEs”) and/or CRRAHs) due a credit are “short-paid” on a pro rata basis.
- Second, approximately six months later, short-paid entities will be reimbursed when the cost of the short-pay is uplifted or socialized across the market. ERCOT calculates an allocation factor for each Counter-Party (parent entity to the QSEs and CRRAHs) with activity in the month prior to the default month using data from the calendar month prior to the month in which the default occurred.

In addition, as explained above, the PURA, PUCT Substantive Rules and ERCOT Protocols authorize ERCOT to collect fees that are adequate to fund its operations such that it can satisfactorily fulfill its duties.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361 and 25.363;
- ERCOT Protocol Section 1, 16.11, and 9.

ERCOT also maintains a Financial Corporate Standard that requires ERCOT, Inc. to: (a) provide a five year strategic plan in conjunction with its annual budget; (b) maintain an investment grade rating; (c) fund at least 40% of its capital expenditures with revenues; and (d) maintain adequate liquidity to meet its operating needs. This standard is reviewed and updated annually by its Board of Directors. ERCOT uses a mix of fees and debt capacity to meet these requirements. ERCOT’s Financial Corporate Standard presently requires liquidity based on: (1) six months of forecasted Scheduled Debt Service, other than principal payments reasonably expected to be refinanced; (2) two months of average Cash Operating and Maintenance Expenses, net of projected administrative fee receipts; (3) two months of budgeted project expenditures; and (4) to the extent CRR auction revenues have been utilized to fund ERCOT working capital and project expenditure needs, two months of estimated CRR repayment obligations expected to be paid, net of projected CRR auction receipts during the same period.

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Attachment C

DCO Core Principle C: Participant and Product Eligibility

(i) IN GENERAL.—Each derivatives clearing organization shall establish—

(I) appropriate admission and continuing eligibility standards (including sufficient financial resources and operational capacity to meet obligations arising from participation in the derivatives clearing organization) for members of, and participants in, the derivatives clearing organization; and

(II) appropriate standards for determining the eligibility of agreements, contracts, or transactions submitted to the derivatives clearing organization for clearing.

(ii) REQUIRED PROCEDURES.—Each derivatives clearing organization shall establish and implement procedures to verify, on an ongoing basis, the compliance of each participation and membership requirement of the derivatives clearing organization.

(iii) REQUIREMENTS.—The participation and membership requirements of each derivatives clearing organization shall—

(I) be objective;

(II) be publicly disclosed; and

(III) permit fair and open access.

Responses:

Attachment C—DCO Core Principle C: Participant and Product Eligibility

ERCOT

A. Admission and Continuing Eligibility Standards.

Participant Eligibility. ERCOT’s participation eligibility requirements are comparable to those required by this Core principle. ERCOT requires each entity to meet eligibility requirements to participate in the ERCOT market. Counter-Parties may participate as Qualified Scheduling Entities (QSEs) in the energy markets and as CRRAHs in the financial transmission rights markets. The eligibility requirements include, in relevant part, the satisfaction of the following:

- Demonstrating the capability to perform the functions of a CRRAH or QSE;
- Demonstrating the capability of complying with the requirements of all ERCOT Protocols and Operating Guides;
- Satisfying all applicable credit requirements;
- Demonstrating the ability to pay its debts as they come due (ERCOT may request evidence if ERCOT believes that a QSE or CRRAH is failing to comply with this requirement);
- Providing bank account information and arrange for electronic system transfers for two-way confirmation; and
- Assuming financial responsibility for all settlement charges under the ERCOT Protocols.

Each participant is obligated to meet these standards on an ongoing basis.

Any entity is eligible to obtain QSE or CRRAH designation, subject to the satisfaction of ERCOT’s membership and credit criteria. Speculators can participate in ERCOT’s CRR auction if they register as CRRAHs or in ERCOT’s energy markets, including participation based solely on financial interests, if they register as a QSE.³

The PUCT Substantive Rules, the ERCOT Bylaws, the Standard Form Agreement, and the ERCOT Protocols establish each ERCOT market participant’s obligation to comply with all relevant market rules.⁴

In addition to the eligibility requirements noted above, the PUCT has established minimum financial requirements for applicants seeking what are known as “Option 1” and “Option 2”

³ Entity generally means any natural person, partnership, municipal corporation, cooperative corporation, association, governmental subdivisions, or public or private organization.

⁴ See the end of this section for specific citations to the relevant authorities.

Attachment C—DCO Core Principle C: Participant and Product Eligibility

Retail Electric Provider (REP) certification in the ERCOT market. In the ERCOT market construct, REPs are the companies that sell to and collect payment from end user electricity customers.⁵

An Option 1 REP certificate is for a REP whose service offerings are defined by a geographic service area as set forth in the rule. An Option 2 REP certificate is for a REP whose service offerings are limited to specifically identified customers, each of whom contracts for one megawatt or more of capacity. The minimum financial requirements in the PUCT's REP Rule focus on the REP's access to sufficient capital, and provide REPs two options. The Rule provides that a REP or its guarantor⁶ must be able to demonstrate and maintain:

- An investment-grade credit rating documented by reports of a credit reporting agency; or
- Tangible net worth greater than or equal to \$100 million, a minimum current ratio (current assets divided by current liabilities) of 1.0, and a debt to total capitalization ratio not greater than 0.60, where all calculations exclude unrealized gains and losses resulting from valuing to market the power contracts and financial instruments used as supply hedges to serve load, and such calculations are supported by an affidavit from an executive officer of the REP attesting to the accuracy of the calculation.

Alternatively, a REP must demonstrate shareholders' equity, determined in accordance with generally accepted accounting principles, of not less than \$1,000,000 for the purpose of obtaining certification. The shareholders' equity must be documented by the audited and unaudited financial statements of the REP for the most recent quarter. The REP or its guarantor must also provide and maintain an irrevocable stand-by letter of credit payable to the PUCT with a face value of \$500,000 for the purpose of maintaining certification. The PUCT Rule includes requirements that REPs provide the PUCT with specific, detailed documentation demonstrating compliance.

There are no specific capitalization requirements for participation in the ERCOT market other than those established by the PUCT's REP Rule noted above. However, an entity's participation in the ERCOT market is effectively limited by:

- 1) Requiring collateral for 100% of estimated exposure subject to any approved unsecured credit. Exposure is updated daily.
- 2) Enforcing a credit limit within the CRR Auction and for Day Ahead Market transactions based on unsecured credit allowed or collateral posted in excess of what is required per the daily exposure requirement.

⁵ See PUCT Substantive Rule § 25.107(f)(1) and (d)(3). . The financial requirements in Subsection (f) of the rule do not apply to "Option 3" REPs who sell electricity exclusively to a retail customer from a distributed generation facility located on a site controlled by the customer.

⁶ PUCT Substantive. R. § 25.107 (f)(4)(G) sets forth capital requirements for guarantors.

Attachment C—DCO Core Principle C: Participant and Product Eligibility

ERCOT is in the process of considering new eligibility requirements that are comparable to those contemplated by FERC Order 741.

Relevant authorities:

- PURA Section 39.151 and 39.352;
- PUCT Substantive Rule 25.107, 25.361, and 25.503;
- ERCOT Protocol Section 16.8 and 16.11;
- Membership Standard Form Agreement;
- ERCOT bylaws.

B. Standards for Determining the Eligibility of Agreements, Contracts, or Transactions.

This Core Principle has very limited application to ERCOT's operations. While ERCOT does not clear the transactions in its markets (*i.e.*, it does not act as a financial intermediary and does not novate transactions to a central counterparty), ERCOT does:

- Utilize a Standard Form Market Participant Agreement for all Counter-Parties. This ensures that all contracts meet predefined criteria.
- Enforce collateral constraints in both its Day Ahead Market and in its CRR Auctions to ensure that transactions are adequately collateralized.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361 and 25.503;
- ERCOT Protocol Section 16.8 and 16.11.

C. Required Procedures.

ERCOT has procedures to verify, on an ongoing basis, compliance with each participation and membership requirement that are comparable to those required by this Core principle. Each CRRAH and QSE is obligated to:

- Meet its relevant eligibility requirements and obligations under the Protocols on an on-going basis;

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- Notify ERCOT of any changes in its situation that affect its ability to meet its eligibility requirements;
- Sign a market participant agreement and update it annually;
- Attest each year that it meets the relevant requirements;
- Update information related to its eligibility as necessary; and
- Respond to requests from ERCOT for information.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361 and 25.503;
- ERCOT Protocol Section 16.8.

D. Requirements.

ERCOT's participation and membership requirements are comparable to those of this Core principle. The general membership requirements, rights, and obligations are established in the ERCOT bylaws and available to the public on the ERCOT website. The rules for participation in the ERCOT markets are prescribed by the ERCOT Protocols and are public and also available on the ERCOT website.

ERCOT is a non-profit organization and is required to be independent from the market and to provide access to the transmission system on non-discriminatory terms. ERCOT's markets, including its CRR markets and all associated rules, are subject to that requirement. This facilitates objective rules in terms of substance and access. In addition, ERCOT is obligated to develop its market rules in concert with its market participants and other interested parties in an open, transparent committee process. To that end, a market participant body (the TAC), as well as other relevant market participant subcommittees, participate in such rule development. The ERCOT market construct (*i.e.*, the ERCOT Protocols) is subject to PUCT approval, which ensures compliance with these rules. This construct ensures that CRR market participation and membership requirements are objective and open.

ERCOT may amend certain of its participation and membership requirements and will apprise the CFTC of any changes thereto made while ERCOT's application is pending.

Relevant authorities:

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- PURA Section 39.151;
- PUCT Substantive Rule 25.361; 25.362; and 25.501;
- ERCOT Protocol Section 1;
- ERCOT Bylaws;
- ERCOT Articles of Incorporation.

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Attachment D

DCO Core Principle D: Risk Management

(i) IN GENERAL.—Each derivatives clearing organization shall ensure that the derivatives clearing organization possesses the ability to manage the risks associated with discharging the responsibilities of the derivatives clearing organization through the use of appropriate tools and procedures.

(ii) MEASUREMENT OF CREDIT EXPOSURE.—Each derivatives clearing organization shall—

(I) not less than once during each business day of the derivatives clearing organization, measure the credit exposures of the derivatives clearing organization to each member and participant of the derivatives clearing organization; and

(II) monitor each exposure described in subclause (I) periodically during the business day of the derivatives clearing organization.

(iii) LIMITATION OF EXPOSURE TO POTENTIAL LOSSES FROM DEFAULTS.—Each derivatives clearing organization, through margin requirements and other risk control mechanisms, shall limit the exposure of the derivatives clearing organization to potential losses from defaults by members and participants of the derivatives clearing organization to ensure that—

(I) the operations of the derivatives clearing organization would not be disrupted; and

(II) nondefaulting members or participants would not be exposed to losses that nondefaulting members or participants cannot anticipate or control.

(iv) MARGIN REQUIREMENTS.—The margin required from each member and participant of a derivatives clearing organization shall be sufficient to cover potential exposures in normal market conditions.

(v) REQUIREMENTS REGARDING MODELS AND PARAMETERS.—Each model and parameter used in setting margin requirements under clause (iv) shall be—

(I) risk-based; and

(II) reviewed on a regular basis.

Responses:

Attachment D—DCO Core Principle D: Risk Management

ERCOT

A. Risk Management.

ERCOT's risk management tools and procedures are comparable to those required by this Core principle.

