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| NPRR Number | 1067 | NPRR Title | Market Entry Qualifications, Continued Participation Requirements, and Credit Risk Assessment |
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| Date | | January XX, 2022 | |
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| Submitter’s Information | | | |
| Name | |  | |
| E-mail Address | |  | |
| Company | | ERCOT | |
| Phone Number | |  | |
| Cell Number | |  | |
| Market Segment | | Not applicable | |

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| Comments |

For CWG/MCWG Discussion Only

ERCOT is providing these baseline edits for the limited purpose of discussion by CWG/MCWG. Due to the importance of focusing resources on ensuring smooth implementation of securitization financing, ERCOT does not plan to offer official comments to NPRR1067 until early 2022. ERCOT updated the baseline following the incorporation of a number of NPRRs that have been approved since NPRR1067 was last discussed. These modifications reflect the original submission of the language on top of the updated baseline. The 3/31/21 Morgan Stanley Capital Group Inc comments to NPRR1067 are not reflected in this version, as the majority of those edits are presently included in the current baseline following the implementation of NPRR1073.

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| Revised Cover Page Language |

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| **NPRR Number** | [**1067**](http://www.ercot.com/mktrules/issues/nprr1067) | **NPRR Title** | **Market Entry Qualifications, Continued Participation Requirements, and Credit Risk Assessment** |
| **Nodal Protocol Sections Requiring Revision** | | 1.3.1.1, Items Considered Protected Information  16.1.2, Principal of a Market Participant (new)  16.2.1, Criteria for Qualification as a Qualified Scheduling Entity  16.2.1.1, QSE Background Check Process (new)  16.2.1.1, Data Agent-Only Qualified Scheduling Entities  16.2.2, QSE Application Process  16.2.2.2, Incomplete Applications  16.2.2.3, ERCOT Approval or Rejection of Qualified Scheduling Entity Application  16.2.3.2, Maintaining and Updating QSE Information  16.8.1, Criteria for Qualification as a CRR Account Holder  16.8.1.1, CRR Account Holder Background Check Process (new)  16.8.2, CRR Account Holder Application Process  16.8.2.2, Incomplete Applications  16.8.2.3, ERCOT Approval or Rejection of CRR Account Holder Application  16.8.3.1, Maintaining and Updating CRR Account Holder Information  16.11, Financial Security for Counter-Parties  16.11.1, ERCOT Creditworthiness Requirements for Counter-Parties  16.11.1.1, Quantitative Financial Scoring Model (new)  16.11.1.2, Review of Counter-Party Eligibility (new)  16.11.1.2.1, Failure to Maintain Eligibility (new)  16.11.2, Requirement for Financial Statements (new)  16.11.2, Requirements for Setting a Counter-Party’s Unsecured Credit Limit  16.11.3, Alternative Means of Satisfying ERCOT Creditworthiness Requirements  16.11.4, Determination and Monitoring of Counter-Party Credit Exposure  16.11.4.1, Determination of Total Potential Exposure for a Counter-Party  16.11.4.2, Determination of Counter-Party Initial Estimated Liability  16.11.4.3, Determination of Counter-Party Estimated Aggregate Liability  16.11.4.3.1, Day-Ahead Liability Estimate  16.11.4.3.2, Real-Time Liability Estimate  16.11.4.3.3, Forward Adjustment Factors  16.11.4.4, [Reserved] (delete)  16.11.5, Monitoring of a Counter-Party’s Creditworthiness and Credit Exposure by ERCOT  16.11.6, Payment Breach and Late Payments by Market Participants  16.11.6.1, ERCOT’s Remedies  16.11.6.1.1, No Payments by ERCOT to Market Participant  16.11.6.1.2, ERCOT May Draw On, Hold or Distribute Funds  16.11.6.1.3, Aggregate Amount Owed by Breaching Market Participant Immediately Due  16.11.6.1.4, Repossession of CRRs by ERCOT  16.11.6.1.5, Declaration of Forfeit of CRRs  16.11.6.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements  16.11.6.2, ERCOT’s Remedies for Late Payments by a Market Participant  16.11.6.2.1, First Late Payment in Any Rolling 12-Month Period  16.11.6.2.2, Second Late Payment in Any Rolling 12-Month Period  16.11.6.2.3, Third Late Payment in Any Rolling 12-Month Period  16.11.6.2.4, Fourth Late Payment in Any Rolling 12-Month Period  16.11.6.2.5, Level I Enforcement  16.11.6.2.6, Level II Enforcement  16.11.6.2.7, Level III Enforcement  16.11.7, Release of Market Participant’s Financial Security Requirement  16.11.8, Acceleration  Section 23 Form A: Congestion Revenue Right (CRR) Account Holder Application for Registration  Section 23 Form G: QSE Application and Service for Registration Form  ERCOT Fee Schedule | |
| **Related Documents Requiring Revision/Related Revision Requests** | | ERCOT Internal Credit Score Methodology (new) | |
| **Revision Description** | | This Nodal Protocol Revision Request (NPRR) strengthens ERCOT’s market entry qualification and continued participation requirements for ERCOT Counter-Parties i.e., Qualified Scheduling Entities (QSEs) and Congestion Revenue Right Account Holders (CRRAHs), classifies information provided in the background check and credit scoring process as Protected Information, modifies application forms for QSEs and CRRAHs, and adds a new background check fee to the Fee Schedule.  This NPRR makes the following modifications to Section 16:  (1) Creates a new background check process as a part of ERCOT’s review of current and prospective Counter-Parties;  (2) Authorizes ERCOT to review current and prospective Counter-Parties to determine whether they pose an unreasonable credit risk to ERCOT;  (3) Authorizes ERCOT to determine creditworthiness based on an ERCOT-calculated credit score, and allows ERCOT to require certain actions be taken by a Counter-Party to remain creditworthy.  (4) Authorizes ERCOT to suspend a QSE or CRR Account Holder if it poses an unreasonable credit risk to; and  (5) Authorizes ERCOT to terminate the registration of a Counter-Party if it is deemed an unreasonable credit risk that cannot be remedied.  Further, this NPRR formalizes processes for ERCOT’s assessment of Counter-Party creditworthiness, and includes a credit scoring process to provide a consistent framework for review of creditworthiness. Credit scoring will incorporate assessment of both qualitative and quantitative (financial statement) information. In the event of a material change to creditworthiness, this NPRR also clarifies the means by which ERCOT may adjust Unsecured Credit Limits and/or Total Potential Exposure (TPE) to ensure that these adequately reflect the financial risk created by a Counter-Party’s activities under these Protocols. | |
| **Business Case** | | In an attempt to mitigate market exposure, ERCOT proposes this NPRR to make changes to qualifications and requirements for prospective and current Counter-Parties.  ERCOT’s goal is to strike a balance between open access, competition, and barriers to entry, while protecting the integrity of the market.  Based on ERCOT’s review of various Know Your Customer (KYC) practices and proposals in financial markets and other Independent System Operators, and following consultation with ERCOT stakeholders, this NPRR proposes revisions to:   * Limit overall market exposure by potential bad actors. * Help avoid uplifts to the ERCOT market by:   + Reducing risk of bad actors re-entering the ERCOT market as new entities;   + Reducing risk of entities/individuals with poor financial history or history of manipulating markets entering the ERCOT market;   + Reducing risk of entities/individuals sanctioned in other markets entering the ERCOT market; and   + Increasing ERCOT oversight of financial health of Counter-Parties.   Consistent with the ERCOT Board of Directors’ policy on the approval of user fees, the background check fee proposed in this NPRR is designed to cover the cost of background checks of new and prospective Counter-Parties—a service that will benefit Counter-Parties in mitigating market exposure by bad actors.  This NPRR additionally proposes revisions to conform with emerging standards of Self-Regulatory Organizations (SROs) e.g. Financial Industry Regulatory Administration (FINRA), New York Stock Exchange (NYSE), etc., as well as best practices in the US financial industry and financial regulators such as the Securities and Exchange Commission (SEC), the Commodities Futures Trading Commission (CFTC), and the Federal Energy Regulatory Commission (FERC).  Finally, this NPRR documents the means by which ERCOT will assess Counter-Party creditworthiness, and provides additional clarity to Market Participants of the process by which this might occur. | |

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| **Market Rules Notes** |

Please note the baseline language in the following sections has been updated to reflect the incorporation of the following NPRRs into the Protocols:

* NPRR867 (unboxed due to system implementation on 6/1/21)
  + Section 16.11.1
* NPRR902 (incorporated 9/1/21)
  + Section 1.3.1.1
* NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage
  + Section 1.3.1.1
  + Section 16.11.4.3.2
* NPRR1007, RTC – NP 3: Management Activities for the ERCOT System (incorporated 1/1/21)
  + Section 3.5.2.1
  + Section 3.5.2.2
  + Section 3.5.2.3
  + Section 3.5.2.4
  + Section 3.5.2.5
  + Section 3.5.2.6
  + Section 3.5.2.7
* NPRR1023, Change to CRR Repossession Process (incorporated mm/dd/yy)
  + Section 16.11.6.1.4
  + Section 16.11.6.1.5
  + Section 16.11.6.1.6
  + Section 16.11.7
* NPRR1039, Replace the Term MIS Public Area with ERCOT Website (incorporated 1/1/21)
  + Section 6.6.1.5
* NPRR1054, Removal of Oklaunion Exemption Language (incorporated mm/dd/yy)
  + Section 16.11.4.3.2
* NPRR1073 (incorporated mm/dd/yy) \*denotes “net result = no change”
  + Section 16.1.2
  + Section 16.2.1
  + Section 16.2.2\*
  + Section 16.2.2.2
  + Section 16.2.2.3\*
  + Section 16.2.3.2\*
  + Section 16.8.1
  + Section 16.8.2\*
  + Section 16.8.2.2
  + Section 16.8.2.3\*
  + Section 16.8.3.1\*
  + Section 23A\*
  + Section 23G\*
* NPRR1078 (incorporated 8/20/21)
  + Section 16.11.4.1

Please note that the following NPRRs also propose revisions to the following sections:

* [To be completed]

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| Revised Proposed Protocol Language |

1.3.1.1 Items Considered Protected Information

(1) Subject to the exclusions set out in Section 1.3.1.2, Items Not Considered Protected Information, and in Section 3.2.5, Publication of Resource and Load Information, “Protected Information” is information containing or revealing any of the following:

(a) Base Points, as calculated by ERCOT. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(b) Bids, offers, or pricing information identifiable to a specific Qualified Scheduling Entity (QSE) or Resource. The Protected Information status of part of this information shall expire 60 days after the applicable Operating Day, as follows:

(i) Ancillary Service Offers by Operating Hour for each Resource for all Ancillary Services submitted for the Day-Ahead Market (DAM) or any Supplemental Ancillary Services Market (SASM);

(ii) The quantity of Ancillary Service offered by Operating Hour for each Resource for all Ancillary Service submitted for the DAM or any SASM; and

(iii) Energy Offer Curve prices and quantities for each Settlement Interval by Resource. The Protected Information status of this information shall expire within seven days after the applicable Operating Day if required to be posted as part of paragraph (5) of Section 3.2.5 and within two days after the applicable Operating Day if required to be posted as part of paragraph (7) of Section 3.2.5;

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| ***[NPRR1013: Replace paragraph (b) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]***  (b) Bids, offers, or pricing information identifiable to a specific Qualified Scheduling Entity (QSE) or Resource. The Protected Information status of part of this information shall expire 60 days after the applicable Operating Day, as follows:  (i) Ancillary Service Offers by Operating Hour or Security-Constrained Economic Dispatch (SCED) interval for each Resource for all Ancillary Services submitted for the Day-Ahead Market (DAM) or Real-Time Market (RTM);  (ii) The quantity of Ancillary Service offered by Operating Hour or SCED interval for each Resource for all Ancillary Service submitted for the DAM or RTM; and  (iii) A Resource’s Energy Offer Curve prices and quantities by Operating Hour or SCED interval. The Protected Information status of this information shall expire within seven days after the applicable Operating Day if required to be posted as part of paragraph (5) of Section 3.2.5 and within two days after the applicable Operating Day if required to be posted as part of paragraph (7) of Section 3.2.5; |

(c) Status of Resources, including Outages, limitations, or scheduled or metered Resource data. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(d) Current Operating Plans (COPs). The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(e) Ancillary Service Trades, Energy Trades, and Capacity Trades identifiable to a specific QSE or Resource. The Protected Information status of this information shall expire 180 days after the applicable Operating Day;