Authorization

ERCOT has the authorization to manage the credit risk. As discussed above, PURA § 39.151(a)(1)-(4) prescribes the overarching functions of ERCOT, including the requirement to “. . . ensure that electricity production and delivery are accurately accounted for among the generators and wholesale buyers and sellers in the region.” This broad charge is implemented in the first instance by the PUCT Substantive Rules, and then further by the ERCOT Protocols. This discretion is broad and is not contingent on a material adverse change.

The PUCT Substantive Rules mirror provisions in PURA, including the obligation to “...ensure that electricity production and delivery are accurately accounted for among the generators and wholesale buyers and sellers in the region.” The PUCT's regulations go on to prescribe several overarching functions, including ERCOT's duty to “administer, on a daily basis, the operational and market functions of the ERCOT system . . . as set forth in . . . [the] ERCOT [Protocols]” and “administer settlement and billing for services provided by ERCOT, *including assessing creditworthiness of market participants and establishing and enforcing reasonable security requirements in relation to their responsibilities under [the] ERCOT [Protocols].*”

The legislative and regulatory construct that governs ERCOT requires it to establish credit and security rules for the ERCOT markets. Accordingly, ERCOT has the ability and the *obligation* to ensure the potential financial risks associated with participation in its market are mitigated pursuant to appropriate credit/security rules. This obligation is reflected in the ERCOT Bylaws and Protocols. Risk management is one of the qualifications for unaffiliated Board members specified in ERCOT's Bylaws. The relevant sections in ERCOT's Protocol are described below.

Organization and Process

ERCOT executive management encourages transparency, market involvement (particularly in rule making), and an emphasis on internal controls. ERCOT's Vice President of Credit and Enterprise Risk Management is responsible for managing all corporate risk, including market credit risk. The Enterprise Risk function is charged with identifying and prioritizing risks to the organization on an ongoing basis, communicating risks to management and stakeholders, and supporting effective risk management processes, standards and governance.

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Attachment D—DCO Core Principle D: Risk Management

Controls within the scope of the Statement on Standards for Attestation Engagements (SSAE) 16 are monitored on an ongoing basis to ensure ongoing suitability by a group within the Credit and Enterprise Risk Management function. These Standards are designed to provide assurance that proper internal controls relevant to financial reporting are in place. Furthermore, ERCOT is subject to annual SSAE16 compliance audits.

In addition, the Compliance function under the Chief Compliance Officer works to manage risks associated with critical infrastructure security and to ensure compliance with market rules, including North American Electric Reliability Corporation (NERC) standards.

Within the Credit organization process controls are in place to ensure adequate measurement, monitoring and reporting of all Counter-Party credit exposures and to monitor Counter-Party credit-worthiness on an ongoing basis.

ERCOT supports an Internal Audit function with independent reporting to the Board. Internal Audit supports effective enterprise risk management by identifying areas of risk, testing controls, and providing recommendations for improvement.

Finally, ERCOT employs experienced staff throughout the organization, including its credit staff, and provides education and training opportunities so as to support an environment in which employees are sufficiently able to identify and act on organization risks as appropriate.

Tools

ERCOT utilizes an automated system to calculate credit exposure. The Credit Monitoring and Management system (CMM):

- Calculates exposure daily from data received every day, including holidays and weekends, from source systems (including a full CRR inventory, updated payments received, and updated exposure calculations)
- Aggregates exposure at a Counter-Party level to ensure that a Counter-Party's overall credit risk is considered. Highlights entities that are at or near their credit limit for action by Credit staff
- Sends updated Available Credit Limits (ACL) daily to both the CRR system and the Day Ahead Market system
- Posts reports at least daily for Counter-Parties that details how their exposure is calculated and provides their ACL

In addition, both the Day Ahead Market system and the CRR Auction engine enforce credit constraints.

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Attachment D—DCO Core Principle D: Risk Management

Market Procedures

Market participants are required to meet specific eligibility requirements to participate in the ERCOT markets. This is a structural risk management tool that acts as an *ex ante* approach to mitigating potential market defaults.

Market eligibility also is contingent upon compliance with all applicable requirements in the ERCOT Protocols. ERCOT has sole discretion to suspend a CRRAH's or a QSE's rights as a Market Participant if it reasonably determines that is an appropriate remedy for failure to satisfy any applicable Protocol requirement.

Key aspects of ERCOT's credit process provide that ERCOT:

- 1) Establishes unsecured credit for Counter-Parties within the boundaries defined in its Creditworthiness Standard. Unsecured credit is subject to a \$100 million limit and is granted solely within ERCOT's discretion. Currently, ERCOT is imposing a \$75 million limit overall.
 - a. ERCOT is currently discussing with market participants the possibility of reducing the limit on unsecured credit to \$50 million.
- 2) Monitors for changes in creditworthiness of Counter-Parties, Guarantors and banks daily and takes action as needed.
- 3) Accepts a limited number of forms of collateral: third party guarantees; unconditional, irrevocable Letters of Credit (LCs); surety bonds with ERCOT as beneficiary; or cash
 - a. Utilizes standard forms to ensure strong and consistent terms and conditions are applied.
- 4) Accepts LCs and Guarantees only from entities that meet the Creditworthiness Standards. ERCOT's Creditworthiness Standard requires that any Letters of Credit must be: (1) issued by a bank with a minimum rating of A- with Fitch or S&P or A3 with Moody's; (2) issued on the Standard Form document approved by the Board of Directors; and (3) accepted subject to the review and approval of ERCOT. ERCOT has the right to not accept a letter of credit from a bank that it deems "at risk." ERCOT does not currently monitor the concentration of letters of credit issued by a particular issuer; however, the new Credit Monitoring and Marketing system does provide the capability. ERCOT expects to use this information to: (1) understand what, if any, concentration issues may exist in its markets; (2) educate market participants about concentration risk and determine what further actions, if any, are necessary; and (3) if a bank is determined to be "at risk", identify all collateral that may need to be replaced or addressed in some other way.

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- 5) Ensures that the combined settlement and payment process occurs promptly
 - a. Day Ahead Market activity, including settlement of most CRRs, occurs within 14 days
 - b. Real Time Market activity settlement currently occurs within 21 to 31 days
 - i. ERCOT is working with the market through the Protocol change process on changes that will ensure that approximately 88% of Real Time days are settled and paid within 14 days and 96% within 15 days with the average combined settlement and payment cycle being no more than 14 days. Settlement and payment timelines longer than the above are due to holiday schedules. All outstanding receivables are included in ERCOT's credit exposure calculation and are collateralized as required by ERCOT Protocols.
- 6) Updates credit exposure for all markets and for all market participants at least once each day, including holidays and weekend, to ensure exposure is adequately covered, including mark – to –market values for CRRs.
 - a. Forward exposure for CRRs is determined for all CRRs held based on auction clearing price and recent historical pricing (past 30 days).
 - i. ERCOT will consider additional risk forecasting methodologies once it has adequate experience in the nodal market.
 - b. ERCOT currently allows Counter-Parties to net current obligations (*e.g.*, DAM or RT markets) with forward CRR positions *if* a) they have granted ERCOT a first priority security interest or b) they are a Cooperative or EC or an entity created under Texas Water Code (TWC) § 222.001, Creation.
 - i. ERCOT is currently working with the market through the Protocol change process on changes that would restrict or eliminate netting of current exposure from DAM and RT activity with CRR forward mark–to–market positions.
- 7) Requires Counter-Parties (CRRAs and QSEs) to post collateral for 100% of calculated market exposure, net of unsecured credit.
- 8) Operates all ERCOT market activity under one credit limit, utilizing both collateral and unsecured credit.

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Attachment D—DCO Core Principle D: Risk Management

- a. ERCOT is currently working with the market through the Protocol change process on changes that would ensure that the CRR Auction and CRR forward mark-to-market values are fully collateralized rather than subject to unsecured credit.
- 9) Restricts a Counter-Party's participation in the DAM and future CRR Auctions to the lesser of their Available Credit Limit (ACL) or their self-imposed limit. The ACL is equal to an entity's unsecured credit (if any) plus collateral less its Total Potential Exposure (TPE). Market participants are prohibited from participating in the DAM and future CRR Auctions if their TPE exceeds their credit limit.
 - 10) Requires Counter-Parties to provide ERCOT with all necessary information (*e.g.*, audited and unaudited financials) for themselves or their Guarantors as well as notification of any status change that may affect unsecured credit rights, if applicable to ensure ERCOT has the information it needs to evaluate credit risk in the market.
 - 11) If an entity's exposure (TPE) equals or exceeds its credit limit (*e.g.*, its financial security plus its unsecured credit, if applicable), ERCOT:
 - a. Requires the entity to post additional collateral within two bank business days. Until corrected,
 - i. ERCOT can withhold any other payments due that entity; and
 - ii. ERCOT systems prohibit participation in the DAM or upcoming CRR Auctions since the entity's Available Credit Limit is zero.
 - b. A participant is in payment breach if it does not pay an invoice when due or post collateral within the two bank business days allowed.
 - c. Requires the entity to cure a payment breach within two bank business days.
 - i. ERCOT and the market through the Protocol change process are considering reducing the cure period further to one bank business day. ERCOT believes it is appropriate to allow at least one bank business day to cure a payment breach given that
 1. The breaching entity may be restricted from any participation in DAM activity and future CRR Auctions until the payment breach is cured
 2. The consequences of a default are that the participant's rights to participate in the market may be terminated.

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Attachment D—DCO Core Principle D: Risk Management

- d. In particular, if a market participant violates its credit obligations, ERCOT may terminate, expel, suspend, or sanction a Member. In addition, Section 16.11.6.1 and 16.11.6.2 specifically provide for the following remedies:
- i. No Payments by ERCOT to the defaulting participant;
 - ii. Draw on, hold or distribute funds of the participant;
 - iii. Aggregate amounts owed by breaching participant and immediately due;
 - iv. Repossess and resell CRRs held by the participant (sale proceeds offset debt);
 - v. Declare forfeit and resell CRRs held by the participant (sale proceeds offset debt);
 - vi. Honor cleared CRRs but remove them from the participant's account and use proceeds to offset debt; and
 - vii. Revoke the participant's rights and terminate its outstanding agreements (the market participant remains liable for all debt and consequences for termination/revocation.
 1. On revocation of some or all of the Market Participant's rights or termination of the Market Participant's agreements and on notice to the Market Participant and the Public Utility Commission of Texas (PUCT), ERCOT shall initiate a mass transition of the Market Participant's ESI IDs pursuant to Section 15.1.3, Mass Transition, without the necessity of obtaining any order from or other action by the PUCT.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361;
- ERCOT Protocol Section 1 and 16;
- ERCOT bylaws.

B. Measurement of Credit Exposure.

- 1) ERCOT's procedure for measuring and monitoring credit exposure is comparable to that required by this Core principle.

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Attachment D—DCO Core Principle D: Risk Management

2) Under ERCOT Protocols, ERCOT

- a. Updates credit exposure for all markets and for all market participants at least once each day, including holidays and weekend, to ensure exposure is adequately covered, including mark – to –market values for CRRs.
 - i. Historical Real Time, DAM and CRR activity is updated through the prior day
 - ii. Forward exposure for CRRs is determined for all CRRs held based on auction clearing price and recent historical pricing.
 1. ERCOT will consider additional risk forecasting methodologies once it has adequate experience in the nodal market.
 - iii. Forward risk for markets other than the FTR market is currently estimated using the
 1. “Average Daily Day Ahead Liability Extrapolated” (or DALE) component of the Estimated Aggregate Liability (EAL) calculation. The DALE is used to estimate forward risk based on recent Day-Ahead Market activity. The DALE uses a 16 day multiplier to accommodate forward risk. Because the calculation is based on settled data, it is inherently based on the historical prices and volumes in the Day-Ahead Market. This multiplier is not based on the Day-Ahead Market settlement cycle but is simply a mechanism to provide for forward risk based on recent Day-Ahead Market activity.
 2. “Average Daily Transaction Extrapolated” (or ADTE) component of the EAL. The ADTE is used to estimate ERCOT’s forward risk based on recent Real-Time Market activity. ERCOT’s credit exposure takes the highest Average Daily Transaction Extrapolated component calculated in the last sixty days. The ADTE is based on an average of 14 days of initial settlement statements for Real-Time Market activity, multiplied by 40. ERCOT uses 40 as a multiplier to accommodate approximately 20 days of incurred but unbilled Real-Time Market activity and approximately 20 days of forward risk. Because the calculation is based on settled data, it is inherently based on the historical prices and volumes in the Real-Time Market.

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Attachment D—DCO Core Principle D: Risk Management

This is one of the primary mechanisms by which ERCOT provides for forward risk based on recent Real-Time Market activity.

- iv. Forward risk for markets other than the FTR market is reviewed for reasonableness. ERCOT recognizes that: (a) prices and volumes incurred in the future may differ from those used in any particular exposure component; and (b) activity can flip between the Day-Ahead Market and the Real-Time Market. ERCOT looks at the overall calculated exposure relative to potential default risk when evaluating the adequacy of required collateral.
- b. Updates credit exposure intra-day for payments and/or other new information.
- c. Currently allows Counter-Parties to net current obligations (e.g. DAM or RT markets) with forward CRR positions *if* a) they have granted ERCOT a first priority security interest or b) they are a Cooperative or EC or an entity created under Texas Water Code (TWC) § 222.001, Creation.
 - i. ERCOT is currently working with the market through the Protocol change process to define Protocol changes that would restrict or eliminate netting of current exposure from DAM and RT activity with CRR forward mark – to –market positions.
- d. Requires Counter-Parties (CRRAHs and QSEs) to post collateral for 100% of Total Potential Exposure (TPE), net of unsecured credit.
- e. Operates all ERCOT market activity under one credit limit, utilizing both collateral and unsecured credit.
 - i. ERCOT is currently working with the market through the Protocol change process to define Protocol changes that would ensure that the CRR Auction and CRR forward mark – to –market values are fully collateralized rather than subject to unsecured credit.
- f. Restricts a Counter-Party’s participation in the DAM and future CRR Auctions to the lesser of their Available Credit Limit (ACL) or their self-imposed limit. The ACL is equal to an entity’s unsecured credit (if any) plus collateral less its Total Potential Exposure (TPE). Market participants are prohibited from participating in the DAM and future CRR Auctions if their TPE exceeds their credit limit.

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Attachment D—DCO Core Principle D: Risk Management

- i. CRR Auction - The CRR engine determines which CRRs to award by dividing the per MW economic benefit of each bid (defined as the Bid Price per MW less the Clearing Price per MW) by the per MW budget impact of each bid (as defined in Protocol 7.5.5.3(1)) and then ranking the results. Using this calculation, bids with higher values will clear before bids with lower values. The cutoff value for this number (above which, bids clear, below which bids do not clear) is the value of the shadow price for the binding constraint as visible in the Market Operator display.
- ii. In addition, there are quantitative limits to the amount of CRRs than an entity can bid to buy. The quantitative limited for each CRRAH is the lesser the total amount of available transactions divided by the number of participants, or a maximum of 10,000 transactions. Speculators cannot purchase more than the relevant limit. For example, if there are 1,000,000 available transactions in an auction and there are 101 participants, each participant is limited to 9,901 transactions (*i.e.*, 1,000,000/101). For the same number of transactions and 99 participants, the limit would be 10,000 transactions, because that is the maximum allowed per participant, and application of the above formula in that case (*i.e.*, 1,000,000/99) would exceed the 10,000 transaction ceiling. Once the auction is complete, there are no limits on the number of CRRs that an entity can obtain and hold through the bilateral market.

Relevant authorities:

- ERCOT Protocol Section 16.

C. **Limitation of Exposure to Potential Losses From Defaults.**

ERCOT's margin requirements and other risk control mechanisms are comparable to this Core principle. ERCOT does not fund market losses. Losses from defaults are funded by market participants.

Margin requirements and other risk control mechanisms in place to limit market participant losses.

1. As noted above, ERCOT updates exposure calculations daily.
2. If an entity's exposure (TPE) equals or exceeds its credit limit (e.g. its financial security plus its unsecured credit, if applicable), ERCOT:

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Attachment D—DCO Core Principle D: Risk Management

1. Requires the entity to post additional collateral within two bank business days. Until corrected
 - i. ERCOT can withhold any other payments due that entity and
 - ii. ERCOT systems prohibit participation in the DAM or upcoming CRR Auctions since the entity's Available Credit Limit is zero
- b. A participant is in payment breach if it does not pay an invoice when due or post collateral within the two bank business days allowed.
- c. Requires the entity to cure a payment breach within two bank business days.
 - i. ERCOT is considering, through the Protocol change process, reducing the cure period further to one bank business day. ERCOT believes it is appropriate to allow at least one bank business day to cure a payment breach given that
 - a. The breaching entity may be restricted from any participation in DAM activity and future CRR Auctions until the payment breach is cured
 - b. The consequences of a default are that the participant's rights to participate in the market may be terminated.
 - d. In particular, if a market participant violates its credit obligations, ERCOT may terminate, expel, suspend, or sanction the market participant. In addition, Section 16.11.6.1 and 16.11.6.2 specifically provide for the following remedies:
 - i. No Payments by ERCOT to the defaulting participant;
 - ii. Draw on, hold or distribute funds of the participant;
 - iii. Aggregate amounts owed by breaching participant and immediately due;
 - iv. Repossess and resell CRRs held by the participant (sale proceeds offset debt);
 - v. Declare forfeit and resell CRRs held by the participant (sale proceeds offset debt);
 - vi. Honor cleared CRRs but remove them from the participant's account and use proceeds to offset debt; and

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Attachment D—DCO Core Principle D: Risk Management

- vii. Revoke the participant's rights and terminate its outstanding agreements (the market participant remains liable for all debt and consequences for termination/revocation.)
 1. On revocation of some or all of the Market Participant's rights or termination of the Market Participant's agreements and on notice to the Market Participant and the PUCT, ERCOT shall initiate a mass transition of the Market Participant's ESI IDs pursuant to Section 15.1.3, Mass Transition, without the necessity of obtaining any order from or other action by the PUCT.

If a default occurs and there is inadequate collateral (*e.g.*, possibly due to unexpected market conditions) for a particular participant, a default, if any, is handled in a two step process.

- First, all Invoice Recipients (Qualified Scheduling Entities (QSEs) and/or CRRAHs) due a credit are "short-paid" on a pro rata basis.
- Second, approximately six months later (to utilize true-up quality data), short-paid entities will be reimbursed when any net loss is uplifted or socialized across the market. ERCOT calculates the loss allocation factor for each Counter-Party by dividing the Counter-Party's maximum MWh activity by the sum of the maximum MWh activity determined for all Counter-Parties. In determining each Counter-Party's maximum MWh activity, ERCOT considers the Counter-Party's QSE and CRRAH volumetric activity in the Real-Time Market, Day-Ahead Market, and the CRR Auction for each Operating Day in the calendar month prior to the default month. To mitigate the effects of any large defaults, no more than \$2,500,000 can be uplifted in each 30-day billing cycle.

ERCOT Protocols require ERCOT to provide a market notice: a) in the event of a Mass Transition; or b) whenever an invoice will be short paid, identifying the short-paying entity and the amount of short payment.

ERCOT has successfully managed several defaults in the last nine years, although none have occurred in the CRR market, which opened in December 2010. ERCOT procedures for handling Mass Transition and loss socialization have been tested and have proved effective. Below is a list of the defaults experienced in the ERCOT energy market and the related uplifted losses (note that the 2011 loss is estimated and has not yet been uplifted).

Attachment D—DCO Core Principle D: Risk Management

	(in thousands)
2003 default	
Texas Commercial Energy (approx)	15,000
Subtotal 2003 default	<u>15,000</u>
2005 / 2006 defaults	
AZOR	25
USAVE	210
Energy West (dba Franklin Power)	395
Utility Choice	5,043
Bridgepoint	145
Subtotal 2005/2006 defaults	<u>5,818</u>
2008 defaults	
NPC	1,537
HWY3	1,164
Sure	1,200
Pre-Buy	168
Leach	93
Subtotal 2008 defaults	<u>4,162</u>
2011 defaults	
Abacus	620
Total defaults	<u><u>25,600</u></u>

Note: Losses to date have resulted from defaults by load serving entities with volume escalation at the time of default. Extended periods of high prices have generally occurred in conjunction with the defaults.

NOTE: *See also* the above Risk Management discussion.

Relevant authorities:

- ERCOT Protocol Section 15, 16, and 19.

D. Margin Requirements.

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Attachment D—DCO Core Principle D: Risk Management

ERCOT's margin requirements and other risk control mechanisms are comparable those required by this Core principle.

ERCOT:

1. Updates credit exposure for all markets and for all market participants at least once each day, including holidays and weekend, to ensure exposure is adequately covered, including mark-to-market values for CRRs. Further discussion of what is included in the daily update may be seen in Appendix **D**, above.
2. Updates credit exposure intra-day for payments and/or other new information.
3. Restricts a Counter-Party's participation in the DAM and CRR Auctions to the lesser of its Available Credit Limit (ACL) or its self-imposed limit.
4. DAM Bids and Offers are screened at submission – Bids and offers are limited by available credit

Bids – Collateral is required for all positive bids somewhere between a) recent historical prices (using a percentile of 30 day historical prices) and b) actual bid amount. Collateral within that range is based on the Counter-Party's recent activity.

Offers – Collateral is required for the DA-RT price difference using a percentile of 30 day historical prices.

5. CRR Auction activity – Bids and offers are limited by available credit. Unlimited credit for submissions (no bid constraint); however, Auction engine ensures awards are within credit constraints
6. If ERCOT determines that CRR exposure was not being adequately collateralized, Section 16.11.4.1 allows ERCOT to adjust its collateral requirements. ERCOT's systems also provide a mechanism for adjusting how ERCOT calculates credit exposure.

Relevant authorities:

- ERCOT Protocol Section 4 and 16.

E. Requirements Regarding Models and Parameters.

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Attachment D—DCO Core Principle D: Risk Management

ERCOT's margin requirements and other risk control mechanisms are comparable to those required by this Core principle

- ERCOT Protocols require that DAM, CRR and key CMM credit parameters be reviewed at least annually.
- Credit models and parameters are risk based.
 - CMM - Historical risk is measured on a timely basis and collateralized
 - CMM - Forward CRR mark – to –market values for all CRRs held are determined using both auction clearing prices and recent historical DAM values. Values are updated daily based on current DAM valuations.
 - CMM - Forward values for RT and DAM markets are based on recent historical activity and are evaluated for reasonableness
 - DAM credit parameters use a percentile of recent historical prices to determine exposure
 - CRR Auction – the auction solution ensures that awarded CRRs are within credit constraints

In each case the parameter values are recomputed on an ongoing basis, thereby ensuring that market risk is reflected in credit exposure calculations.

Relevant authorities:

ERCOT Protocol Section 4 and 16.