(f) Ancillary Service Schedules identifiable to a specific QSE or Resource. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

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| ***[NPRR1013: Replace paragraph (f) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]***  (f) Ancillary Service awards identifiable to a specific QSE or Resource. The Protected Information status of this information shall expire 60 days after the applicable Operating Day; |

(g) Dispatch Instructions identifiable to a specific QSE or Resource, except for Reliability Unit Commitment (RUC) commitments and decommitments as provided in Section 5.5.3, Communication of RUC Commitments and Decommitments. The Protected Information status of this information shall expire 180 days after the applicable Operating Day;

(h) Raw and Adjusted Metered Load (AML) data (demand and energy) identifiable to:

(i) A specific QSE or Load Serving Entity (LSE). The Protected Information status of this information shall expire 180 days after the applicable Operating Day; or

(ii) A specific Customer or Electric Service Identifier (ESI ID);

(i) Wholesale Storage Load (WSL) data identifiable to a specific QSE. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(j) Settlement Statements and Invoices identifiable to a specific QSE. The Protected Information status of this information shall expire 180 days after the applicable Operating Day;

(k) Number of ESI IDs identifiable to a specific LSE. The Protected Information status of this information shall expire 365 days after the applicable Operating Day;

(l) Information related to generation interconnection requests, to the extent such information is not otherwise publicly available. The Protected Information status of certain generation interconnection request information expires as provided in Section 1.3.1.4, Expiration of Protected Information Status;

(m) Resource-specific costs, design and engineering data, including such data submitted in connection with a verifiable cost appeal;

(n) Congestion Revenue Right (CRR) credit limits, the identity of bidders in a CRR Auction, or other bidding information identifiable to a specific CRR Account Holder. The Protected Information status of this information shall expire as follows:

(i) The Protected Information status of the identities of CRR bidders that become CRR Owners and the number and type of CRRs that they each own shall expire at the end of the CRR Auction in which the CRRs were first sold; and

(ii) The Protected Information status of all other CRR information identified above in item (n) shall expire six months after the end of the year in which the CRR was effective.

(o) Renewable Energy Credit (REC) account balances. The Protected Information status of this information shall expire three years after the REC Settlement period ends;

(p) Credit limits identifiable to a specific QSE;

(q) Any information that is designated as Protected Information in writing by Disclosing Party at the time the information is provided to Receiving Party except for information that is expressly designated not to be Protected Information by Section 1.3.1.2 or that, pursuant to Section 1.3.1.4, is no longer confidential;

(r) Any information compiled by a Market Participant on a Customer that in the normal course of a Market Participant’s business that makes possible the identification of any individual Customer by matching such information with the Customer’s name, address, account number, type of classification service, historical electricity usage, expected patterns of use, types of facilities used in providing service, individual contract terms and conditions, price, current charges, billing record, or any other information that a Customer has expressly requested not be disclosed (“Proprietary Customer Information”) unless the Customer has authorized the release for public disclosure of that information in a manner approved by the Public Utility Commission of Texas (PUCT). Information that is redacted or organized in such a way as to make it impossible to identify the Customer to whom the information relates does not constitute Proprietary Customer Information;

(s) Any software, products of software, or other vendor information that ERCOT is required to keep confidential under its agreements;

(t) QSE, Transmission Service Provider (TSP), and Distribution Service Provider (DSP) backup plans collected by ERCOT under the Protocols or Other Binding Documents;

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| ***[NPRR857: Replace item (t) above with the following upon system implementation:]***  (t) QSE, Transmission Service Provider (TSP), Direct Current Tie Operator (DCTO), and Distribution Service Provider (DSP) backup plans collected by ERCOT under the Protocols or Other Binding Documents; |

(u) Direct Current Tie (DC Tie) Schedule information. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(v) Any Texas Standard Electronic Transaction (TX SET) transaction submitted by an LSE to ERCOT or received by an LSE from ERCOT. This paragraph does not apply to ERCOT’s compliance with:

(i) PUCT Substantive Rules on performance measure reporting;

(ii) These Protocols or Other Binding Documents; or

(iii) Any Technical Advisory Committee (TAC)-approved reporting requirements;

(w) Information concerning a Mothballed Generation Resource’s probability of return to service and expected lead time for returning to service submitted pursuant to Section 3.14.1.9, Generation Resource Status Updates;

(x) Information provided by Entities under Section 10.3.2.4, Reporting of Net Generation Capacity;

(y) Alternative fuel reserve capability and firm gas availability information submitted pursuant to Section 6.5.9.3.1, Operating Condition Notice, Section 6.5.9.3.2, Advisory, and Section 6.5.9.3.3, Watch, and as defined by the Operating Guides;

(z) Non-public financial information provided by a Counter-Party to ERCOT pursuant to meeting its credit qualification requirements as well as the QSE’s form of credit support;

(aa) ESI ID, identity of Retail Electric Provider (REP), and MWh consumption associated with transmission-level Customers that wish to have their Load excluded from the Renewable Portfolio Standard (RPS) calculation consistent with Section 14.5.3, End-Use Customers, and subsection (j) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy;

(bb) Generation Resource emergency operations plans and weatherization plans;

(cc) Information provided by a Counter-Party under Section 16.16.3, Verification of Risk Management Framework;

(dd) Any data related to Load response capabilities that are self-arranged by the LSE or pursuant to a bilateral agreement between a specific LSE and its Customers, other than data either related to any service procured by ERCOT or non-LSE-specific aggregated data.  Such data includes pricing, dispatch instructions, and other proprietary information of the Load response product;

(ee) Status of Settlement Only Generators (SOGs), including Outages, limitations, or scheduled or metered output data, except that ERCOT may disclose output data from an SOG as part of an extract or forwarded TX SET transaction provided to the LSE associated with the ESI ID of the Premise where the SOG is located. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

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| ***[NPRR829 and NPRR995: Replace applicable portions of paragraph (ee) above with the following upon system implementation:]***  (ee) Status of Settlement Only Generators (SOGs) and Settlement Only Energy Storage System (SOESS), including Outages, limitations, schedules, metered output and withdrawal data, or data telemetered for use in the calculation of Real-Time Liability (RTL) as described in Section 16.11.4.3.2, Real-Time Liability Estimate, except that ERCOT may disclose metered output and withdrawal data from an SOG or SOESS as part of an extract or forwarded TX SET transaction provided to the LSE associated with the ESI ID of the Premise where the SOG is located. The Protected Information status of this information shall expire 60 days after the applicable Operating Day; |

(ff) Any documents or data submitted to ERCOT in connection with an Alternative Dispute Resolution (ADR) proceeding. The Protected Information status of this information shall expire upon ERCOT’s issuance of a Market Notice indicating the disposition of the ADR proceeding pursuant to paragraph (1) of Section 20.9, Resolution of Alternative Dispute Resolution Proceedings and Notification to Market Participants, except to the extent the information continues to qualify as Protected Information pursuant to another paragraph of this Section 1.3.1.1;

(gg) Reasons for and future expectations of overrides to a specific Resource’s High Dispatch Limit (HDL) or Low Dispatch Limit (LDL). The Protected Information status of this information shall expire 60 days after the applicable Operating Day;

(hh) Information provided to ERCOT under Section 16.18, Cybersecurity Incident Notification, except that ERCOT may disclose general information concerning a Cybersecurity Incident in a Market Notice in accordance with paragraph (5) of Section 16.18 to assist Market Participants in mitigating risk associated with a Cybersecurity Incident; and

(ii) Information disclosed in response to paragraphs (1)-(4) of the Gas Pipeline Coordination section of Section 22, Attachment K, Declaration of Completion of Generation Resource Summer Weatherization Preparations and Natural Gas Pipeline Coordination for Resource Entities with Natural Gas Generation Resources, submitted to ERCOT in accordance with Section 3.21.1, Natural Gas Pipeline Coordination Requirements for Resource Entities with Natural Gas Generation Resources for Summer Preparedness and Summer Peak Load Season. The Protected Information status of Resource Outage information shall expire as provided in paragraph (1)(c) of Section 1.3.1.1.

(jj) Information provided to ERCOT pursuant to Section 16.2.1.1, QSE Background Check Process, or 16.8.1.1, CRR Account Holder Background Check Process; and

(kk) ERCOT’s internal Counter-Party credit score, as determined in accordance with Section 16.11.1, Monitoring of a Counter-Party’s Creditworthiness and Credit Exposure by ERCOT.

***16.1.2    Principal of a Market Participant***

(1) For purposes of Section 16, Registration and Qualification of Market Participants, a Principal is any of the following, as related to a registered Market Participant or Market Participant applicant:

(a) A sole proprietor of a sole proprietorship;

(b) A general partner of a general partnership;

(c) An executive of a company (e.g., president, chief executive officer, chief operating officer, chief financial officer, general counsel, or equivalent position);

(d) A manager, managing member, or a member vested with the management authority of a limited liability company or limited liability partnership;

(e) A shareholder with more than 10% equity of the Entity; or

(f) A person that has authority to make decisions under these Protocols on behalf of the registered Market Participant or applicant, and is not otherwise controlled by any of the other Principal types listed above, or as otherwise identified by ERCOT.

16.2.1 Criteria for Qualification as a Qualified Scheduling Entity

(1) To become and remain a Qualified Scheduling Entity (QSE), an Entity must meet the following requirements:

(a) Submit a properly completed QSE application for qualification, including any applicable fee, necessary disclosures, and designation of Authorized Representatives, each of whom is responsible for administrative communications with the QSE and each of whom has enough authority to commit and bind the QSE and the Entities it represents;

(b) Comply with ERCOT’s background check process, as described in Section 16.2.1.1, QSE Background Check Process;

(c) Demonstrate to ERCOT’s reasonable satisfaction that the Entity does not pose an Unreasonable Credit Risk, as defined in this Section;

(b) Sign a Standard Form Market Participant Agreement;

(c) Sign any required Agreements relating to use of the ERCOT network, software, and systems;

(d) Demonstrate to ERCOT’s reasonable satisfaction that the Entity is capable of performing the functions of a QSE;

(e) Demonstrate to ERCOT’s reasonable satisfaction that the Entity is capable of complying with the requirements of all ERCOT Protocols and Operating Guides;

(f) Satisfy ERCOT’s creditworthiness and capitalization requirements as set forth in this Section, unless exempted from these requirements by Section 16.17, Exemption for Qualified Scheduling Entities Participating Only in Emergency Response Service;

(g) Be generally able to pay its debts as they come due. ERCOT may request evidence of compliance with this qualification only if ERCOT reasonably believes that a QSE is failing to comply with it;

(h) Provide all necessary bank account information and arrange for Fedwire system transfers for two-way confirmation;

(i) Be financially responsible for payment of Settlement charges for those Entities it represents under these Protocols;

(j) Comply with the backup plan requirements in the Operating Guides;

(k) Maintain a 24-hour, seven-day-per-week scheduling center with qualified personnel for the purposes of communicating with ERCOT relating to Day-Ahead and Operating Day exchange of market and operational obligations in representing Load, Resources, and market positions. Those personnel must be responsible for operational communications and must have sufficient authority to commit and bind the QSE and the Entities that it represents;

(l) Demonstrate and maintain a working functional interface with all required ERCOT computer systems; and

(m) Allow ERCOT, upon reasonable notice, to conduct a site visit to verify information provided by the QSE.

(2) If a QSE chooses to use Electronic Data Interchange (EDI) transactions to receive Settlement Statements and Invoices, it must participate in and successfully complete testing as described in Section 19.8, Retail Market Testing, before starting operations with ERCOT as a QSE.

(3) A QSE must be able to demonstrate to ERCOT’s reasonable satisfaction that it does not pose an “Unreasonable Credit Risk.” Unreasonable Credit Risk as used in Section 16, Registration and Qualification of Market Participants, is a risk posed to ERCOT or its Market Participants by an Entity’s participation in the ERCOT market that cannot be adequately mitigated by the Entity’s satisfaction of additional creditworthiness requirements. Indicators of Unreasonable Credit Risk may include, but are not limited to: past market manipulation or other finance-related violations, based upon a final adjudication in state or federal regulatory or legal proceedings; financial defaults in ERCOT or other energy markets; indications of imminent bankruptcy or insolvency; or a combination of current market and financial risk factors, such as low capitalization.