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Attachment D—DCO Core Principle D: Risk Management

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Attachment E

DCO Core Principle E: Settlement Procedures

Each derivatives clearing organization shall—

- (i) complete money settlements on a timely basis (but not less frequently than once each business day);
- (ii) employ money settlement arrangements to eliminate or strictly limit the exposure of the derivatives clearing organization to settlement bank risks (including credit and liquidity risks from the use of banks to effect money settlements);
- (iii) ensure that money settlements are final when effected;
- (iv) maintain an accurate record of the flow of funds associated with each money settlement;
- (v) possess the ability to comply with each term and condition of any permitted netting or offset arrangement with any other clearing organization;
- (vi) regarding physical settlements, establish rules that clearly state each obligation of the derivatives clearing organization with respect to physical deliveries; and
- (vii) ensure that each risk arising from an obligation described in clause (vi) is identified and managed.

Responses:

Attachment E—DCO Core Principle E: Settlement Procedures

ERCOT

A. Money Settlements.

ERCOT's settlement procedures are comparable to those required by this Core principle.

- ERCOT completes money settlements on a timely basis (but not less frequently than once each business day).

The ERCOT Protocols specify the current settlement timelines and were crafted as a result of market participant discussion and approval. In particular, section 9 of the ERCOT Protocols requires that:

- ERCOT perform Day-Ahead Market settlements every business day:
 1. Day-Ahead Market Invoices are posted two business days after the Operating Day (the Day-Ahead Market is executed one day before the Operating Day).
 2. Payments into ERCOT are due three bank business days after Day-Ahead Market invoices are posted.
 3. Pursuant to these rules, the time period from the Operating Day to payment is between five days and 13 days, with approximately 90% clearing within eight days (payment occurs in 13 days where there are the maximum amount of weekend days and holidays following the Operating Day).
 4. ERCOT rules generally settle CRRs in the Day-Ahead Market, but do allow CRRs to be moved into the Real-Time Market in which case, the CRRs are settled based on the normal Real-Time settlement cycle
- ERCOT performs Real Time settlements every business day:
 1. Real Time settlement statements are posted ten days after the Operating Day
 2. Real Time Invoices are posted weekly
 3. Payments into ERCOT are due five bank business days after Real Time Invoices are posted.
 4. Pursuant to these rules, the time period from the Operating Day to payment ranges from 21 days to 31 days (payment occurs in 31 days when there are the maximum number of weekends and holidays)

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Attachment E—DCO Core Principle E: Settlement Procedures

5. ERCOT is currently working with the market, through the Protocol change process, to tighten the Real Time settlement and payment cycle
 - a. Combining Real Time settlements with DAM settlements into one “daily” invoice with both DAM and RT settlement statements on it, eliminating the delay in invoicing RT settlement statements
 - b. Shortening the RT payment timeline by two bank business days since the “daily” invoice will be paid within 3 bank business days instead of five Other options are being considered as well
 - c. Goal: Ensure that approximately 90% of Real Time days are settled and paid within 15 days with the weighted average settlement and payment cycle being no more than 15 days. Settlement and payment timelines longer than the above are expected to be primarily due to weekend and holiday schedules.
- ERCOT employs money settlement arrangements to eliminate or strictly limit the exposure of the derivatives clearing organization to settlement bank risks (including credit and liquidity risks from the use of banks to effect money settlements);
 - ERCOT’s banking and investment activity is conducted pursuant to its Investment Corporate Standard. The Investment Corporate Standard is approved by its Board of Directors and reviewed at least annually. Key aspects of this Standard include:
 - **Conservative Objectives** – In order of priority, the objectives of ERCOT’s Investment Corporate Standard are: 1) Safety of principal, 2) Liquidity and 3) Reasonable rate of return
 - **Qualified Institutions are carefully selected and must -**
 - Maintain a senior debt rating at least the equivalent of A- by Standard & Poor’s or A3 by Moody’s Investor Service
 - Maintain capital of not less than \$100 million
 - Maintain assets of not less than \$1 billion
 - Provide current audited financial statements to ERCOT treasury personnel
 - **ERCOT procedures include investment of funds overnight**
 - To the extent possible, ERCOT minimizes cash balances left in banks overnight.

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Attachment E—DCO Core Principle E: Settlement Procedures

- Ensure that money settlements are final when effected
 - Payment must be made no later than the due date by Electronic Funds Transfer in immediately available or good funds (*i.e.*, not subject to reversal); or on or before two Bank Business Days before the payment due date if the payment is made by Automated Clearing House funds.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361;
- ERCOT Protocols Section 9.

B. Flow of Funds Records.

ERCOT's settlement procedures are comparable to those required by this Core principle.

ERCOT performs a complete, manual validation of all the settlements calculations and settlement statements and invoices generated by the settlements system. All statements, invoices and data used in the calculations are securely posted for market participants to retrieve and review.

ERCOT also maintains all payment and receipt information.

As provided in the ERCOT Protocols, these data are stored in the ERCOT Data Warehouse and Data Archive for seven years. ERCOT is also subject to a SSAE16 audit. This helps provide assurance that controls are in place for ERCOT to accurately follow its data control objectives.

Relevant authorities:

- ERCOT Protocols Section 17.3.5 and 11.5.1.1(2).

C. Compliance with Netting or Offsetting Arrangements.

ERCOT is not a clearing organization and does not have the type of arrangements contemplated by this Core Principle. As a result, ERCOT does not net with third-party clearing organizations.

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Attachment E—DCO Core Principle E: Settlement Procedures

D. Physical Settlements.

As explained above, ERCOT Protocols establish rules that clearly state each entity's obligation with respect to physical deliveries.

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Attachment E—DCO Core Principle E: Settlement Procedures

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Attachment F

DCO Core Principle F: Treatment of Funds

(i) **REQUIRED STANDARDS AND PROCEDURES.**—Each derivatives clearing organization shall establish standards and procedures that are designed to protect and ensure the safety of member and participant funds and assets.

(ii) **HOLDING OF FUNDS AND ASSETS.**—Each derivatives clearing organization shall hold member and participant funds and assets in a manner by which to minimize the risk of loss or of delay in the access by the derivatives clearing organization to the assets and funds.

(iii) **PERMISSIBLE INVESTMENTS.**—Funds and assets invested by a derivatives clearing organization shall be held in instruments with minimal credit, market, and liquidity risks.

Responses:

Attachment F—DCO Core Principle F: Treatment of Funds

ERCOT

ERCOT and ERCOT market funds are managed under an Investment Corporate Standard that is reviewed and updated annually by its Board of Directors, and under separate procedures designed to comply with the Investment Corporate Standard. The Standard defines the primary objectives, in priority order, of ERCOT's investment activities as (1) safety, (2) liquidity and (3) return on investment. ERCOT's Investment Corporate Standard also defines what kinds of instruments may be held and places limits on how much may be held in any particular instrument or fund.

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Attachment F—DCO Core Principle F: Treatment of Funds

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Attachment G

DCO Core Principle G: Default Rules and Procedures

(i) IN GENERAL.—Each derivatives clearing organization shall have rules and procedures designed to allow for the efficient, fair, and safe management of events during which members or participants—

(I) become insolvent; or

(II) otherwise default on the obligations of the members or participants to the derivatives clearing organization.

(ii) DEFAULT PROCEDURES.—Each derivatives clearing organization shall—

(I) clearly state the default procedures of the derivatives clearing organization;

(II) make publicly available the default rules of the derivatives clearing organization; and

(III) ensure that the derivatives clearing organization may take timely action—

(aa) to contain losses and liquidity pressures; and (bb) to continue meeting each obligation of the derivatives clearing organization.

Responses:

Attachment G—DCO Core Principle G: Default Rules and Procedures

ERCOT

A. Default Rules.

ERCOT currently is considering whether to adopt the central counterparty model. To that end, ERCOT has initiated due diligence actions designed to ensure the central counterparty alternative can be implemented consistent with all legal obligations and policy purposes that apply to ERCOT as the independent system operator in the ERCOT Region of Texas. These actions include, but are not limited to, investigating the impact on ERCOT's corporate structure, working with its regulators and market participants to develop all necessary support, and developing and reviewing the most effective means of effectuating the central counterparty approach.

Under its current procedures, if ERCOT is unable to recover from the defaulting entity all of the costs associated with a market default, the unrecovered costs are uplifted to all market participants on a *pro rata* basis based on maximum MWh activity ratio share. In these situations, ERCOT first exercises all of its rights against the responsible entity. If it is unable to collect funds from the defaulting entity (through direct payment, collateral or otherwise), ERCOT short-pays the market to manage the shortfall during the settlement cycle to maintain revenue neutrality. If necessary, ERCOT issues an uplift charge to all counterparties based on their maximum activity – in MWh - across all ERCOT markets. This process is further detailed in Appendix D.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361;
- ERCOT Protocol Section 9.19.

B. Default Procedures.

ERCOT's Protocols include procedures that are comparable to those required by the Core Principle. They provide ERCOT with the ability to suspend any Counter-Party if it is in Payment Breach or default. ERCOT's Protocols also provide ERCOT with the ability to subject any Counter-Party's activity in the Day Ahead Market or the CRR Auction to the Counter-Party's Available Credit Limit (ACL). The ACL is a function of the Counter-Party's credit limit (its unsecured credit granted and posted collateral) and outstanding exposure. When exposure exceeds the credit limit, that Counter-Party's ACL is zero and the Counter-Party is restricted from participation in the Day Ahead Market or future CRR Auctions.

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Attachment G—DCO Core Principle G: Default Rules and Procedures

In addition, ERCOT has the ability within its systems to flag an entity as not creditworthy and suspend that entity's activity in the ERCOT market. Accordingly, any default leading to a Mass Transition of a LSE's load would result in suspension of the LSE from participation in ERCOT's Day Ahead Market and future CRR Auctions

The default procedures for the CRR market are set forth in detail in the ERCOT Protocols, which are publicly available on the ERCOT website. The Protocols allow ERCOT to take the sequential steps described above in Appendix B with respect to Core Principle B. In addition, to contain losses ERCOT may take several risk management actions, described above Appendix D in with respect to Core Principle D, which, among other things, include termination of market participation, resale of CRR positions and, to the maximum extent possible, management of default risk against that participant's funds, including collateral/financial security and credits owed to the participant in other ERCOT markets.

After ERCOT terminates a defaulting counterparty's contract, the counterparty must reapply with ERCOT and provide ERCOT with a new DUNS number to re-enter the market. In order to execute a new Standard Form Market Participant Agreement, a counterparty re-entering the market must represent, warrant, and covenant that it has paid ERCOT all sums due to it in relation to a prior default.⁷

Relevant authorities:

- Protocol Section 16.1.1 – Re-Registration as a Market Participant
- Protocol Section 16.11.6.1 – ERCOT's Remedies
- Protocol Section 15.1.3 – Mass Transition
- Section 22A , Standard Form Market Participant Agreement

⁷ See Section 4.A(5) and (6) of the Standard Form Market Participant Agreement.
*PRIVILEGED TREATMENT REQUESTED BY
THE REQUESTORS, AS DEFINED HEREIN,
PURSUANT TO 18 C.F.R. § 388.112*

Attachment G—DCO Core Principle G: Default Rules and Procedures

DRAFT

*PRIVILEGED TREATMENT REQUESTED BY
THE REQUESTORS, AS DEFINED HEREIN,
PURSUANT TO 18 C.F.R. § 388.112*

Attachment H

DCO Core Principle H: Rule Enforcement

Each derivatives clearing organization shall—

(i) maintain adequate arrangements and resources for—

(I) the effective monitoring and enforcement of compliance with the rules of the derivatives clearing organization; and

(II) the resolution of disputes;

(ii) have the authority and ability to discipline, limit, suspend, or terminate the activities of a member or participant due to a violation by the member or participant of any rule of the derivatives clearing organization; and

(iii) report to the Commission regarding rule enforcement activities and sanctions imposed against members and participants as provided in clause (ii).

Responses:

Attachment H—DCO Core Principle H: Rule Enforcement

ERCOT

ERCOT's rule enforcement resources and dispute resolution procedures are comparable to those required by this Core principle. The regulatory framework that governs ERCOT provides for adequate resources to monitor and enforce compliance with all rules that govern the ERCOT markets, including the CRR market. PURA authorizes ERCOT to collect a reasonable fee to enable it to cover the costs necessary to perform its functions. This right is implemented in the PUCT Substantive Rules, which state that ERCOT fees are related to performance of its functions.

The ERCOT Protocols establish comprehensive alternative dispute resolution (“ADR”) procedures, and PUCT Procedural Rules require the use of these procedures prior to the filing of complaints at the PUCT. Again, as a required function, ERCOT is authorized to fund adequate to support the ADR process.

Finally, pursuant to the ERCOT bylaws, ERCOT Members are obligated to comply with ERCOT rules and the ERCOT Board may terminate, expel, suspend, or sanction a Member, subject to due process.

Relevant authorities:

- PURA Section 39.151 and 39.1515;
- PUCT Substantive Rule 25.361; 25.363; and 25.503;
- PUCT Procedural Rule 22.251;
- ERCOT Protocol Section 9.19 and 20;
- ERCOT bylaws.

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Attachment H—DCO Core Principle H: Rule Enforcement

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Attachment I

DCO Core Principle I: System Safeguards

Each derivatives clearing organization shall—

(i) establish and maintain a program of risk analysis and oversight to identify and minimize sources of operational risk through the development of appropriate controls and procedures, and automated systems, that are reliable, secure, and have adequate scalable capacity;

(ii) establish and maintain emergency procedures, backup facilities, and a plan for disaster recovery that allows for—

(I) the timely recovery and resumption of operations of the derivatives clearing organization; and

(II) the fulfillment of each obligation and responsibility of the derivatives clearing organization; and

(iii) periodically conduct tests to verify that the backup resources of the derivatives clearing organization are sufficient to ensure daily processing, clearing, and settlement.

Responses:

Attachment I—DCO Core Principle I: System Safeguards

ERCOT

ERCOT's system safeguards are comparable to those required by this Core principle. As described above at Appendix **D-1**, ERCOT has established and maintains controls and procedures to identify and minimize sources of operational risk. With respect to development, testing and implementation of systems, ERCOT minimizes operational risks by utilizing rigorous methodologies to govern these processes. ERCOT has defined methodologies, processes and controls in place covering the Systems Development Life Cycle (SDLC), addressing methodologies, development, testing and release management.

ERCOT has a comprehensive plan to mitigate the risk of interruption or disruption to its operations. ERCOT maintains two data centers to support its operations and is in the process of moving to a larger and more secure secondary data center. To ensure operational capability, each data center is utilized as the primary data center at least once per year. ERCOT switches between data centers on a set schedule and as necessary in response to conditions that warrant such action (*e.g.*, system failures or for maintenance procedures that may raise the risk profile for systems operating in the data center to be maintained).

Recovery plans, service levels, recovery time and point objectives are defined for all systems and the systems are engineered to meet those objectives. The recovery plans ensure the continuation of market operations in five minutes, which means that the potential loss of data is less than five minutes. Recovery of settlement functions occurs on the next business day; this lag is allowed because the critical function in terms of recovery is the market function – settlement will be based on that data.

In addition, ERCOT has a business continuity plan developed to recover all operations. The plan is revised annually, or as necessary based on changed circumstances (*e.g.*, in response to the deployment of new systems or business functions within the organization). To ensure that the plan can be effectively implemented, ERCOT staff is trained on an annual basis and a drill is conducted annually to train staff in the actual deployment of the plan.

During normal operations, data are protected using real-time redundancy between data centers. In addition, as an additional precaution, ERCOT utilizes near-term data backup systems on site and an offsite retention facility. These actions mitigate risk in the event that both ERCOT facilities are simultaneously impacted by an event. Backup media are tested in accordance with NERC CIP requirements to ensure that systems can be recovered from backup media.

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Attachment I—DCO Core Principle I: System Safeguards

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Attachment J

DCO Core Principle J: Reporting

Each derivatives clearing organization shall provide to the Commission all information that the Commission determines to be necessary to conduct oversight of the derivatives clearing organization.

Responses:

DRAFT

Attachment J—DCO Core Principle J: Reporting

ERCOT

ERCOT's reporting and information-sharing procedures are comparable to this Core principle. PURA provides that ERCOT is directly responsible and accountable to the PUCT and that the PUCT has complete authority to oversee ERCOT's operations to ensure it adequately performs its duties and functions. PURA requires ERCOT to fully cooperate with the PUCT in its performing its functions. This grants broad authority to the PUCT.

PUC Substantive Rules require ERCOT to provide information to the PUCT on request. In addition, ERCOT is required to file specific reports as well as *ad hoc* reports as deemed necessary by the PUCT. Among the established reports, ERCOT is required to provide a market performance report. ERCOT is also required to comply with any PUCT order. PUCT rules also require market participants to comply with requests for data from ERCOT. The PUCT can then access this information via its right to request information from ERCOT.

The ERCOT Bylaws require ERCOT Members to provide information to ERCOT. Again, the PUCT can then access such information via its broad authority.

The ERCOT Protocols enable ERCOT to release confidential information to government officials if required by law, regulation or order. As discussed, PURA and PUCT Substantive Rules give the PUCT broad authority to access information from ERCOT.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.362 and 25.503;
- ERCOT Protocol Section 1.3;
- ERCOT bylaws.

Attachment J—DCO Core Principle J: Reporting

DRAFT

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Attachment K

DCO Core Principle K: Recordkeeping

Each derivatives clearing organization shall maintain records of all activities related to the business of the derivatives clearing organization as a derivatives clearing organization—

- (i) in a form and manner that is acceptable to the Commission; and
- (ii) for a period of not less than 5 years.

Responses:

DRAFT

Attachment K—DCO Core Principle K: Recordkeeping

ERCOT

ERCOT's recordkeeping requirements are comparable to those required by this Core principle. ERCOT has specific record retention rules established in the ERCOT Protocols, ERCOT Corporate Standards and specifically in ERCOT Record Retention Schedules. With respect to the CRR market information and credit information, ERCOT is required to retain such for a period of seven years. In addition, see ERCOT's response to Core principle [E] in Appendix [E-2].

Relevant authorities:

- ERCOT Protocol Section 17.3.5;
- ERCOT Corporate Standard 6.2;
- ERCOT Records Retention Policy – Schedule ACC5010.

Attachment L

DCO Core Principle L: Public Information

(i) IN GENERAL.—Each derivatives clearing organization shall provide to market participants sufficient information to enable the market participants to identify and evaluate accurately the risks and costs associated with using the services of the derivatives clearing organization.

(ii) AVAILABILITY OF INFORMATION.—Each derivatives clearing organization shall make information concerning the rules and operating and default procedures governing the clearing and settlement systems of the derivatives clearing organization available to market participants.

(iii) PUBLIC DISCLOSURE.—Each derivatives clearing organization shall disclose publicly and to the Commission information concerning—

(I) the terms and conditions of each contract, agreement, and transaction cleared and settled by the derivatives clearing organization;

(II) each clearing and other fee that the derivatives clearing organization charges the members and participants of the derivatives clearing organization;

(III) the margin-setting methodology, and the size and composition, of the financial resource package of the derivatives clearing organization;

(IV) daily settlement prices, volume, and open interest for each contract settled or cleared by the derivatives clearing organization; and

(V) any other matter relevant to participation in the settlement and clearing activities of the derivatives clearing organization.

Responses:

Attachment L—DCO Core Principle L: Public Information

ERCOT

A. In General.

ERCOT's procedures for making information related to all aspects of its markets and operations available to the public are comparable to those required by this Core principle. The financial value of CRRs is determined by the price differential between the relevant source and sink. That value is subject to system conditions, which is based on several variables. The system models used to auction CRRs attempt to capture these conditions. ERCOT uses the most recent, and, therefore, the most accurate, system model to enable CRR participants to assess the value and risk associated with certain positions based on the best information. Further, ERCOT's budget process and schedules published in the tariff provide added transparency regarding costs. ERCOT also publishes all material operating results, which enables participants to readily identify market risks on an ongoing basis.

In addition, ERCOT provides substantial training on its markets to market participants and the general public. These programs include instructor-led or web-based training on transmission system operations, wholesale market operations and retail market operations.⁸

B. Availability of Information.

ERCOT's procedures for making its rules available to the public are comparable to those required by this Core principle. The rules associated with participation in the ERCOT market, including all credit obligations and default rules, are prescribed in the ERCOT Protocols, which are public and posted on the ERCOT website.

C. Public Disclosure.

ERCOT's procedures for making the terms of its contracts, fees, and any other information relevant to participation in its markets available to the public are comparable to those required by this Core principle. The PUCT Substantive Rules require ERCOT to disseminate information relating to market operations, prices, availability of services. These mandates are implemented via the ERCOT Protocols. With respect to CRR information, the following rules apply:

1. Following each CRR Auction, ERCOT shall post to the MIS Public Area the following information for all outstanding CRRs following this auction:
 - PTP Options and PTP Options with Refund – the source and sink, and total MWs;
 - PTP Obligations and PTP Obligations with Refund – the source and sink and total MWs;

⁸ See <http://www.ercot.com/services/training/index>.
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Attachment L—DCO Core Principle L: Public Information

- FGRs – the identity of each directional flowgate, and the magnitude of positive flow (MW) on each directional network element represented by each flowgate;
- The identities of the CRRAHs that were awarded or allocated CRRs in or before the CRR Auction;
- The clearing prices for each strip of CRR blocks awarded in the CRR Auction;
- The identity and post contingency flow of each binding directional element based on the CRR Network Model used in the CRR Auction; and
- All CRR Auction Bids and CRR Auction Offers, without identifying the name of the CRRAH that submitted the bid or offer.

This information reflects the terms and conditions of the CRRs awarded in the auctions. All other bid information is posted six months after the relevant auction. There are at present no special fees to participate in the CRR market. The ERCOT membership fees are prescribed in the ERCOT Protocols and are approved by the PUCT.

ERCOT's credit rules are described in the ERCOT Protocols in Section 16.11 (general, Section 4.4.10 (DAM) and Section 7.5.5 (CRR Auction)

ERCOT publicly posts the prices of all nodes and zones in the ERCOT region on a daily basis. These are the sources and sinks for CRRs. As noted above, the CRRs awarded in monthly auctions are public.

Relevant authorities:

- PUCT Substantive Rule 25.361 and 25.363;
- ERCOT Protocol Section 16.11, 4.4.10, and 7.5.5.

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Attachment L—DCO Core Principle L: Public Information

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Attachment M

DCO Core Principle M: Information-Sharing

Each derivatives clearing organization shall—

- (i) enter into, and abide by the terms of, each appropriate and applicable domestic and international information-sharing agreement; and
- (ii) use relevant information obtained from each agreement described in clause (i) in carrying out the risk management program of the derivatives clearing organization.

Responses:

Attachment M—DCO Core Principle M: Information-Sharing

DRAFT

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Attachment M—DCO Core Principle M: Information-Sharing

ERCOT

This DCO Core Principle does not apply to ERCOT's operation as an ISO. ERCOT is not a DCO and does not perform a clearing function as contemplated with respect to DCOs.