(3) A QSE or QSE applicant must be able to demonstrate to ERCOT’s reasonable satisfaction that none of its Principals were or are Principals of any Entity with an outstanding payment obligation that remains owing to ERCOT under any Agreement or these Protocols. For purposes of this Section, ERCOT will only consider disqualifying those Principals of the QSE or QSE applicant who were Principals of the other Entity at a time during which the unpaid financial obligation remained owing to ERCOT or during the 120-day period prior to the date on which the unpaid financial obligation first became due and owing to ERCOT.

(4) If any of a QSE’s or QSE applicant’s Principals were or are Principals of a terminated Market Participant with an obligation for Default Uplift Ratio Share allocated under Section 9.19.1, Default Uplift Invoices, the terminated Market Participant must be current on all payment obligations for Default Uplift Invoices in order for the QSE to remain, or QSE applicant to become, a registered QSE. For purposes of this Section, ERCOT will only consider as disqualifying those Principals of the QSE or QSE applicant who were Principals of the other Entity at a time during which the other Entity was not current on its payment obligation for Default Uplift Invoices or 120 days prior to the date the other Entity first failed to pay a Default Uplift Invoice.

(5) A QSE shall promptly notify ERCOT of any change that a reasonable examiner may deem material to the QSE’s ability to continue to meet the requirements set forth in this Section, and any material change in the information provided by the QSE to ERCOT that may adversely affect the reliability or safety of the ERCOT System or the financial security of ERCOT. This includes any changes in the Principals of the QSE. If the QSE fails to so notify ERCOT of such change within two Business Days after becoming aware of the change, then ERCOT may, after providing notice to each Entity represented by the QSE, refuse to allow the QSE to perform as a QSE and take any other action ERCOT deems appropriate, in its sole discretion, to prevent ERCOT or Market Participants from bearing potential or actual risks, financial or otherwise, arising from those changes, and in accordance with these Protocols.

(6) Subject to the following provisions of this paragraph, a QSE may partition itself into any number of subordinate QSEs (“Subordinate QSEs”). If a single Entity requests to partition itself into more than four Subordinate QSEs, ERCOT may implement the request subject to ERCOT’s reasonable determination that the additional requested Subordinate QSEs will not be likely to overburden ERCOT’s staffing or systems. ERCOT shall adopt an implementation plan allowing phased-in registration for these additional Subordinate QSEs in order to mitigate system or staffing impacts. However, ERCOT may not unreasonably delay that registration.

(7) Each Subordinate QSE must be treated as an individual QSE for all purposes including communications and control functions except for liability, financial security, and financial liability requirements under this Section. That liability, financial security, and financial liability is cumulative for all Subordinate QSEs for the single Entity signing the QSE Agreement.

(8) Continued qualification as a QSE is contingent upon compliance with all applicable requirements in these Protocols. ERCOT may suspend a QSE’s rights as a Market Participant when ERCOT reasonably determines that it is an appropriate remedy for the Entity’s failure to satisfy any applicable requirement.

***16.2.1.1 QSE Background Check Process***

(1) A QSE applicant must satisfy a background check as a part of the ERCOT registration process. Upon ERCOT’s request, a registered QSE may be required to satisfy a background check as a condition of maintaining its ERCOT registration. For the purpose of this Section unless otherwise specified, “QSE” refers to registered QSEs, QSE applicants, and their Principals.

(2) A QSE will provide the following disclosures to complete a QSE background check:

(a) Any civil or criminal litigation filed against the QSE within the last ten years that resulted in a conviction or liability for fraud, theft, larceny, deceit, deceptive trade practices, or a violation of securities laws or customer protection laws;

(b) Any complaint or disciplinary action filed against the QSE within the last ten years with the Securities and Exchange Commission (SEC), Commodities Futures Trading Commission (CFTC), Federal Energy Regulatory Commission (FERC), a self-regulatory organization, Independent System Operator or Regional Transmission Organization, or a state public utility commission or securities board;

(c) Any default by the QSE, or revocation of the QSE’s right to operate in any other energy market, within the last ten years;

(d) Any bankruptcy by the QSE within the last ten years; and

(e) Any other information ERCOT deems reasonably necessary to complete a background check (e.g., Social Security Number(s), birth dates, home addresses).

(3) As required by paragraph (4) of Section 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity, a QSE must provide ERCOT notice of any change that a reasonable examiner could deem material to the QSE’s ability to continue to satisfy the background check requirement within one Business Day of becoming aware of the change, including any change to information that must be disclosed under this Section.

**16.2.1.2 Data Agent-Only Qualified Scheduling Entities**

(1) An Entity may request registration as a Data Agent-Only QSE by submitting a completed Data Agent-Only QSE application. ERCOT will consider the application and register the Entity as a Data Agent-Only QSE in accordance with the same processes in Section 16.2, Registration and Qualification of Qualified Scheduling Entities, generally applicable to the QSE application process.

(2) An Entity is eligible to register as a Data Agent-Only QSE and maintain that registration if it:

(a) Meets all the eligibility criteria to qualify as a QSE under paragraph (1) of Section 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity, except for items (b), (c), (h), (j), (l), and (m);

(b) Is not also registered as a Congestion Revenue Right (CRR) Account Holder;

(c) Does not participate in the Day-Ahead Market (DAM) or Real-Time Market (RTM);

(d) Does not participate in the Emergency Response Service (ERS) market;

(e) Does not have decision making authority over the Resources for which the Entity provides agency services; and

(f) Maintains 24-hour, seven-day-per-week support contact with qualified personnel to support and resolve any data or communication issues with ERCOT.

(3) A registered Data Agent-Only QSE may only be appointed to act as the authorized agent of a QSE that meets all requirements of Section 16.2.1 for the limited purpose of exchanging or communicating certain types of data with ERCOT provided that a QSE Agency Agreement making such appointment has been properly executed by the parties and accepted by ERCOT. If a Data Agent-Only QSE is appointed as such an agent, it shall perform its agency services in accordance with the terms of the QSE Agency Agreement and the requirements for Wide Area Network (WAN) Participants under the Nodal Operating Guide Section 7, Telemetry and Communication. Once a Data Agent-Only QSE has been designated as an agent as provided herein, it will be authorized to act on behalf of the designating QSE and the Market Participant represented by the designating QSE.

(4) A Data Agent-Only QSE shall comply with the obligations applicable to QSEs under this Section 16, Registration and Qualification of Market Participants, but is exempt from the following requirements:

(a) Paragraph (1)(f) of Section 16.2.1;

(b) Paragraph (1)(h) of Section 16.2.1;

(c) Paragraph (1)(j) of Section 16.2.1;

(d) Paragraph (1)(k) of Section 16.2.1;

(e) Section 16.11, Financial Security for Counter-Parties; and

(f) Section 16.16, Additional Counter-Party Qualification Requirements.

(5) ERCOT will ensure that its systems prevent participation by a Data Agent-Only QSE in the DAM and RTM.

(6) A Data Agent-Only QSE may request to change its registration to a QSE that meets all the requirements of Section 16.2.1 and is registered with ERCOT as such by submitting a written request to ERCOT. ERCOT will change the Data Agent-Only QSE’s registration upon satisfaction of all requirements in Section 16.2.1.

(7) Nothing in this section affects a Data Agent-Only QSE’s obligation under paragraph (3) of Section 16.2.1 to provide ERCOT notice of any material change that could adversely affect the reliability or safety of the ERCOT System.

16.2.2 QSE Application Process

(1) To register as a QSE, an applicant must submit to ERCOT a completed Section 23, Form G, QSE Application and Service Filing for Registration Form, and any applicable fee. ERCOT shall post on the ERCOT website the form in which QSE applications must be submitted, all materials that must be provided with the QSE application and the fee schedule, if any, applicable to QSE applications. The QSE application shall be attested to by a duly authorized officer or agent of the applicant. The QSE applicant shall promptly notify ERCOT of any material changes affecting a pending application using the appropriate form posted on the ERCOT website. The application must be submitted at least 60 days before the proposed date of commencement of service.

16.2.2.2 Incomplete QSE Applications

(1) Within ten Business Days after receiving a QSE application, ERCOT shall notify the applicant in writing if the application is incomplete. An application will not be deemed complete until ERCOT has received all information necessary to conduct an evaluation of whether the applicant satisfies the requirements to be registered as a QSE including information necessary to complete any background checks..

(2) If a QSE application is incomplete, ERCOT’s notice of incompletion to the applicant must explain the deficiencies and describe the additional information necessary to make the QSE application complete. The QSE applicant has five Business Days after it receives the notice, or a longer period if ERCOT allows, to provide the additional required information.

(3) If the applicant does not respond to the incompletion notice within the time allotted, ERCOT shall reject the application and shall notify the applicant using the procedures below.

(4) ERCOT will notify the applicant of the date on which the application is deemed complete.

16.2.2.3 ERCOT Approval or Rejection of Qualified Scheduling Entity Application

(1) ERCOT will approve or reject a QSE application within 60 days after the application has been deemed complete as provided for in Section 16.2.2.2, Incomplete QSE Applications, unless ERCOT determines that additional time is needed to complete its review of the application. ERCOT will notify the applicant when additional time is needed to complete its review and will provide a date by which ERCOT expects to complete its review. If ERCOT’s initial evaluation indicates that there may be a basis to reject the application, ERCOT may contact the applicant prior to rendering a final decision on the application to determine if further information can be provided by the applicant to resolve the identified concern.

(2) If ERCOT rejects a QSE application, ERCOT shall send the applicant a rejection letter explaining the grounds upon which ERCOT rejected the QSE application. Appropriate grounds for rejecting a QSE application include the following:

(a) Required information is not provided to ERCOT in the allotted time;

(b) Noncompliance with technical requirements; and

(c) Noncompliance with other specific eligibility requirements in this Section or in any other Protocols.

(3) Not later than ten Business Days after receiving a rejection letter, the QSE applicant may challenge the rejection of its QSE application using the dispute resolution procedures set forth in Section 20, Alternative Dispute Resolution Procedure.The applicant may submit a new QSE application and fee at any time, and ERCOT shall process the new QSE application under this Section.

(4) If ERCOT approves the QSE application, ERCOT shall send the applicant a Standard Form Market Participant Agreement and any other required Agreements relating to use of the ERCOT network, software, and systems for the applicant’s signature.

(5) If ERCOT fails to approve or deny the QSE application within 60 days after the application is deemed complete, and also fails to notify the applicant that additional time is needed to complete its review, the QSE applicant may seek relief using the dispute resolution procedures set forth in Section 20.

#### 16.2.3.2 Maintaining and Updating QSE Information

(1) Each QSE must timely update information the QSE provided to ERCOT in the application process, and a QSE must promptly respond to any reasonable request by ERCOT for updated information regarding the QSE or the information provided to ERCOT by the QSE, including:

(a) The QSE’s addresses;

(b) A list of Principals, as defined in Section 16.1.2, Principal of a Market Participant;

(c) A list of Affiliates; and

(d) Designation of the QSE’s officers, directors, Authorized Representatives, Credit Contacts, and User Security Administrator (USA) (all per the QSE application) including the addresses (if different), telephone and facsimile numbers, and e-mail addresses for those persons.

16.8.1 Criteria for Qualification as a CRR Account Holder

(1) To become and remain a Congestion Revenue Right (CRR) Account Holder, an Entity must meet the following requirements:

(a) Submit a properly completed CRR Account Holder application (Section 23, Form A, Congestion Revenue Right (CRR) Account Holder Application for Registration) for qualification, including any applicable fee, any necessary disclosures, and designation of “Authorized Representatives,” each of whom is responsible for administrative communications with the CRR Account Holder and each of whom has enough authority to commit and bind the CRR Account Holder;

(b) Comply with ERCOT’s background check process, as described in Section 16.8.1.1, CRR Account Holder Background Check Process;

(c) Demonstrate to ERCOT’s reasonable satisfaction that the Entity does not pose an Unreasonable Credit Risk, as described in this Section;

(b) Sign a CRR Account Holder Agreement;

(c) Sign any required Agreements relating to use of the ERCOT network, software, and systems;

(d) Demonstrate to ERCOT’s reasonable satisfaction that the Entity is capable of performing the functions of a CRR Account Holder;

(e) Demonstrate to ERCOT’s reasonable satisfaction that the Entity is capable of complying with the requirements of all ERCOT Protocols and Operating Guides;

(f) Satisfy ERCOT’s creditworthiness requirements as set forth in this Section;

(g) Be generally able to pay its debts as they come due; ERCOT may request evidence of compliance with this qualification only if ERCOT reasonably believes that a CRR Account Holder is failing to comply with it;

(h) Provide all necessary bank account information and arrange for Fedwire system transfers for two-way confirmation;

(i) Be financially responsible for payment of its Settlement charges under these Protocols; and

(j) Not be an unbundled Transmission Service Provider (TSP), Distribution Service Provider (DSP), or an ERCOT employee.