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Attachment M—DCO Core Principle M: Information-Sharing

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Attachment N

DCO Core Principle N: Antitrust Considerations

Unless necessary or appropriate to achieve the purposes of this Act, a derivatives clearing organization shall not—

- (i) adopt any rule or take any action that results in any unreasonable restraint of trade; or
- (ii) impose any material anticompetitive burden.

Responses:

Attachment N—DCO Core Principle N: Antitrust Considerations

ERCOT

ERCOT complies with this Core principle. The PUCT implements the requirements of PURA relative to ERCOT as the ISO. In executing this function, PURA prohibits the PUCT from implementing rules that contravene federal law. The PUCT implemented this limitation with respect to both federal and state anti-trust laws via its substantive rules, which state that the existence of ERCOT is not intended to affect the application of any state, or federal, antitrust laws. In addition, ERCOT has a standard antitrust admonition that is presented at the opening of all meetings. ERCOT also conducts antitrust training for its employees annually. Furthermore, PURA, PUCT Substantive Rules and ERCOT Protocols require that ERCOT allow access to the transmission system for all buyers and sellers of electricity on a nondiscriminatory basis. This arguably includes all market rules, including the rules applicable to CRRs, because market access encompasses all products administered under the ERCOT Protocols.

Relevant Authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361;
- ERCOT Protocol Section 1;
- ERCOT Training documentation.

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Attachment N—DCO Core Principle N: Antitrust Considerations

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Attachment O

DCO Core Principle O: Governance Fitness Standards

(i) GOVERNANCE ARRANGEMENTS.—Each derivatives clearing organization shall establish governance arrangements that are transparent—

(I) to fulfill public interest requirements; and

(II) to permit the consideration of the views of owners and participants.

(ii) FITNESS STANDARDS.—Each derivatives clearing organization shall establish and enforce appropriate fitness standards for—

(I) directors;

(II) members of any disciplinary committee;

(III) members of the derivatives clearing organization;

(IV) any other individual or entity with direct access to the settlement or clearing activities of the derivatives clearing organization; and

(V) any party affiliated with any individual or entity described in this clause.

Responses:

Attachment O—DCO Core Principle O: Governance Fitness Standards

ERCOT

A. Governance Arrangements.

ERCOT's governance structure is mandated by PURA to include market participant representation and is comparable to this Core principle. In addition, PURA requires that all meetings be open and broadcast to the public on the internet. These requirements do not apply to executive session matters, which are, in essence, sensitive and confidential matters. Consistent with this theme of transparency and inclusion, PURA requires that Board materials be posted in advance, which provides notice and adequate opportunity to review, and that interested parties be afforded the right to comment on agenda items for the relevant meeting. These policies are also reflected in PUCT Substantive Rules and the ERCOT Bylaws.

These policies are further supported by the substantive involvement of market participants in the governance and operation of ERCOT via the Technical Advisory Committee (TAC). TAC is a market participant body that acts to facilitate the purposes of ERCOT and the policies of the ERCOT Board. Similar to the ERCOT Board, TAC is comprised of diverse market participant groups to facilitate consideration of the views of all interested parties. TAC reports to the Board at each meeting.

Relevant authorities:

- PURA Section 39.151 and 39.1511;
- PUCT Substantive Rule 25.362 and 25.366;
- ERCOT Protocol Section 1;
- ERCOT bylaws.

B. Fitness Standards.

ERCOT's fitness standards for directors and other key entities are comparable to this Core principle. The following fitness standards apply to each of the relevant categories:

7. Directors

PURA establishes the Board construct, in terms of market participant and unaffiliated representation (discussed in greater detail below) and requires the ERCOT Bylaws to establish a selection process that provides for input from its regulatory body (*i.e.*, the PUCT). The PUCT Substantive Rules require ERCOT to establish criteria for Board positions and for removal of Board members if such cease to meet the requisite criteria. ERCOT Bylaws establish the relevant criteria for unaffiliated directors, including, but not limited to, subject matter expertise and independence.

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Attachment O—DCO Core Principle O: Governance Fitness Standards

8. Members of Disciplinary Committee

There is no formally established disciplinary committee in ERCOT. Effectively, the Board acts as the “disciplinary” committee in ERCOT in terms of revocation of sanction, expulsion, termination or suspension of membership. The fitness standards of the Board Members are described above.

In addition, the PUC enforcement division may be viewed as a disciplinary entity in terms of market participant and ERCOT behavior (e.g. Protocol compliance and market abuse). The fitness of the PUCT staff is beyond the control of ERCOT.

9. Member of the DCO

The fitness criteria for ERCOT membership is generally established in the ERCOT Bylaws. In essence, membership requires a nexus between an entity’s business and ERCOT’s functions (e.g., operations and markets) and, specifically, a financial interest. It also requires the ability to participate in ERCOT’s markets. With respect to specific markets, the ERCOT Protocols establish specific registration requirements, which ensure an entity participating in ERCOT’s markets meet a minimum level of eligibility standards and capabilities.

10. Any other individual or entity with direct access to the settlement or clearing activities of the derivatives clearing organization

This category would only apply to settlement activities, because ERCOT does not engage in clearing activity. With respect to settlement, this category would be limited to ERCOT employees. All ERCOT positions are staffed based on the needs relative to the experience of the individuals. Each position must meet minimum requirements as established by positions descriptions. Accordingly, each relevant ERCOT employee meets minimum fitness standards relative to the position.

11. Any party affiliated with any individual or entity described in this clause.

The rules governing the standards applicable to the above categories circumscribe the standards applicable to those persons/entities. To the extent any affiliated person or organization falls within those categories, the relevant fitness standards would be addressed in the relevant rules.

Relevant authorities:

- PURA Section 39.151;
- PUC Substantive Rule 25.362;

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Attachment O—DCO Core Principle O: Governance Fitness Standards

- ERCOT bylaws;
- ERCOT Protocol Section 16.8.

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Attachment O—DCO Core Principle O: Governance Fitness Standards

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Attachment P

DCO Core Principle P: Conflicts of Interest

Each derivatives clearing organization shall—

- (i) establish and enforce rules to minimize conflicts of interest in the decision-making process of the derivatives clearing organization; and
- (ii) establish a process for resolving conflicts of interest described in clause (i).

Responses:

DRAFT

Attachment P—DCO Core Principle P: Conflicts of Interest

ERCOT

ERCOT's general structure and conflict of interest policies are comparable to this Core principle. ERCOT is required by PURA to be independent and is a non-profit corporation. This means that ERCOT has no financial interest in market outcomes, including the CRR market. The independence of the organization mitigates the potential for conflicts of interest to arise in the execution of its duties.

In addition, the PUC Substantive Rules expressly require ERCOT to adopt policies to mitigate conflicts of interest. In terms of its staff, ERCOT mitigates potential conflicts of interest by employing specific Corporate Standards to address this concern. The Corporate Standards require all employees to avoid conflict and appearance of conflict. They also provide a non-exhaustive list of situations that create potential actual or perceived conflict and impose an obligation on the employee to determine the existence, if any, of any conflict. If an employee believes a situation may present conflict, but is not sure, he/she is required to exercise one of the following three options:

- Eliminate the conflict of interest;
- Submit a written statement of the possible conflict to the Vice President & Chief Administrative Officer, Director of Audit or the Vice President, General Counsel & Corporate Secretary of ERCOT who will review and provide a written response to the employee as to the action required, if any, or
- Leave the employ of the Company.

In addition, each employee is required to submit an Employee Ethics Agreement annually and to disclose any potential conflicts. If a conflict exists, the employee will be notified by ERCOT's human resources or legal department. The conflict must be resolved promptly or the employee's employment will be terminated.

Potential conflicts of interest are further mitigated by the ERCOT Bylaws, which impose appropriate restrictions on ERCOT Board members and relevant committee members to ensure actions taken in their respective roles do not present potential conflicts of interests.

The authorities described above provide structural and behavioral protections that prevent conflicts of interest in the first instance, and, to the extent a conflict arises, a process for resolving such conflict to respect and preserve ERCOT's integrity in performing its independent functions, including the objective administration of the CRR market, and markets generally.

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Attachment P—DCO Core Principle P: Conflicts of Interest

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.362;
- ERCOT bylaws;
- ERCOT Articles of Incorporation;
- ERCOT Corporate Standard 18.

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Attachment P—DCO Core Principle P: Conflicts of Interest

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⁹ **[Add cite.]**
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Attachment Q

DCO Core Principle Q: Composition of Governing Boards

Each derivatives clearing organization shall ensure that the composition of the governing board or committee of the derivatives clearing organization includes market participants.

Responses:

DRAFT

Attachment Q—DCO Core Principle Q: Composition of Governing Boards

ERCOT

The composition of ERCOT's Board of Directors reflects the spectrum of market participant interests in the ERCOT market and is comparable to this Core principle. In addition, the Board includes the ERCOT CEO and PUCT Chairman as non-voting members (the other PUCT Commissioners also participate in the Board meetings). The former ensures the Board decisions consider the interests of the organization and the latter facilitates effective regulation of ERCOT and the market.

The ERCOT Board composition is as follows:

- a. One Independent REP and one (1) Segment Alternate;
- b. One Independent Generator and one (1) Segment Alternate;
- c. One Independent Power Marketer and one (1) Segment Alternate;
- d. One IOU and one (1) Segment Alternate;
- e. One Municipal and one (1) Segment Alternate;
- f. One Cooperative and one (1) Segment Alternate;
- g. Three Consumers: the Public Counsel, representing Residential Consumers and Small Commercial Consumers, as an *ex officio* voting member, one Large Commercial, and one Industrial;
- h. Five Unaffiliated Directors;
- i. The CEO as an *ex officio* voting member; and
- j. The Chair of the PUCT as an *ex officio* non-voting member.

Although this composition is mandated by PURA and implemented by the ERCOT Bylaws, it is set by statute it cannot be changed absent specific action by the Texas legislature.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.362;
- ERCOT bylaws.

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Attachment Q—DCO Core Principle Q: Composition of Governing Boards

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Attachment R

DCO Core Principle R: Legal Risk

Each derivatives clearing organization shall have a well-founded, transparent, and enforceable legal framework for each aspect of the activities of the derivatives clearing organization.

Responses:

DRAFT

Attachment R—DCO Core Principle R: Legal Risk

ERCOT

ERCOT's legal framework is comparable to the Core principle. ERCOT is subject to a comprehensive legal framework, including governing rules prescribed by both statute and regulations that were developed and implemented by the Texas legislature and PUCT, respectively. The rights, obligations and policies embodied in this overarching framework are implemented pursuant to detailed rules – the ERCOT Protocols – that, among other things, govern the CRR market. Because they are the product of collaborative efforts (*i.e.*, legislation, rulemakings and committee based rule development) they are well founded such that the final product is not the result of a narrow viewpoint, but rather represents consideration of the views of a wide variety of interested parties. All of these authorities are public documents, and, therefore, are transparent and available to all current and prospective market participants. The fact that the legal framework emanates from statute and regulation ensures that the rules are enforceable. In addition, to ensure the rules are followed there are several layers of oversight. As an initial matter, ERCOT, acting as the system operator monitors the activity in its markets, including the CRR market. This includes participant activity and credit positions.

With respect to ERCOT's activities, participants can raise issues with ERCOT and escalate them to the PUCT if satisfaction is not achieved via such discussions. In addition, the PUCT has an enforcement division that oversees the market, including ERCOT, to ensure all rules are respected. PURA established an Independent Market Monitor (IMM) that monitors ERCOT and market participant behavior against the market rules. The IMM can raise issues with ERCOT and/or the PUCT. Furthermore, market participant status is established in the ERCOT bylaws. The bylaws also require that market participants comply with all rules and sign a market participant agreement, plus for CRR participants, a specific CRRRAH agreement. Finally, as a practical check on the activities of ERCOT, the Chairman of the PUCT is a non-voting member of the ERCOT Board. This facilitates effective regulatory oversight of ERCOT.

ERCOT is investigating the central counterparty model. As noted above, ERCOT has initiated due diligence actions designed to ensure the central counterparty alternative can be implemented consistent with all legal obligations and policy purposes that apply to ERCOT as the independent system operator in the ERCOT Region of Texas. These actions include, but are not limited to, investigating the impact on ERCOT's corporate structure, working with its regulators and market participants to develop all necessary support and developing and reviewing the most effective means of effectuating the central counterparty approach.

Relevant authorities:

- PURA Section 39.151 and 39.1515
- PUCT Substantive Rule 25.361; 25.362; 25.365; 25.501 and 25.503;
- ERCOT Protocol Section 1 and Standard Form Agreement;
- ERCOT bylaws.

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Attachment R—DCO Core Principle R: Legal Risk

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Attachment S

SEF Core Principal 1: Compliance With Core Principles

(A) IN GENERAL.—To be registered, and maintain registration, as a swap execution facility, the swap execution facility shall comply with—

- (i) the core principles described in this subsection; and
- (ii) any requirement that the Commission may impose by rule or regulation pursuant to section 8a(5).

(B) REASONABLE DISCRETION OF SWAP EXECUTION FACILITY.—Unless otherwise determined by the Commission by rule or regulation, a swap execution facility described in subparagraph (A) shall have reasonable discretion in establishing the manner in which the swap execution facility complies with the core principles described in this subsection.

Responses:

WH to draft a single response for all ISOs.

Attachment T

SEF Core Principle 2: Compliance With Rules

A swap execution facility shall—

(A) establish and enforce compliance with any rule of the swap execution facility, including—

(i) the terms and conditions of the swaps traded or processed on or through the swap execution facility; and

(ii) any limitation on access to the swap execution facility;

(B) establish and enforce trading, trade processing, and participation rules that will deter abuses and have the capacity to detect, investigate, and enforce those rules, including means—

(i) to provide market participants with impartial access to the market; and

(ii) to capture information that may be used in establishing whether rule violations have occurred;

(C) establish rules governing the operation of the facility, including rules specifying trading procedures to be used in entering and executing orders traded or posted on the facility, including block trades; and

(D) provide by its rules that when a swap dealer or major swap participant enters into or facilitates a swap that is subject to the mandatory clearing requirement of section 2(h), the swap dealer or major swap participant shall be responsible for compliance with the mandatory trading requirement under section 2(h)(8).

Responses:

Attachment T—SEF Core Principle 2: Compliance With Rules

ERCOT

The ERCOT Protocols and other governing documents provide rules, including rules to deter market abuse, and enforcement programs comparable to SEF Core Principle 2. ERCOT, however, does not currently operate a system in which multiple participants have the ability to execute or trade CRRs by accepting bids and offers made by other multiple participants CRRs. Rather, ERCOT allocates CRRs based on a predetermined calculation mechanism. See ERCOT’s response to the DCO core principle on measurement of credit exposure.

Notwithstanding the foregoing, ERCOT is subject to a comprehensive legal framework, including governing rules prescribed by both statute and regulations that were developed and implemented by the Texas legislature and PUCT, respectively. The rights, obligations and policies embodied in this overarching framework are implemented pursuant to detailed rules – the ERCOT Protocols – that, among other things, establish and enforce trading, trade processing, and participation rules. All of these authorities are public documents, and, therefore, are transparent and available to all current and prospective market participants. The fact that the legal framework emanates from statute and regulation ensures that the rules are enforceable. In addition, to ensure that the rules are followed there are several layers of oversight. As an initial matter, ERCOT, acting as the system operator monitors the activity in its markets, including the CRR market. This includes participant activity and credit positions.

ERCOT’s rule enforcement resources and procedures are consistent with SEF Core Principle 2. The regulatory framework that governs ERCOT provides for adequate resources to monitor and enforce compliance with all rules that govern the ERCOT markets, including the CRR market.¹⁰ ERCOT bylaws obligate ERCOT Members to comply with ERCOT rules and the ERCOT Board may terminate, expel, suspend, or sanction a Member, subject to due process. In the exercise of its duties as the market administrator, ERCOT monitors its operations and market activity and is obligated pursuant to Section 17 of the Protocols to support market oversight activities through specific data requirements. Accordingly, as one of its functions ERCOT is authorized by statute and regulation to receive funding that supports this purpose. In addition, PURA establishes an independent market monitor (“IMM”) whose primary functions are detecting and preventing market manipulation and market design assessment with the goal of enhancing market efficiency, while PUCT rules implement the IMM’s functions. The PUCT has full authority to take action to address market power and has an internal enforcement division that works with the independent market monitor and ERCOT, as necessary to detect and address market power.

Inappropriate market behavior is defined by the relevant authorities (PURA and PUCT rules) in terms of specific types of activities, which are reflected in the statutory and regulatory

¹⁰ PURA authorizes ERCOT to collect a reasonable fee to enable it to cover the costs necessary to perform its functions. This right is implemented in the PUCT Substantive Rules, which state that ERCOT fees are related to performance of its functions.

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THE REQUESTORS, AS DEFINED HEREIN,
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Attachment T—SEF Core Principle 2: Compliance With Rules

definitions of market power and market power abuses, as well as other specifically listed activities. The IMM and PUCT monitor market participant activity against these standards, and generally look for activity that contravenes these specific standards and other general principles governing the competitive market and economic efficiency.

Further, ERCOT provides market participants who meet certain eligibility requirements impartial access to the ERCOT markets. These eligibility requirements are summarized above in response to the DCO core principles.

Relevant authorities:

- PURA Section 39.151 and 39.1515;
- PUCT Substantive Rule 25.361; 25.363; 25.365; and 25.503;
- ERCOT Protocol Section 16.8; 9.19; 16.11; and 20;
- Membership Standard Form Agreement;
- ERCOT bylaws.

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Attachment T—SEF Core Principle 2: Compliance With Rules

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Attachment U

SEF Core Principle 3: Swaps Not Readily Susceptible to Manipulation

The swap execution facility shall permit trading only in swaps that are not readily susceptible to manipulation.

Responses:

DRAFT

Attachment U—SEF Core Principle 3: Swaps Not Readily Susceptible to Manipulation

ERCOT

The ERCOT Protocols provide trading and market rules that are comparable to the requirements of SEF Core Principle 3. The vast majority of CRRs in ERCOT are sold in competitive auctions.¹¹ Statutory and regulatory rules applicable to trading on ERCOT impose structural safeguards to mitigate market power and enforce compliance with all rules that govern the ERCOT markets, including the CRR market. PURA gives the PUCT express authority to address market power through a variety of means including actions against individual entities for market abuse, or ordering the construction of additional transmission to remove system constraints that may facilitate the exercise of market power.¹² In addition, PURA establishes an independent market monitor (IMM) whose primary functions are detecting and preventing market manipulation and market design assessment with the goal of enhancing market efficiency,¹³ while PUCT rules implement the IMM's functions.¹⁴ The PUCT has full authority to take action to address market power and has an internal enforcement division that works with the independent market monitor and ERCOT, as necessary to detect and address market power.

Relevant authorities:

- PURA Section 39.157 and 39.1515;
- PUCT Substantive Rule 25.365 and 25.503;
- ERCOT Protocol Section 7.

¹¹ In the ERCOT market, priority rights (i.e., CRRs that allocated on an entitlement basis) are only available to certain market participants (municipal utilities and electric cooperatives). In the first four ERCOT CRR markets, 1,289 of these rights were awarded, whereas 76,704 CRRs were auctioned off in the same time period, which is approximately 1.7% allocated v. 98.3% sold in the CRR competitive auction process.

¹² PURA § 39.157 provides that “for purposes of this subchapter, market power abuses are practices by persons possessing market power that are unreasonably discriminatory or tend to unreasonably restrict, impair, or reduce the level of competition, including practices that tie unregulated products or services to regulated products or services or unreasonably discriminate in the provision of regulated services. For purposes of this section, “market power abuses” include predatory pricing, withholding of production, precluding entry, and collusion. A violation of the code of conduct provided by Subsection (d) that materially impairs the ability of a person to compete in a competitive market shall be deemed to be an abuse of market power. The possession of a high market share in a market open to competition may not, of itself, be deemed to be an abuse of market power; however, this sentence shall not affect the application of state and federal antitrust laws.”

¹³ PURA § 39.1515.

¹⁴ PUC Substantive. Rule § 25.365.
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Attachment U—SEF Core Principle 3: Swaps Not Readily Susceptible to Manipulation

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Attachment V

SEF Core Principle 4: Monitoring of Trading and Trade Processing

The swap execution facility shall—

(A) establish and enforce rules or terms and conditions defining, or specifications detailing—

(i) trading procedures to be used in entering and executing orders traded on or through the facilities of the swap execution facility; and

(ii) procedures for trade processing of swaps on or through the facilities of the swap execution facility; and

(B) monitor trading in swaps to prevent manipulation, price distortion, and disruptions of the delivery or cash settlement process through surveillance, compliance, and disciplinary practices and procedures, including methods for conducting real-time monitoring of trading and comprehensive and accurate trade reconstructions.

Responses:

Attachment V—SEF Core Principle 4: Monitoring of Trading and Trade Processing

ERCOT

The ERCOT Protocols provides extensive rules regarding trading procedures in the ERCOT markets, consistent with Core Principle 4. Further, the IMM, by law, has complete access to ERCOT systems, data and information to enable it to perform market monitoring functions consistent with SEF Core Principle 4. The IMM has complete visibility into all ERCOT market activity. ERCOT is obligated by law to support and cooperate with the IMM, including providing access to all ERCOT systems, data and information. In addition to the annual and other standard periodic reports and analysis conducted by the IMM, the IMM monitors continuously based on standard review of data and any *ad hoc* scenarios that arise, whether identification of such is by the IMM on its own, or is brought to the attention of the IMM by ERCOT or any other entity. As the ISO, ERCOT looks at market activity in the course of performing its market, operational, and planning activities. Any potentially suspicious market activity identified by ERCOT would be brought to the attention of the IMM and the PUCT as necessary.

Relevant authorities:

- PURA Section 39.1515;
- PUCT Substantive Rule 25.365.

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Attachment W

SEF Core Principle 5: Ability to Obtain Information

The swap execution facility shall—

- (A) establish and enforce rules that will allow the facility to obtain any necessary information to perform any of the functions described in this section;
- (B) provide the information to the Commission on request; and
- (C) have the capacity to carry out such international information-sharing agreements as the Commission may require.

Responses:

Attachment W—SEF Core Principle 5: Ability to Obtain Information

ERCOT

ERCOT's reporting and information-sharing procedures are consistent with SEF Core Principle 5. The PUCT Substantive Rules require ERCOT to provide information to the PUCT on request. In addition, ERCOT is required to file specific reports as well as *ad hoc* reports as deemed necessary by the PUCT. Among the established reports, ERCOT is required to provide a market performance report. ERCOT is also required to comply with any PUCT order. PUCT rules also require market participants to comply with requests for data from ERCOT. The PUCT can then access this information via its right to request information from ERCOT. In addition, the ERCOT Bylaws require ERCOT Members to provide information to ERCOT. The ERCOT Protocols enable ERCOT to release confidential information to government officials if required by law, regulation or order.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.361; 25.362; and 25.503;
- ERCOT Protocol Section 1.3;
- ERCOT bylaws.