(2) A CRR Account Holder must be able to demonstrate to ERCOT’s reasonable satisfaction that it does not pose an “Unreasonable Credit Risk.” Unreasonable Credit Risk as used in Section 16, Registration and Qualification of Market Participants, is a risk posed to ERCOT or its Market Participants by an Entity’s participation in the ERCOT market that cannot be adequately mitigated by the Entity’s satisfaction of additional creditworthiness requirements. Indicators of Unreasonable Credit Risk may include, but are not limited to: past market manipulation or other finance-related violations, based upon a final adjudication in state or federal regulatory or legal proceedings; financial defaults in ERCOT or other energy markets; indications of imminent bankruptcy or insolvency; or a combination of current market and financial risk factors, such as low capitalization.

(2) A CRR Account Holder or CRR Account Holder applicant must be able to demonstrate to ERCOT’s reasonable satisfaction that none of its Principals were or are Principals of any Entity with an outstanding payment obligation that remains owing to ERCOT under any Agreement or these Protocols. For purposes of this Section, ERCOT will only consider disqualifying those Principals of the CRR Account Holder or CRR Account Holder applicant who were Principals of the other Entity at a time during which the unpaid financial obligation remained owing to ERCOT or during the 120-day period prior to the date on which the unpaid financial obligation first became due and owing to ERCOT.

(3) If any of a CRR Account Holder’s or CRR Account Holder applicant’s Principals were or are Principals of a terminated Market Participant with an obligation for Default Uplift Ratio Share allocated under Section 9.19.1, Default Uplift Invoices, the terminated Market Participant must be current on all payment obligations for Default Uplift Invoices in order for the CRR Account Holder to remain, or CRR Account Holder applicant to become, a registered CRR Account Holder. For purposes of this Section, ERCOT will only consider as disqualifying those Principals of the CRR Account Holder or CRR Account Holder applicant who were Principals of the other Entity at a time during which the other Entity was not current on its payment obligation for Default Uplift Invoices or 120 days prior to the date the other Entity first failed to pay a Default Uplift Invoice.

(4) A CRR Account Holder shall promptly notify ERCOT of any material change that a reasonable examiner could deem material to the CRR Account Holder’s ability to continue to meet the requirements set forth in paragraphs (1) to (3) above, and any material change in the information provided by the CRR Account Holder to ERCOT that may adversely affect the financial security of ERCOT. This includes any changes in the Principals of the CRR Account Holder. If the CRR Account Holder fails to so notify ERCOT of the following within two Business Days after becoming aware of the change, then ERCOT may refuse to allow the CRR Account Holder to continue to perform as a CRR Account Holder and take any other action ERCOT deems appropriate, in its sole discretion, to prevent ERCOT or Market Participants from bearing potential or actual risks, financial or otherwise, arising from those changes, and in accordance with these Protocols.

(5) Continued qualification as a CRR Account Holder is contingent upon compliance with all applicable requirements in these Protocols. ERCOT may suspend a CRR Account Holder’s rights as a Market Participant when ERCOT reasonably determines that it is an appropriate remedy for the Entity’s failure to satisfy any applicable requirement.

***16.8.1.1 CRR Account Holder Background Check Process***

(1) CRR Account Holder applicants must satisfy a background check as a part of the ERCOT registration process. Upon ERCOT’s request, a registered CRR Account Holder may be required to satisfy a background check as a condition of maintaining its ERCOT registration. For the purpose of this Section, unless otherwise specified, “CRR Account Holder” refers to registered CRR Account Holders, CRR Account Holder applicants, and their Principals.

(2) A CRR Account Holder will provide the following disclosures to complete a CRR Account Holder background check:

(a) Any civil or criminal litigation filed against the CRR Account Holder within the last ten years that resulted in a conviction or liability for fraud, theft, larceny, deceit, deceptive trade practices, or a violation of securities laws or customer protection laws;

(b) Any complaint or disciplinary action filed against the CRR Account Holder within the last ten years with the Securities and Exchange Commission (SEC), Commodities Futures Trading Commission (CFTC), Federal Energy Regulatory Commission (FERC), a self-regulatory organization, Independent System Operator or Regional Transmission Organization, or a state public utility commission or securities board;

(c) Any default by the CRR Account Holder, or revocation of the CRR Account Holder’s right to operate in any other energy market, within the last ten years;

(d) Any bankruptcy by CRR Account Holder within the last ten years; and

(e) Any other information ERCOT deems reasonably necessary to complete a background check (e.g., Social Security Number(s), birth dates, and home addresses).

(3) As required by paragraph (3) of Section 16.8.1, Criteria for Qualification as a CRR Account Holder, a CRR Account Holder must provide ERCOT notice of any change that a reasonable examiner could deem material to the CRR Account Holder’s ability to continue to satisfy the background check requirement within one Business Day of becoming aware of the change, including any change to information that must be disclosed.

16.8.2 CRR Account Holder Application Process

(1) To register as a CRR Account Holder, an applicant must submit to ERCOT a completed Section 23, Form A, Congestion Revenue Right (CRR) Account Holder Application for Registration, and any applicable fee. ERCOT shall post on the ERCOT website the form in which CRR Account Holder applications must be submitted, all materials that must be provided with the CRR Account Holder application and the fee schedule, if any, applicable to CRR Account Holder applications. The CRR Account Holder application shall be attested to by a duly authorized officer or agent of the applicant. The CRR Account Holder applicant shall promptly notify ERCOT of any material changes affecting a pending application using the appropriate form posted on the ERCOT website. The application must be submitted at least 60 days before the first day of participation in the CRR Auction process or purchase of CRRs.

16.8.2.2 Incomplete CRR Account Holder Applications

(1) Within ten Business Days after receiving a CRR Account Holder application, ERCOT shall notify the applicant in writing if the application is incomplete. An application will not be deemed complete until ERCOT has received all information necessary to conduct an evaluation of whether the applicant satisfies the requirements to be registered as a CRR Account Holder, including information necessary to complete any needed background checks.

(2) If a CRR Account Holder application is incomplete, ERCOT’s notice of incompletion to the applicant must explain the deficiencies and describe the additional information necessary to make the CRR Account Holder application complete. The CRR Account Holder applicant has five Business Days after it receives the notice, or a longer period if ERCOT allows, to provide the additional required information.

(3) If the applicant does not respond to the incompletion notice within the time allotted, ERCOT shall reject the application and shall notify the applicant using the procedures below.

(4) ERCOT will notify the applicant of the date on which the application is deemed complete.

16.8.2.3 ERCOT Approval or Rejection of CRR Account Holder Application

(1) ERCOT will approve or reject a CRR Account Holder application within 60 days after the application has been deemed complete as provided for in Section 16.8.2.2, Incomplete CRR Account Holder Applications, unless ERCOT determines that additional time is needed to complete its review of the application. ERCOT will notify the applicant when additional time is needed to complete its review and will provide a date by which ERCOT expects to complete its review. If ERCOT’s initial evaluation indicates that there may be a basis to reject the application, ERCOT may contact the applicant prior to rendering a final decision on the application to determine if further information can be provided by the applicant to resolve the identified concern.

(2) If ERCOT rejects a CRR Account Holder application, ERCOT shall send the applicant a rejection letter explaining the grounds upon which ERCOT rejected the CRR Account Holder application. Appropriate grounds for rejecting a CRR Account Holder application include the following:

(a) Required information is not provided to ERCOT in the allotted time;

(b) Noncompliance with technical requirements; and

(c) Noncompliance with other specific eligibility requirements in this Section or in any other Protocols.

(3) Not later than ten Business Days after receiving a rejection letter, the CRR Account Holder applicant may challenge the rejection of its CRR Account Holder application using the dispute resolution procedures set forth in Section 20, Alternative Dispute Resolution Procedure. The applicant may submit a new CRR Account Holder application and fee at any time, and ERCOT shall process the new CRR Account Holder application under this Section.

(4) If ERCOT approves the CRR Account Holder application, ERCOT shall send the applicant a CRR Account Holder Agreement and any other required Agreements relating to use of the ERCOT network, software, and systems for the applicant’s signature.

(5) If ERCOT fails to approve or deny the CRR Account Holder application within 60 days after the application is deemed complete, and fails to notify the applicant that additional time is needed to complete its review, the CRR Account Holder may seek relief using the dispute resolution procedures set forth in Section 20.

#### 16.8.3.1 Maintaining and Updating CRR Account Holder Information

(1) Each CRR Account Holder must timely update information the CRR Account Holder provided to ERCOT in the application process, and a CRR Account Holder must promptly respond to any reasonable request by ERCOT for updated information regarding the CRR Account Holder or the information provided to ERCOT by the CRR Account Holder, including:

(a) The CRR Account Holder’s addresses;

(b) A list of Principals;

(b) A list of Affiliates; and

(c) Designation of the CRR Account Holder’s officers, directors, Authorized Representatives, Credit Contacts, and User Security Administrator (all per the CRR Account Holder application) including the addresses (if different), telephone and facsimile numbers, and e-mail addresses for those persons.

16.11 Financial Security for Counter-Parties

(1) The term “Financial Security” in this Section means the collateral amount posted with ERCOT in any of the forms listed in Section 16.11. 4, Alternative Means of Satisfying ERCOT Creditworthiness Requirements.

(2) The term “Secured Collateral” in this Section means the collateral posted by a Counter-Party with ERCOT in the form of an unconditional, irrevocable letter of credit, a surety bond naming ERCOT as the beneficiary, or cash.

(3) The term “Remainder Collateral” in this Section means the Secured Collateral minus Total Potential Exposure Secured (TPES) minus Net Positive Exposure of approved Congestion Revenue Right (CRR) Bilateral Trades minus Available Credit Limit (ACL) locked for CRR Auction, calculated in accordance with paragraph (3) of Section 16.11.5.6.1, Credit Requirements for CRR Auction Participation.

16.11.1 Assessment and Monitoring of a Counter-Party’s Creditworthiness by ERCOT

(1) ERCOT shall assess a Qualified Scheduling Entity (QSE) or Congestion Revenue Right (CRR) Account Holder applicant’s creditworthiness, and monitor the creditworthiness of existing Counter-Parties on an ongoing basis. For the purpose of this Section, unless otherwise specified, “Counter-Party” refers to QSE and CRR Account Holder applicants, and registered QSEs and CRR Account Holders. Creditworthiness is assessed to determine whether a Counter-Party’s position has changed in such a manner that, as determined by ERCOT in its sole discretion:

(a) The Unsecured Credit Limit for the Counter-Party or applicant, as determined under Section 16.11.3, Requirements for Setting a Counter-Party’s Unsecured Credit Limit, is appropriate with respect to the financial risk created by the Counter-Party’s activities under these Protocols; or

(b) The Total Potential Exposure (TPE) for the Counter-Party or applicant, as calculated under Section 16.11.5.1, Determination of Total Potential Exposure for a Counter-Party, appropriately reflects the financial risk created by that Counter-Party’s activities under these Protocols.

(2) If ERCOT determines that any of the conditions in paragraph (1) above apply, one or more of the following actions may be taken:

(a) The Counter-Party’s Unsecured Credit Limit may be revised in accordance with paragraphs (2)(e) and (f) of Section 16.11.3; and

(b) The Counter-Party’s TPE may be revised in accordance with paragraph (2) of Section 16.11.5.1.

(3) To provide a framework for the assessment of Counter-Party creditworthiness, ERCOT will assign an internal credit score to each Counter-Party, which may be adjusted based on ERCOT’s evaluation of quantitative and qualitative factors. The internal credit score includes:

(a) A quantitative component computed using one or more internal financial scoring models maintained by ERCOT, as described in Section 16.11.2, Requirements for Financial Statements; and

(b) A qualitative component, based on an assessment by ERCOT of non-quantitative factors impacting credit risk, including but not limited to:

(i) Information obtained from a background check performed in accordance with Section 16.2.1.1, QSE Background Check Process, or Section 16.8.1.1, CRR Account Holder Background Check Process;

(ii) Information obtained in connection with the annual Counter-Party certification process, as described in Section 16.16.2, Annual Certification;

(iii) Information obtained in connection with the risk framework verification process, as described in Section 16.16.3, Verification of Risk Management Framework;

(iv) For Counter-Parties or guarantors with public agency ratings, a credit rating upgrade or downgrade; or

(v) Any other information that ERCOT, in its sole discretion, considers relevant in making an assessment of creditworthiness.