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Attachment W—SEF Core Principle 5: Ability to Obtain Information

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Attachment X

SEF Core Principle 6: Position Limits or Accountability

(A) IN GENERAL.—To reduce the potential threat of market manipulation or congestion, especially during trading in the delivery month, a swap execution facility that is a trading facility shall adopt for each of the contracts of the facility, as is necessary and appropriate, position limitations or position accountability for speculators.

(B) POSITION LIMITS.—For any contract that is subject to a position limitation established by the Commission pursuant to section 4a(a), the swap execution facility shall—

- (i) set its position limitation at a level no higher than the Commission limitation; and
- (ii) monitor positions established on or through the swap execution facility for compliance with the limit set by the Commission and the limit, if any, set by the swap execution facility.

Responses:

Attachment X—SEF Core Principle 6: Position Limits or Accountability

ERCOT

Although ERCOT does set explicit position limits, ERCOT's rules and market structure are comparable to the requirements of SEF Core Principle 6. Eligibility of CRRs in any particular auction is limited generally by the system topology (*i.e.*, capacity). CRRs are only allowed if they can be supported by the system. In addition, participants are limited in their CRR transactions by their available credit limit, which ensures the participant cannot purchase CRRs if the position would result in exposure that exceeds its collateral capability.

Relevant authorities:

- ERCOT Protocol Section 7 and 16.

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Attachment X—SEF Core Principle 6: Position Limits or Accountability

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Attachment Y

SEF Core Principle 7: Financial Integrity of Transactions

The swap execution facility shall establish and enforce rules and procedures for ensuring the financial integrity of swaps entered on or through the facilities of the swap execution facility, including the clearance and settlement of the swaps pursuant to section 2(h)(1).

Responses:

DRAFT

Attachment Y—SEF Core Principle 7: Financial Integrity of Transactions

ERCOT

ERCOT's minimum financial requirements are comparable to the requirements of SEF Core Principle 7. While there are no specific capitalization requirements for participation in the ERCOT market other than those established by the PUCT for REPs noted below, an entity's participation in the ERCOT market is effectively limited by:

- Requiring collateral for 100% of estimated exposure subject to any approved unsecured credit. Exposure is updated daily.
- Enforcing a credit limit within the CRR Auction and for Day Ahead Market transactions based on unsecured credit allowed or collateral posted in excess of what is required per the daily exposure requirement.

ERCOT is in the process of developing new eligibility requirements that are comparable to those required by FERC Order 741.

In addition, under the PUCT's REP Rule, a Retail Electric Provider (REP) or its guarantor must demonstrate and maintain certain minimum financial requirements, which are detailed in ERCOT's response regarding comparability to *DCO Core Principle C: Participant and Product Eligibility*.

Relevant authorities:

- PURA Section 39.151;
- PUCT Substantive Rule 25.107; ERCOT Protocol Section 16.8 and 16.11;
- Membership Standard Form Agreement;
- ERCOT bylaws.

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Attachment Y—SEF Core Principle 7: Financial Integrity of Transactions

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Attachment Z

SEF Core Principle 8: Emergency Authority

The swap execution facility shall adopt rules to provide for the exercise of emergency authority, in consultation or cooperation with the Commission, as is necessary and appropriate, including the authority to liquidate or transfer open positions in any swap or to suspend or curtail trading in a swap.

Responses:

DRAFT

Attachment Z—SEF Core Principle 8: Emergency Authority

ERCOT

Section 16.11.6 of the ERCOT Protocols provides ERCOT a range of authorities to address emergency conditions including liquidating open positions of CRRs. Other actions may include:

- holding payments of defaulting participants;
- drawing on, holding or distributing funds of the participant;
- aggregating amounts owed by breaching participant and immediately due;
- restricting or eliminating the defaulting entity's ability to participate in the Day Ahead Market; and
- revoking the participant's rights and terminating its outstanding agreements (the market participant remains liable for all debt and consequences for termination/revocation).

Relevant authorities:

- ERCOT Protocol Section 16.11.6.

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Attachment Z—SEF Core Principle 8: Emergency Authority

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Attachment AA

SEF Core Principle 9: Timely Publication of Trading Information

(A) IN GENERAL.—The swap execution facility shall make public timely information on price, trading volume, and other trading data on swaps to the extent prescribed by the Commission.

(B) CAPACITY OF SWAP EXECUTION FACILITY.—The swap execution facility shall be required to have the capacity to electronically capture and transmit trade information with respect to transactions executed on the facility.

Responses:

DRAFT

Attachment AA—SEF Core Principle 9: Timely Publication of Trading Information

ERCOT

ERCOT's procedures for making the terms of its contracts, fees, and any other information relevant to participation in its markets available to the public are comparable to those required by SEF Core Principle 9. The PUCT Substantive Rules require ERCOT to disseminate information relating to market operations, prices, availability of services. These mandates are implemented via the ERCOT Protocols.

Following each CRR Auction, ERCOT is required to post to the MIS Public Area the following information for all outstanding CRRs:

- PTP Options and PTP Options with Refund – the source and sink, and total MWs;
- PTP Obligations and PTP Obligations with Refund – the source and sink and total MWs;
- FGRs – the identity of each directional flowgate, and the magnitude of positive flow (MW) on each directional network element represented by each flowgate;
- The identities of the CRRAHs that were awarded or allocated CRRs in or before the CRR Auction;
- The clearing prices for each strip of CRR blocks awarded in the CRR Auction;
- The identity and post contingency flow of each binding directional element based on the CRR Network Model used in the CRR Auction; and
- All CRR Auction Bids and CRR Auction Offers, without identifying the name of the CRRAH that submitted the bid or offer.

This information reflects the terms and conditions of the CRRs awarded in the auctions. All other bid information is posted six months after the relevant auction. There are at present no special fees to participate in the CRR market. The ERCOT membership fees are prescribed in the ERCOT Protocols and are approved by the PUCT.

ERCOT's credit rules are described in the ERCOT Protocols in Section 16.11 (general, Section 4.4.10 (DAM) and Section 7.5.5 (CRR Auction)

ERCOT publicly posts the prices of all nodes and zones in the ERCOT region on a daily basis. These are the sources and sinks for CRRs. As noted above, the CRRs awarded in monthly auctions are public.

Relevant authorities:

- PUCT Substantive Rule 25.361;
- ERCOT Protocol Section 7.5.3.1; 16.11; 4.4.10; and 7.5.5

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Attachment AA—SEF Core Principle 9: Timely Publication of Trading Information

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Attachment BB

SEF Core Principle 10: Recordkeeping and Reporting

(A) IN GENERAL.—A swap execution facility shall—

(i) maintain records of all activities relating to the business of the facility, including a complete audit trail, in a form and manner acceptable to the Commission for a period of 5 years;

(ii) report to the Commission, in a form and manner acceptable to the Commission, such information as the Commission determines to be necessary or appropriate for the Commission to perform the duties of the Commission under this Act; and

(iii) shall keep any such records relating to swaps defined in section 1a(47)(A)(v) open to inspection and examination by the Securities and Exchange Commission.

(B) REQUIREMENTS.—The Commission shall adopt data collection and reporting requirements for swap execution facilities that are comparable to corresponding requirements for derivatives clearing organizations and swap data repositories.

Responses:

Attachment BB—SEF Core Principle 10: Recordkeeping and Reporting

ERCOT

See Section X (Recordkeeping and Reporting), above.

DRAFT

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Attachment BB—SEF Core Principle 10: Recordkeeping and Reporting

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Attachment CC

SEF Core Principle 11: Antitrust Considerations

Unless necessary or appropriate to achieve the purposes of this Act, the swap execution facility shall not—

- (A) adopt any rules or taking any actions that result in any unreasonable restraint of trade; or
- (B) impose any material anticompetitive burden on trading or clearing.

Responses:

Attachment CC—SEF Core Principle 11: Antitrust Considerations

ERCOT

See Section XIII (Antitrust Considerations), above.

DRAFT

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Attachment CC—SEF Core Principle 11: Antitrust Considerations

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Attachment DD

SEF Core Principle 12: Conflicts of Interest

The swap execution facility shall—

- (A) establish and enforce rules to minimize conflicts of interest in its decision-making process;
and
- (B) establish a process for resolving the conflicts of interest.

Responses:

DRAFT

Attachment DD— SEF Core Principle 12: Conflicts of Interest

ERCOT

See Section XV (Conflicts of Interest), above.

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Attachment EE

SEF Core Principle 13: Financial Resources

(A) IN GENERAL.—The swap execution facility shall have adequate financial, operational, and managerial resources to discharge each responsibility of the swap execution facility.

(B) DETERMINATION OF RESOURCE ADEQUACY.—The financial resources of a swap execution facility shall be considered to be adequate if the value of the financial resources exceeds the total amount that would enable the swap execution facility to cover the operating costs of the swap execution facility for a 1-year period, as calculated on a rolling basis.

Responses:

Attachment EE—SEF Core Principle 13: Financial Resources

ERCOT

ERCOT's financial resources and related requirements are consistent with SEF Core Principle 13. See ERCOT's response to the DCO Core Principle on Financial Resources.

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Attachment FF

SEF Core Principle 14: System Safeguards

The swap execution facility shall—

(A) establish and maintain a program of risk analysis and oversight to identify and minimize sources of operational risk, through the development of appropriate controls and procedures, and automated systems, that—

- (i) are reliable and secure; and
- (ii) have adequate scalable capacity;

(B) establish and maintain emergency procedures, backup facilities, and a plan for disaster recovery that allow for—

- (i) the timely recovery and resumption of operations; and
- (ii) the fulfillment of the responsibilities and obligations of the swap execution facility; and

(C) periodically conduct tests to verify that the backup resources of the swap execution facility are sufficient to ensure continued—

- (i) order processing and trade matching;
- (ii) price reporting;
- (iii) market surveillance and
- (iv) maintenance of a comprehensive and accurate audit trail.

Responses:

Attachment FF—SEF Core Principle 14: System Safeguards

ERCOT

See Section IX (System Safeguards), above.

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Attachment GG

SEF Core Principle 15: Designation of Chief Compliance Officer

(A) IN GENERAL.—Each swap execution facility shall designate an individual to serve as a chief compliance officer.

(B) DUTIES.—The chief compliance officer shall—

- (i) report directly to the board or to the senior officer of the facility;
- (ii) review compliance with the core principles in this subsection;
- (iii) in consultation with the board of the facility, a body performing a function similar to that of a board, or the senior officer of the facility, resolve any conflicts of interest that may arise;
- (iv) be responsible for establishing and administering the policies and procedures required to be established pursuant to this section;
- (v) ensure compliance with this Act and the rules and regulations issued under this Act, including rules prescribed by the Commission pursuant to this section; and
- (vi) establish procedures for the remediation of noncompliance issues found during compliance office reviews, look backs, internal or external audit findings, self-reported errors, or through validated complaints.

Responses:

Attachment GG—SEF Core Principle 15: Designation of Chief Compliance Officer

ERCOT

ERCOT has a Chief Compliance Officer who reports directly to the Chief Executive Officer. His responsibilities include assurance of compliance with Protocols and other applicable standards, including NERC standards. In addition, as head of Human Resources, he is responsible for the ERCOT Code of Conduct and Ethics Compliance Standard and reporting of any exceptions and validated complaints to the Board. In addition, a separate department, reporting to the Vice President of Credit and Enterprise Risk, is responsible for managing compliance with control standards associated with SSAE16 through control self-assessments in applicable business functions and monitoring resolution of compliance issues identified in Internal Audits.

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