(c) ERCOT, in its sole discretion, may reassess a Counter-Party’s internal credit score at any time, including but not limited to when ERCOT receives information that the Counter-Party has experienced a change that may influence creditworthiness.

(d) A Counter-Party may request that its credit score be evaluated at any time, and ERCOT may then choose to conduct a reassessment at its sole discretion. If ERCOT requests information in support of the reassessment, the Counter-Party must provide such information within ten Business Days of the request.

(4) The methodology used for determining the internal credit score shall be described in an Other Binding Document, ERCOT Internal Credit Score Methodology. The Other Binding Document will specify the financial metrics and methodology utilized by the financial scoring model(s) and the relative weightings of the financial scoring model results and ERCOT’s qualitative assessment that determine the overall internal credit score for a Counter-Party. The Credit Work Group will review the methodology and parameters described in the Other Binding Document, ERCOT Internal Credit Score Methodology, no less often than annually.

***16.11.1.1 Quantitative Financial Scoring Model***

(1) ERCOT shall utilize one or more internal financial scoring models to provide the quantitative assessment of Counter-Party creditworthiness.

(a) The scoring model(s) will use financial metrics obtained from the audited and unaudited financial statements provided by the Counter-Party in accordance with Section 16.11.2, Requirements for Financial Statements.

(b) For Counter-Parties and Counter-Party guarantors that are rated by S&P, Moody’s or Fitch, ERCOT may elect to substitute the agency issuer or long-term debt rating for the rating equivalent provided by the financial scoring model(s). If the Counter-Party or its guarantor is rated by more than one of the above-referenced ratings agencies, and the ratings fall within different rating categories which are not all functional equivalents, then ERCOT shall determine the proxy agency rating as follows:

(i) If there are three ratings and two of the three are functional equivalents, within the range where two of the three apply;

(ii) If there are three ratings and all three are different, within the range where the average of the three ratings apply (rounded down); and

(iii) If there are two ratings and the two are different, within the range of the lower of the two.

(c) As appropriate, ERCOT may utilize different financial scoring models applicable to different Market Participant industry segments.

(d) ERCOT will update each Counter-Party’s financial model score within 60 days of receiving updated audited or unaudited financial statements.

***16.11.1.2 Review of Counter-Party Eligibility***

(1) At any time, ERCOT may conduct a review to determine if a Counter-Party continues to satisfy all requirements set forth in Section 16 of these Protocols. This review may include, but is not limited to, reassessment of the Counter-Party’s internal credit score, as described in Section 16.11.1, Assessment and Monitoring of a Counter-Party’s Creditworthiness by ERCOT.

(2) ERCOT’s review under this Section may be triggered by notice of a change provided by the Counter-Party to ERCOT, or by information that ERCOT receives or discovers through other means.

(3) As part of ERCOT’s review under this Section, ERCOT may conduct additional background checks, as described in Section 16.2.1.1, QSE Background Check Process and Section 16.8.1.1, CRR Account Holder Background Check Process. ERCOT will charge the Counter-Party a new background check fee for any necessary background check. A Counter-Party’s failure to pay a background check fee by the deadline set by ERCOT constitutes a Payment Breach pursuant to Section 16.11.7, Payment Breach and Late Payments by Market Participants.

(4) If ERCOT conducts a review pursuant to this Section and determines that the Counter-Party may no longer satisfy a requirement set forth in Section 16 of these Protocols, ERCOT, in its sole discretion, may consult with the Counter-Party to determine if the Counter-Party can provide additional information or take remedial action that would explain or resolve the deficiencies preliminarily identified by ERCOT in its review.

(5) If ERCOT’s review under this Section indicates that a Counter-Party has experienced a change that impacts its creditworthiness, ERCOT may, in is sole discretion, resolve the identified deficiency by taking action under paragraph (2) of Section 16.11.1.

***16.11.1.2.1 Failure to Maintain Eligibility***

(1) If ERCOT’s review of a Counter-Party pursuant to Section 16.2.1.1, QSE Background Check Process, Section 16.8.1.1, CRR Account Holder Background Check Process, or Section 16.11.1, Assessment and Monitoring of a Counter-Party’s Creditworthiness by ERCOT, results in ERCOT determining that the Counter-Party no longer satisfies a requirement set forth in Section 16 of these Protocols, then ERCOT will notify the Counter-Party that such failure to comply with the ERCOT Protocols is a material breach under Section (8)(A)(2) of the Standard Form Market Participant Agreement. ERCOT will provide the Counter-Party with specific information concerning what is required to cure the material breach.

(2) If ERCOT determines, in its sole discretion, that continued participation of the Counter-Party would pose a risk that could immediately compromise the integrity of the ERCOT market during the 14-day cure period described in Section (8)(A)(2) of the Standard Form Market Participant Agreement, ERCOT may suspend the Counter-Party’s rights as a Market Participant upon the notification of the material breach, and, revise the Counter-Party’s Total Potential Exposure (TPE), as set forth in Section 16.11.5.1, Determination of Total Potential Exposure for a Counter-Party.

***16.11.2 Requirements for Financial Statements***

(1) In support of ERCOT’s creditworthiness monitoring, each Counter-Party shall provide to ERCOT:

(a) Its own or its guarantor’s quarterly (semi-annually, if the guarantor is foreign and rated by a rating agency acceptable to ERCOT) unaudited financial statements not later than 60 days (90 days if the guarantor is foreign and rated by a rating agency acceptable to ERCOT) after the close of each of the issuer’s fiscal quarters; if an issuer’s financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement.

(b) Its own or its guarantor’s annual audited financial statements not later than 120 days after the close of each of the issuer’s fiscal year; if an issuer’s financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement. ERCOT may extend the period for providing interim unaudited or annual audited statements on a case-by-case basis. Annual audited financial statements must be prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) or International Accounting Standards (IAS).

(c) For paragraphs (a) and (b) above, financial statements shall include the Counter-Party’s or its guarantor’s:

(i) Statement of Financial Position (balance sheet) as of the applicable quarterly or annual ending date;

(ii) Statement of Income (or Profit and Loss); and

(iii) Statement of Cash Flows.

16.11.3 Requirements for Setting a Counter-Party’s Unsecured Credit Limit

(1) The following terms used throughout this section are defined below:

(a) Times Interest Earnings Ratio (TIER) and Debt Service Coverage (DSC) ratios are as defined in 7 C.F.R § 1710.114 (2011).

(b) Maximum Debt to Total Capitalization Ratio is defined as: Long-term debt (including all current borrowings) / (Total shareholder’s equity + Long-term debt).

(c) EBITDA is defined as annual Earnings Before Interest, Depreciation and Amortization.

(d) CMLTD, Current Maturities of Long-Term Debt, is defined as the principal portions of long-term debt payable within the next twelve months.

(2) ERCOT, in its sole discretion, may set an Unsecured Credit Limit, not to exceed $50 million, for a Counter-Party if the Counter-Party meets the following requirements as applicable:

(a) If the Counter-Party is an Electric Cooperative (EC) that is not publicly rated by Standard and Poor’s (S&P), Fitch or Moody’s credit rating agencies, or has less than $100 million in Tangible Net Worth, and is a Rural Utilities Service (RUS) distribution borrower or power supply borrower as those terms are used in 7 C.F.R. § 1717.656 (2014); then the Unsecured Credit Limit shall be set within the range defined in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| If Counter-Party has | And | And | And | Then |
| Minimum Equity (Patronage Capital) | Minimum Times Interest Earnings Ratio (TIER) | Minimum Debt Service Coverage (DSC) | Minimum Equity to Assets | Maximum Unsecured Credit Limit as a Percentage of Total Assets minus Total Secured Debt |
| $25,000,000 | 1.00 | 1.00 | 0.15 | 0.00% to 5.00% |

(i) ERCOT shall apply these standards consistent with 7 C.F.R. § 1717.656 (3).

(ii) ERCOT shall utilize annual financial data only for the assessment for those ECs that fall within the scope of this subsection.

(iii) Unsecured Credit Limits for ECs that are publicly rated by S&P, Fitch or Moody’s and that have Tangible Net Worth greater than $100 million will be computed in accordance with item (c) below.

(iv) The amount of Unsecured Credit Limit established within the range in the table above is at the discretion of ERCOT if the stated criteria are met.

(b) If the Counter-Party is a Municipal Owned Utility (MOU) that is not publicly rated by S&P, Fitch or Moody’s, or has less than $100 million in Tangible Net Worth, the Unsecured Credit Limit shall be set within the range defined in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| If Counter-Party has | And | And | And | Then |
| Minimum Equity | Minimum Times Interest Earnings Ratio (TIER) | Minimum Debt Service Coverage (DSC) | Minimum Equity to Assets | Maximum Unsecured Credit Limit as a Percentage of Total Assets minus Total Secured Debt |
| $25,000,000 | 1.05 | 1.00 | 0.15 | 0.00% to 5.00% |

(i) ERCOT shall utilize annual financial data only for the assessment for those MOUs that fall within the scope of this subsection.

(ii) Unsecured Credit Limits for MOUs that are publicly rated by S&P, Fitch or Moody’s and that have Tangible Net Worth greater than $100 million will be computed in accordance with item (c) below.

(iii) The amount of the Unsecured Credit Limit established within the range in the table above is at the discretion of ERCOT if the stated criteria are met.

(c) If the Counter-Party is publicly rated by S&P, Fitch or Moody’s and has greater than $100 million in Tangible Net Worth, the Unsecured Credit Limit shall be set with the ranges defined in the following table:

| If Counter-Party has | | And | Then | | |
| --- | --- | --- | --- | --- | --- |
| Long-Term or Issuer Rating | | Tangible Net Worth greater than | Maximum Unsecured Credit Limit as a percentage of Tangible Net Worth | | |
| Fitch/S&P | Moody’s |
| AAA | Aaa | $100,000,000 | 0.00% | to | 3.00% |
| AA+ | Aa1 | $100,000,000 | 0.00% | to | 2.95% |
| AA | Aa2 | $100,000,000 | 0.00% | to | 2.85% |
| AA- | Aa3 | $100,000,000 | 0.00% | to | 2.70% |
| A+ | A1 | $100,000,000 | 0.00% | to | 2.55% |
| A | A2 | $100,000,000 | 0.00% | to | 2.35% |
| A- | A3 | $100,000,000 | 0.00% | to | 2.10% |
| BBB+ | Baa1 | $100,000,000 | 0.00% | to | 1.80% |
| BBB | Baa2 | $100,000,000 | 0.00% | to | 1.40% |
| BBB- | Baa3 | $100,000,000 | 0.00% | to | 0.70% |
| Below BBB- | Below Baa3 | $100,000,000 | Requires Security | | |

(i) If a Counter-Party’s or guarantor’s debt is rated by more than one of the referenced rating agencies and all ratings fall within ratings categories which are functional equivalents, ERCOT shall assign an Unsecured Credit Limit or allow a guarantee for amounts within the range for that rating.

(ii) If a Counter-Party’s or guarantor’s debt is rated by more than one of the referenced ratings agencies and the ratings fall within different rating categories which are not functional equivalents, ERCOT shall assign an Unsecured Credit Limit or allow a guarantee for amounts as follows:

(A) If there are three ratings and two of the three are functional equivalents, within the range where two of the three apply;

(B) If there are three ratings and all three are different, within the range where the average of the three ratings apply (rounded down); and

(C) If there are two ratings and the two are different, within the range of the lower of the two.

(iii) ERCOT shall utilize annual financial data only for the assessment for those ECs and MOUs that fall within the scope of this subsection.

(iv) The amount of the Unsecured Credit Limit established within the range in the table above is at the discretion of ERCOT if the stated criteria are met.

(d) If the Counter-Party is a privately held company that is not publicly rated by S&P, Fitch or Moody’s, subject to its providing ERCOT with financial statements as specified in Section 16.11.2, Requirement for Financial Statements, the Unsecured Credit Limit shall be set within the range defined in the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| If Counter-Party has | And | And | And | Then | | |
| Tangible Net Worth | Minimum Current Ratio | Maximum Debt to Total Capitalization Ratio | Minimum EBITDA to Interest and CMLTD | Maximum Unsecured Credit Limit as a percentage of Tangible Net Worth | | |
| $100,000,000 | 1.0 | 0.60 | 2.0 | 0.00% | to | 1.80% |

(i) The amount of the Unsecured Credit Limit established within the range in the table above is at the discretion of ERCOT if the stated criteria are met.

(e) If warranted by a change in a Counter-Party’s creditworthiness, as determined by ERCOT, ERCOT may adjust Unsecured Credit Limits. ERCOT may notify a Counter-Party that its Unsecured Credit Limit is under review and, as appropriate, request additional information relevant to the assessment of the Counter-Party’s creditworthiness. Additional explanatory information requested by ERCOT must be provided within ten days, unless otherwise determined by ERCOT.

(f) ERCOT will notify a Counter-Party of a change to that Counter-Party’s Unsecured Credit Limit, including an explanation of the change, no less than five Bank Business Days before the effective date of the change. Unsecured Credit Limits may not be increased to amounts in excess of those specified in this Section.

16.11.4 Alternative Means of Satisfying ERCOT Creditworthiness Requirements

(1) If a Counter-Party is required to provide Financial Security under these Protocols, then it may do so through one or more of the following means:

(a) Another Entity may give a guarantee to ERCOT, if ERCOT has set an Unsecured Credit Limit for the Entity under Section 16.11.3, Requirements for Setting a Counter-Party’s Unsecured Credit Limit. ERCOT shall value the guarantee based on the guarantor’s Unsecured Credit Limit and other obligations the guarantor has under these Protocols or other contracts with ERCOT.

(i) The guarantee must be given using one of the ERCOT Board-approved standard guarantee forms. No modifications are permitted.

(ii) Guarantees are subject to a limit of $50 million of guarantees per Counter-Party and an overall limit of $50 million per guarantor for all ERCOT Counter-Parties.

(iii) For foreign guarantees, the guarantor must also meet the following standards:

(A) The country of domicile for the foreign guarantor must:

(1) Maintain a sovereign rating greater than or equal to AA with Fitch or S&P or Aa2 with Moody’s;

(2) If the ratings are below those in item (a)(iii)(A)(1) above, but greater than or equal to A with Fitch or S&P or A2 with Moody’s, then the sovereign rating would qualify if the country had a ceiling rating of AAA with Fitch or S&P or Aaa with Moody’s; and

(3) Must have reciprocity agreements with the U.S. regarding enforcement and collection of guarantee agreements.

(B) The foreign guarantor must:

(1) Provide to ERCOT annual audited financial statements, prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) or International Accounting Standards (IAS) and semi-annual unaudited financial statements;

(2) Provide a guarantee in one of the standard form documents approved by the ERCOT Board of Directors for foreign Entities. No modifications are permitted; and

(3) Provide an opinion letter from a law firm unaffiliated with the Counter-Party or guarantor affirming that the guarantee agreement is enforceable in the U.S. and in the jurisdiction of the corporate guarantor’s domicile.

(b) The Counter-Party may give an unconditional, irrevocable letter of credit naming ERCOT as the beneficiary. ERCOT may, in its sole discretion, reject the letter of credit if the issuer is unacceptable to ERCOT or if the conditions under which ERCOT may draw against the letter of credit are unacceptable to ERCOT.

(i) The letter of credit must be given using the ERCOT Board-approved standard letter of credit form.

(ii) Letters of credit must be issued by a bank or other financial institution that is acceptable to ERCOT, with a minimum rating of A- with S&P or Fitch or A3 with Moody’s.

(iii) Letters of credit are subject to an overall limit per letter of credit issuer for all ERCOT Counter-Parties as determined below:

| If the issuing entity has | | Then |
| --- | --- | --- |
| Long-Term or Issuer Rating | | Maximum letter of credit issuer limit as a percentage of Tangible Net Worth of issuer |
| S&P or Fitch | Moody’s |
| AAA | Aaa | 1.00% |
| AA+ | Aa1 | 0.95% |
| AA | Aa2 | 0.90% |
| AA- | Aa3 | 0.85% |
| A+ | A1 | 0.80% |
| A | A2 | 0.75% |
| A- | A3 | 0.70% |
| Below A- | Below A3 | Not accepted |

(A) Each letter of credit issuer limit is also subject to an overall limit of $750 million per issuer.

(B) Each Bank Business Day, ERCOT will issue a report of each letter of credit issuer detailing the issuer’s dollar amount of the letters of credit currently issued to ERCOT, the issuer’s computed aggregate concentration limit, and the unused capacity under that limit. Market Participants may inquire of ERCOT about intra-day changes to the amount of posted letters of credit.

(C) If a letter of credit issuer limit is breached, Counter-Parties utilizing that issuer will be notified and no new letters of credit from the issuer will be accepted while the limit remains breached.

(D) After four months of the limit in breach, ERCOT will no longer accept new letters of credit or amendments to existing letters of credit from that issuer.

(E) Letters of credit held as collateral at the time of an issuer limit breach will not be rejected.

(F) ERCOT in its sole discretion may authorize exceptions to these limits.

(G) Revisions to the issuer limit calculation in this Section will be recommended by the Technical Advisory Committee (TAC) and approved by the ERCOT Board. ERCOT shall update parameter values on the first day of the month following ERCOT Board approval unless otherwise directed by the ERCOT Board. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value.

(c) The Counter-Party may give a surety bond naming ERCOT as the beneficiary.

(i) The surety bond must be signed by a surety acceptable to ERCOT, in its sole discretion and must be in the form of ERCOT’s standard surety bond form approved by the ERCOT Board. No modifications to the form are permitted.

(ii) The surety bond must be issued by an insurance company with a minimum rating of A- with S&P or Fitch or A3 with Moody’s.

(iii) Surety bonds are subject to a limit of $10 million per Counter-Party per insurer and an overall limit of $100 million per insurer for all ERCOT Counter-Parties.

(d) The Counter-Party may deposit Cash Collateral with ERCOT with the understanding that ERCOT may draw part or all of the deposited cash to satisfy any overdue payments owed by the Counter-Party to ERCOT. The Cash Collateral may bear interest payable directly to the Counter-Party, but any such arrangements may not restrict ERCOT’s immediate access to the cash.

(i) Interest on Cash Collateral will be calculated based on Counter-Party average Cash Collateral balances. Interest is not paid on Cash Collateral balances held by ERCOT where, in accordance with paragraph (4) of Section 16.11.8, Release of Market Participant’s Financial Security Requirement, the Counter-Party’s Standard Form Market Participant Agreement has been terminated and ERCOT has determined that no obligations remain owing or will become due and payable.

(ii) Once per year, ERCOT will:

(A) Return interest earned on a Counter-Party’s Cash Collateral to the Counter-Party if the amount of interest earned is greater than $50; or

(B) Retain interest earned on a Counter-Party’s Cash Collateral as additional Cash Collateral if the amount of interest earned is less than or equal to $50.

(iii) ERCOT has a security interest in all property delivered by the Counter-Party to ERCOT from time to time to meet the creditworthiness requirements, and that property secures all amounts owed by the Counter-Party to ERCOT.

16.11.5 Determination and Monitoring of Counter-Party Credit Exposure

**16.11.5.1 Determination of Total Potential Exposure for a Counter-Party**

(1) A Counter-Party’s TPE is the sum of its “Total Potential Exposure Any” (TPEA) and TPES:

(a) TPEA is the positive net exposure of the Counter-Party that may be satisfied by any forms of Financial Security defined under paragraphs (1)(a) through (1)(d) of Section 16.11.4, Alternative Means of Satisfying ERCOT Creditworthiness Requirements. TPEA will include all exposure not included in TPES.

(b) TPES is the positive net exposure of the Counter-Party that may be satisfied only by forms of Financial Security defined under paragraphs (1)(b) through (1)(d) of Section 16.11.4. The Future Credit Exposure (FCE) that reflects the future mark-to-market value for CRRs registered in the name of the Counter-Party is included in TPES.

(2) For all Counter-Parties:

TPEA = Max [0, MCE, Max [0, ((1-TOA) \* EAL *q* + TOA \* EAL *t* +EAL *a*)]] + PUL \* EAFA

TPES = (Max [0, FCE *a*] + IA) \* EAFS

The above variables are defined as follows:

| **Variable** | **Unit** | **Description** |
| --- | --- | --- |
| EAL *q* | $ | *Estimated Aggregate Liability for all QSEs that represents Load or generation*—EAL for all QSEs represented by the Counter-Party if at least one QSE represented by the Counter-Party represents either Load or generation. |
| EAL *t* | $ | *Estimated Aggregate Liability for all QSEs* —EAL for all QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation. |
| EAL *a* | $ | *Estimated Aggregate Liability for all CRR Account Holders*—EAL for all CRR Account Holders represented by the Counter-Party. |
| PUL | $ | *Potential Uplift*—Potential uplift to the Counter-Party, to the extent and in the proportion that the Counter-Party represents Entities to which an uplift of a short payment will be made pursuant to Section 9.19, Partial Payments by Invoice Recipients. It is calculated as the sum of: (a) Amounts expected to be uplifted within one year of the date of the calculation; and (b) the lesser of: (1) 25% of amounts expected to be uplifted beyond one year of the date of the calculation; or (2) five years’ worth of uplift charges. |
| FCE *a* | $ | *Future Credit Exposure for all CRR Account Holders*—FCE for all CRR Account Holders represented by the Counter-Party. |
| MCE | $ | *Minimum Current Exposure*—For each Counter-Party, ERCOT shall determine a Minimum Current Exposure (MCE) as follows:  MCE = Max[RFAF \* MAF \* Max[{**[**L *i, od, p* \* RTSPP *i, od, p*]/*n*}, {**[[[**L *i, od, p* \* *T2***-** G *i, od, p* \* (1-*NUCADJ*) \* *T3*] \* RTSPP *i, od, p*] + [RTQQNET *i, od, p*\* *T5*]]**/***n*},  {**[**G *i, od, p* \* *NUCADJ* \* *T1* \* RTSPP *i, od, p***]/**n},  {DARTNET*i, od, p* \* *T4*/*n*}],  MAF \* IMCE]  RTQQNET *i, od, p* = Max**[(**RTQQES *i, od, p, c -*RTQQEP *i, od, p, c*), *BTCF* \* (RTQQES *i, od, p, c* – RTQQEP *i, od, p, c*)] \* RTSPP *i, od, p*  DARTNET *i, od, p*  = DAM EOO Cleared *i, od, p* \* DART *i, od, p*+ DAM TPO Cleared *i, od, p* \* DART *i, od, p* + DAM PTP Cleared *i, od, p* \* DARTPTP *i, od, p*– DAM EOB Cleared *i, od, p* \* DART *i, od, p*  Where:  G *i, od, p* = *Total Metered Generation at all Resource Nodes* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  L *i, od, p* = *Total Adjusted Metered Load (AML) at all Load Zones* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  MAF = *Market Adjustment Factor*—Used to provide for the potential for overall price increases based on changes to ERCOT market rules or market conditions. This factor shall not be set below 100%. Revisions to this factor will be recommended by the Technical Advisory Committee (TAC) and the ERCOT Finance and Audit (F&A) Committee, and approved by the ERCOT Board. Such revisions shall be implemented on the 45th calendar day following ERCOT Board approval unless otherwise directed by the ERCOT Board.  *NUCADJ*= *Net Unit Contingent Adjustment*—To allow for situations where a generator may unintentionally or intentionally meet its requirement from the Real-Time Market (RTM)  RTQQNET *i, od, p* = *Net QSE-to-QSE Energy Trades* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  RTQQES *i, od, p, c* = *QSE Energy Trades* for which the Counter-Party is the seller for interval *i* for Operating Day *od* at Settlement Point *p* with Counter-Party *c*  RTQQEP *i, od, p, c* = *QSE Energy Trades* for which the Counter-Party is the buyer for interval *i* for Operating Day *od* at Settlement Point *p* with Counter-Party *c*  *BTCF* = *Bilateral Trades Credit Factor*  RTSPP *i, od, p* = *Real-Time Settlement Point Price* for interval *i* for Operating Day *od* at Settlement Point *p*  DARTNET *i, od, p* = *Net DAM activities* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  DART *i, od, p* = *Day-Ahead - Real-Time Spread* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM EOB Cleared*i, od, p* = *DAM Energy Only Bids Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM EOO Cleared *i, od, p* = *DAM Energy Only Offers Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM TPO Cleared *i, od, p* = *DAM Three-Part Offers Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM PTP Cleared *i, od, p* = *DAM Point-to-Point (PTP) Obligations Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DARTPTP *i, od, p* = *Day-Ahead - Real-Time Spread* for value of PTP Obligation for interval *i* for Operating Day *od* at Settlement Point *p*  *c* = Bilateral Counter-Party  *cif = Cap Interval Factor* - Represents the historic largest percentage of System-Wide Offer Cap (SWCAP) intervals during a calendar day  *e* = Most recent *n* Operating Days for which RTM Initial Settlement Statements are available  *i* = Settlement Interval  *n* = Days used for averaging  *nm =* Notional Multiplier  *od* = Operating Day  *p* = A Settlement Point |
| |  |  |  |  | | --- | --- | --- | --- | | 1. ***[NPRR1013: Replace the variable “MCE” above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]***  |  |  |  | | --- | --- | --- | | MCE | $ | *Minimum Current Exposure*—For each Counter-Party, ERCOT shall determine a Minimum Current Exposure (MCE) as follows:  MCE = Max[RFAF \* MAF \* Max[{**[**L *i, od, p* \* RTSPP *i, od, p*]/*n*}, {**[[[**L *i, od, p* \* *T2***-** G *i, od, p* \* (1-*NUCADJ*) \* *T3*] \* RTSPP *i, od, p*] + [RTQQNET *i, od, p*\* *T5*]]**/***n*},  {**[**G *i, od, p* \* *NUCADJ* \* *T1* \* RTSPP *i, od, p***]/**n},  {{DARTNET*i, od, p* \* *T4*/*n*} {DARTASONET *i, od, c \* T4/n*}}],  MAF \* IMCE]  RTQQNET *i, od, p* = Max**[(**RTQQES *i, od, p, c -*RTQQEP *i, od, p, c*), *BTCF* \* (RTQQES *i, od, p, c* – RTQQEP *i, od, p, c*)] \* RTSPP *i, od, p*  DARTNET *i, od, p*  = DAM EOO Cleared *i, od, p* \* DART *i, od, p*+ DAM TPO Cleared *i, od, p* \* DART *i, od, p* + DAM PTP Cleared *i, od, p* \* DARTPTP *i, od, p*– DAM EOB Cleared *i, od, p* \* DART *i, od, p*  DARTASONET *i, od* = DAM ASOO Cleared *i, od* \* DARTMCPC *i, od*  Where:  G *i, od, p* = *Total Metered Generation at all Resource Nodes* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  L *i, od, p* = *Total Adjusted Metered Load (AML) at all Load Zones* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  MAF = *Market Adjustment Factor*—Used to provide for the potential for overall price increases based on changes to ERCOT market rules or market conditions. This factor shall not be set below 100%. Revisions to this factor will be recommended by the Technical Advisory Committee (TAC) and the ERCOT Finance and Audit (F&A) Committee, and approved by the ERCOT Board. Such revisions shall be implemented on the 45th calendar day following ERCOT Board approval unless otherwise directed by the ERCOT Board.  *NUCADJ*= *Net Unit Contingent Adjustment*—To allow for situations where a generator may unintentionally or intentionally meet its requirement from the Real-Time Market (RTM)  RTQQNET *i, od, p* = *Net QSE-to-QSE Energy Trades* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  RTQQES *i, od, p, c* = *QSE Energy Trades* for which the Counter-Party is the seller for interval *i* for Operating Day *od* at Settlement Point *p* with Counter-Party *c*  RTQQEP *i, od, p, c* = *QSE Energy Trades* for which the Counter-Party is the buyer for interval *i* for Operating Day *od* at Settlement Point *p* with Counter-Party *c*  DARTASONET *i, od* = *Net DAM Ancillary Service Only activities* for interval *i* for Operating Day *od*  DAM ASOO Cleared *i, od* = DAM Ancillary Service Only Offers Cleared in DAM for interval *i* for Operating Day *od*  DARTMCPC *i, od* = Day-Ahead – Real-Time MCPC Spread for interval *i* for Operating Day *od*  *BTCF* = *Bilateral Trades Credit Factor*  RTSPP *i, od, p* = *Real-Time Settlement Point Price* for interval *i* for Operating Day *od* at Settlement Point *p*  DARTNET *i, od, p* = *Net DAM activities* for the Counter-Party for interval *i* for Operating Day *od* at Settlement Point *p*  DART *i, od, p* = *Day-Ahead - Real-Time Spread* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM EOB Cleared*i, od, p* = *DAM Energy Only Bids Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM EOO Cleared *i, od, p* = *DAM Energy Only Offers Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM TPO Cleared *i, od, p* = *DAM Three-Part Offers Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DAM PTP Cleared *i, od, p* = *DAM Point-to-Point (PTP) Obligations Cleared* for interval *i* for Operating Day *od* at Settlement Point *p*  DARTPTP *i, od, p* = *Day-Ahead - Real-Time Spread* for value of PTP Obligation for interval *i* for Operating Day *od* at Settlement Point *p*  *c* = Bilateral Counter-Party  *cif = Cap Interval Factor* - Represents the historic largest percentage of System-Wide Offer Cap (SWCAP) intervals during a calendar day  *e* = Most recent *n* Operating Days for which RTM Initial Settlement Statements are available  *i* = Settlement Interval  *n* = Days used for averaging  *nm =* Notional Multiplier  *od* = Operating Day  *p* = A Settlement Point | | | | |
| IMCE | $ | *Initial Minimum Current Exposure*  IMCE = TOA \* (SWCAP \* *nm* \* *cif%*) |
| TOA | None | *Trade-Only Activity*—Counter-Party that does not represent either a Load or a generation QSE. Set to “0” if Counter-Party represents a QSE that has an association with a Load Serving Entity (LSE) or a Resource Entity, or if Counter-Party does not represent any QSE;otherwise set to 1. |
| EAFA | % | *Exposure Adjustment Factor-Any* – Adjustment that is made to ensure that TPEA adequately matches the financial risk created by that Counter-Party’s activities under these Protocols. The default value of EAFA is 100%, and may be increased to a maximum of 150%. |
| EAFS | % | *Exposure Adjustment Factor-Secured* – Adjustment that is made to ensure that TPEA adequately matches the financial risk created by that Counter-Party’s activities under these Protocols. The default value of EAFS is 100%, and may be increased to a maximum of 150%. |
| *q* | None. | QSEs represented by Counter-Party. |
| *a* | None. | CRR Account Holders represented by Counter-Party. |
| IA | $ | *Independent Amount*—The amount required to be posted as defined in Section 16.16.1, Counter-Party Criteria. |
| RFAF | None | *Real-Time Forward Adjustment Factor*—The adjustment factor for RTM-related forward exposure as defined in Section 16.11.5.3.3, Forward Adjustment Factors. |

The above parameters are defined as follows:

| **Parameter** | **Unit** | **Current Value\*** |
| --- | --- | --- |
| *nm* | None | 50 |
| *cif* | Percentage | 9% |
| *NUCADJ* | Percentage | Minimum value of 20%. |
| *T1* | Days | 2 |
| *T2* | Days | 5 |
| *T3* | Days | 5 |
| *T4* | Days | 1 |
| *T5* | Days | For a Counter-Party that represents Load this value is equal to 5, otherwise this value is equal to 2. |
| *BTCF* | Percentage | 80% |
| *n* | Days | 14 |
| \* The current value for the parameters referenced in this table above will be recommended by TAC and approved by the ERCOT Board. ERCOT shall update parameter values on the first day of the month following ERCOT Board approval unless otherwise directed by the ERCOT Board. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value. | | |

(3) If ERCOT, in its sole discretion, determines that the TPEA or the TPES for a Counter-Party calculated under paragraphs (1) or (2) above does not adequately match the financial risk created by that Counter-Party’s activities under these Protocols, then ERCOT may set a different TPEA or TPES for that Counter-Party by adjusting EAFA or EAFS as applicable. ERCOT may notify a Counter-Party that its TPEA or TPES is under review and, as appropriate, request additional information relevant to the assessment of the Counter-Party’s creditworthiness. Additional explanatory information requested by ERCOT must be provided within ten days, unless otherwise determined by ERCOT.

(4) ERCOT shall provide Notice to the Counter-Party of the basis for ERCOT’s assessment of the Counter-Party’s financial risk and the resulting revision to the Counter-Party’s EAFA and/or EAFS. Notice shall be provided to the Counter-Party at least five Bank Business Days before the effective date of the change.

(4) ERCOT shall monitor and calculate each Counter-Party’s TPEA and TPES daily.

16.11.5.2 Determination of Counter-Party Initial Estimated Liability

(1) For each Counter-Party, except those Counter-Parties that are only CRR Account Holders, ERCOT shall determine an Initial Estimated Liability (IEL) for purposes of Section 16.11.4, Alternative Means of Satisfying ERCOT Creditworthiness Requirements.

(2) For a Counter-Party that has all its QSEs representing only LSEs, ERCOT shall calculate the IEL using the following formula:

**IEL = DEL \* Max [0.2, RTEFL] \* RTAEP \* (M1 + M2)**

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| Variable | Unit | Description |
| IEL | $ | *Initial Estimated Liability*⎯The Counter-Party’s Initial Estimated Liability. |
| DEL | MWh | *Daily Estimated Load*⎯The Counter-Party’s estimated average daily Load as determined by ERCOT based on information provided by the Counter-Party. |
| RTEFL | none | *Real-Time Energy Factor for Load*⎯The ratio of the Counter-Party’s estimated energy purchases in the RTM as determined by ERCOT based on information provided by the Counter-Party, to the Counter-Party’s Daily Estimated Load. |
| RTAEP | $/MWh | *Real-Time Average Energy Price*⎯Average Settlement Point Price for the “ERCOT 345” as defined in Section 3.5.2.5, ERCOT Hub Average 345 kV Hub (ERCOT 345), based upon the previous seven days’ average Real-Time Settlement Point Prices. |

(3) For a Counter-Party that has all its QSEs representing only Resources, ERCOT shall calculate the IEL using the following formula:

**IEL = DEG \* Max [0.2, RTEFG] \* RTAEP \* (M1 + M2)**

The above variables are defined as follows:

| Variable | Unit | Description |
| --- | --- | --- |
| IEL | $ | *Initial Estimated Liability*⎯The Counter-Party’s Initial Estimated Liability. |
| DEG | MWh | *Daily Estimated Generation*⎯The Counter-Party’s estimated average daily generation as determined by ERCOT based on information provided by the Counter-Party. |
| RTEFG | none | *Real-Time Energy Factor for Generation*⎯The ratio of the Counter-Party’s QSE to QSE estimated energy sales as determined by ERCOT based on information provided by the Counter-Party, to the Counter-Party’s Daily Estimated Generation. |
| RTAEP | $/MWh | *Real-Time Average Energy Price*⎯Average Settlement Point Price for the “ERCOT 345” as defined in Section 3.5.2.5 based upon the previous seven days average Real-Time Settlement Point Prices. |

(4) For a Counter-Party that has QSEs representing both LSE and Resources, ERCOT shall calculate the Counter-Party’s IEL using the following formula:

**IEL = DEL \* Max [0.1, RTEFL] \* RTAEP** \* **(M1 + M2) + DEG \* Max [0.1, RTEFG] \* RTAEP \* (M1 + M2)**

The above variables are defined as follows:

| Variable | Unit | Description |
| --- | --- | --- |
| IEL | $ | *Initial Estimated Liability*⎯The Counter-Party’s Initial Estimated Liability. |
| DEL | MWh | *Daily Estimated Load*⎯The Counter-Party’s estimated average daily Load as determined by ERCOT based on information provided by the Counter-Party. |
| DEG | MWh | *Daily Estimated Generation*⎯The Counter-Party’s estimated average daily generation as determined by ERCOT based on information provided by the Counter-Party. |
| RTEFL | none | *Real-Time Energy Factor for Load*⎯The ratio of the Counter-Party’s estimated energy purchases in the RTM as determined by ERCOT based on information provided by the Counter-Party, to the Counter-Party’s Daily Estimated Load. |
| RTAEP | $/MWh | *Real-Time Average Energy Price*⎯Average Settlement Point Price for the “ERCOT 345” as defined in Section 3.5.2.5 based upon the previous seven days’ average Real-Time Settlement Point Prices. |
| RTEFG | none | *Real-Time Energy Factor for Generation*—The ratio of the Counter-Party’s QSE to QSE estimated energy sales as determined by ERCOT, based on information provided by the Counter-Party, to the Counter-Party’s Daily Estimated Generation. |

(5) For a Counter-Party that has all its QSEs representing neither Load nor generation, and that is not representing a CRR Account Holder, the IEL is equal to IMCE as defined in paragraph (2) of Section 16.11.5.1, Determination of Total Potential Exposure for a Counter-Party.

(6) For a Counter-Party that is only a CRR Account Holder and is not a QSE, the IEL is zero.

16.11.5.3 Determination of Counter-Party Estimated Aggregate Liability

(1) After a Counter-Party commences activity in ERCOT markets, ERCOT shall monitor and calculate the Counter-Party’s EAL based on the formulas below.

**EAL *q* = Max [IEL during the first 40-day period only beginning on the date that the Counter-Party commences activity in ERCOT markets, RFAF \* Max {RTLE during the previous *lrq* days}, RTLF] + DFAF \* DALE + Max [RTLCNS, Max {URTA during the previous *lrq* days}] + OUT *q* + ILE*q***

**EAL *t* = Max [RFAF \* Max {RTLE during the previous *lrt* days}, RTLF] + DFAF \* DALE + Max [RTLCNS, Max {URTA during the previous *lrt* days}] + OUT *t***

**EAL *a* = OUT *a***

ERCOT may adjust the number of days used in determining the highest RTLE and/or URTA, and/or to exclude specific Operating Days to calculate RTLE, URTA, OUT, or DALE.

The above variables are defined as follows:

| Variable | Unit | Description |
| --- | --- | --- |
| EAL*q* | $ | *Estimated Aggregate Liability for all the QSEs* represented by a Counter-Party if at least one QSE represented by the Counter-Party represents either Load or generation. |
| EAL *t* | $ | *Estimated Aggregate Liability for all the QSEs* represented by a Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation. |
| EAL*a* | $ | *Estimated Aggregate Liability for all the CRR Account Holders* represented by the Counter-Party. |
| IEL | $ | *Initial Estimated Liability for all the QSEs* represented by the Counter-Party if at least one QSE represented by the Counter-Party represents either Load or generation as defined in paragraphs (1), (2), (3) and (4) of Section 16.11.5.2, Determination of Counter-Party Initial Estimated Liability. |
| *q* |  | QSEs represented by Counter-Party. |
| *t* |  | QSEs represented by a Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation |
| *a* |  | CRR Account Holders represented by Counter-Party. |
| RTLE | $ | *Real Time Liability Extrapolated for a QSE that represents either Load or generation* —M1 multiplied by the sum of the net amount, with zero substituted for missing values, due to or from ERCOT by the Counter-Party in the 14 most recent Operating Days for which RTM Initial Statements are produced for Counter-Parties according to the ERCOT Settlement Calendar divided by 14. |
| URTA | $ | *Unbilled Real-Time Amount*—M2 multiplied by the sum of the net amount, with zero substituted for missing values, due to or from ERCOT by the Counter-Party in the 14 most recent Operating Days for which RTM Initial Statements are produced for Counter-Parties according to the ERCOT Settlement Calendar divided by 14. |
| RTL | $ | *Real-Time Liability*—The estimated or settled amounts due to or from ERCOT due to activities in the RTM for an Operating Day, as defined in Section 16.11.5.3.2, Real-Time Liability Estimate. |
| RTLCNS | $ | *Real Time Liability Completed and Not Settled*—For each Operating Day that is completed but not settled, ERCOT shall calculate RTL adjusted up by *rtlcu%* if there is a net amount due to ERCOT or adjusted down by *rtlcd%* if there is a net amount due to the QSE.  RTLCNS = Sum of Max RTL(*rtlcu%* \* RTL, *rtlcd%* \* RTL) for all completed and not settled Operating Days  Where:  *rtlcu* = Real-Time Liability Markup  *rtlcd* = Real-Time Liability Markdown |
| RTLF | $ | *Real-Time Liability Forward*— rtlfp% of the sum of estimated RTL from the most recent seven Operating Days.  RTLF = *rtlf%* of the Sum of Max RTL(*rtlcu%* \* RTL*, rtlcd%* \* RTL) for the most recent seven Operating Days  Where:  *rtlfp =* Real-Time Liability Forward |
| OUT q | $ | *Outstanding Unpaid Transactions*—Outstanding unpaid transactions for all QSEs represented by the Counter-Party, which include (a) outstanding Invoices to the Counter-Party; (b) estimated unbilled items to the Counter-Party, to the extent not adequately accommodated in the RTLE calculation (including resettlements and other known liabilities); and (c) estimated CRR Auction revenue available for distribution for Operating Days in the previous two months, to the extent not invoiced to the Counter-Party. Invoices will not be considered outstanding for purposes of this calculation the Business Day after that Invoice payment is received.  OUT *q* = OIA *q* + UDAA *q* + UFA *q* + UTA *q* + CARD  Where:  OIA *q* = *Outstanding Invoice Amounts for all the QSEs represented by the Counter-Party* – Sum of any outstanding Real-Time and Day-Ahead unpaid invoices issued to the Counter-Party, including but not limited to CRR Auction Revenue Distribution (CARD) Invoices, CRR Balancing Account Invoices, Default Uplift Invoices and other miscellaneous Invoices. Also included are the amounts or portions of Invoices due to the Counter-Party that have been short-paid as a result of a default or non-payment of Invoices due to ERCOT by another Counter-Party.  UDAA *q* = *Unbilled Day-Ahead Amounts for all the QSEs represented by the Counter-Party*  – Sum of DAL for all the QSEs represented by the Counter-Party for all Operating Days for which a DAM Statement is not generated.  UFA *q* = *Unbilled Final Amounts for all the QSEs represented by the Counter-Party* – Unbilled final extrapolated days (*ufd)* multiplied by the sum of the net amount due to or from ERCOT for all QSEs represented by the Counter-Party for Operating Days for which RTM Final Statements were generated in the 21 most recent calendar days, divided by the number of Operating Days for which RTM Final Settlement Statements were generated for the Counter-Party in the 21 most recent calendar days.  UTA *q* = *Unbilled True-Up Amounts for all the QSEs represented by the Counter-Party* –– Unbilled true-up extrapolated days (*utd)* multiplied by the sum of the net amount due to or from ERCOT by the Counter-Party for all the QSEs represented by the Counter-Party for Operating Days for which RTM True-up Statements were generated in the 21 most recent calendar days, divided by the number of Operating Days for which RTM True-up Settlement Statements were generated for the Counter-Party in the 21 most recent calendar days.  CARD = *CRR Auction Revenue Distribution for all the QSEs represented by the Counter-Party* –Estimate of the Counter-Party’s unpaid allocation of CRR Auction revenues that have already been collected but have not been paid out to all QSEs represented by the Counter-Party. CRR Auction revenues that have been earned but not billed are distributed based on the following Load Ratio Shares (LRSs): (a) Zonal LRS applied to revenues from CRRs cleared and have source and sink points located within a 2003 ERCOT Congestion Management Zone (CMZ), and (b) ERCOT-wide LRS applied to all other CRR Auction revenues. The LRS will be based on the latest completed operating month for which LRS are available. |
| DAL | $ | *Day-Ahead Liability*—The estimated or settled amounts due to or from ERCOT due to activities in the DAM for an Operating Day, as defined in Section 16.11.5.3.1, Day-Ahead Liability Estimate. |
| OUT *t* | $ | *Outstanding Unpaid Transactions*—Outstanding unpaid transactions for all QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation, which include (a) outstanding Invoices to the Counter-Party; (b) estimated unbilled items to the Counter-Party, to the extent not adequately accommodated in the RTLE calculation (including resettlements and other known liabilities).  OUT *t* = OIA *t* + UDAA *t* + UFA *t* + UTA *t*  Where:  OIA *t* = *Outstanding Invoice Amounts for all the QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation* – Sum of any outstanding Real-Time and Day-Ahead unpaid Invoices issued to the Counter-Party, including but not limited to CRR Balancing Account Invoices, Default Uplift Invoices and other miscellaneous Invoices. Also included are the amounts or portions of invoices due to the Counter-Party that have been short-paid as a result of a Default or non-payment of invoices due to ERCOT by another Counter-Party.  UDAA *t* = *Unbilled Day-Ahead Amounts for all the QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation* – Sum of DAL for all the QSEs represented by the Counter-Party for all Operating Days for which DAM Statement is not generated.  UFA *t* = *Unbilled Final Amounts for all the QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation* – *ufd* multiplied by the sum of the net amount due to or from ERCOT for all QSEs represented by the Counter-Party for Operating Days for which RTM Final Statements were generated in the 21 most recent calendar days, divided by the number of Operating Days for which RTM Final Settlement Statements were generated for the Counter-Party in the 21 most recent calendar days.  UTA *t* = *Unbilled True-Up Amounts for all the QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation* – *utd* multiplied by the sum of the net amount due to or from ERCOT by the Counter-Party for all the QSEs represented by the Counter-Party for Operating Days for which RTM True-up Statements were generated in the 21 most recent calendar days, divided by the number of Operating Days for which RTM True-up Settlement Statements were generated for the Counter-Party in the 21 most recent calendar days. |
| OUT *a* | $ | *Outstanding Unpaid Transactions for all CRR Account Holders represented by the Counter-Party*—Outstanding, unpaid transactions of all the CRR Account Holders represented by the Counter-Party, which include outstanding Invoices to the Counter-Party. Invoices will not be considered outstanding for purposes of this calculation the Business Day after that Invoice payment is received.  OUT *a* = OIA *a* + UDAA *a*  Where:  OIA *a* = *Outstanding Invoice Amounts for all the CRR Account Holders represented by the Counter-Party* – Sum of any outstanding Real-Time and Day-Ahead unpaid Invoices issued to the Counter-Party including but not limited to CRR Balancing Account Invoices, Default Uplift Invoices and other miscellaneous Invoices. Also included are the amounts or portions of Invoices due to the Counter-Party that have been short-paid as a result of a default or non-payment of Invoices due to ERCOT by another Counter-Party.  UDAA *a* = *Unbilled Day-Ahead Amounts for all the CRR Account Holders represented by the Counter-Party*  – Sum of DAL of all the CRR Account Holders represented by the Counter-Party for all Operating Days for which DAM Statement is not generated. |
| ILE***q*** | $ | *Incremental Load Exposure –*In the event of a Mass Transition necessitated by the default of a Counter-Party representing a QSE associated with an LSE, ERCOT may adjust the TPE of the Counter-Parties representing QSEs that are qualified as Providers of Last Resort (POLRs) to reflect the estimated Incremental Load Exposure (ILE) resulting from the Mass Transition. The adjustment will be based on the POLR’s *pro rata* share of the defaulting Counter-Party’s RTLE, based on the total estimated Electric Service Identifiers (ESI IDs) to be transitioned. ERCOT will communicate any such adjustment to the Authorized Representative of each Counter-Party who is a POLR within 24 hours of the initiation of a Mass Transition. The ILE adjustment will remain in place no more than the number of days necessary to effect a Mass Transition for the defaulting Counter-Party, after which time the incremental exposure will be fully reflected in the Counter-Party’s unadjusted TPE. |
| DALE | $ | *Average Daily Day-Ahead Liability Extrapolated*—M1 multiplied by the sum of the net amount, with zero substituted for missing values, due to or from ERCOT by the Counter-Party in the seven most recent Operating Days for which DAM Settlement Statements are produced for Counter-Parties according to the ERCOT Settlement Calendar divided by seven. |
| M1 |  | M1 = M1a + M1b—Multiplier for DALE and RTLE. Provides for forward risk during a Counter-Party termination upon default based upon the sum of the time period required for any termination upon default (M1a) and the time period required for a Mass Transition only (M1b). The M1a component is applicable to all Counter-Parties. The M1b component is applicable only to Counter-Parties representing any QSE associated with a LSE.  M1a = Time period required for any termination from an Operating Day.  M1a is comprised of a fixed value (*M1d*), representing days from issuance of a collateral call to termination, and a calendar day-specific variable value. For any Operating Day, M1a is equal to the total number of forward calendar days encompassed by starting on the Operating Day, including *M1d* Bank Business Days forward, and adding any ERCOT holidays that are also Bank Business Days.  M1b = Weighted average transition days = Min(B, (2 + Max(1, (u+1)/2))\*(1-DF)), rounded up to whole days  Where:  u = (ESIn/r) Unscaled number of days to transition.  B = Benchmark value. Used to establish a maximum M1 value.  ESIn = Number of ESI IDs associated with an individual Counter-Party. This value will be updated no less often than annually by ERCOT and updated values communicated to individual Counter-Parties. Counter-Parties entering the market will provide an estimated number of ESI IDs for use during their first six months of market activity. Subsequent to this time, the value for that Counter-Party shall be updated by ERCOT concurrently with other Counter-Parties with QSEs representing an LSE.  r = Assumed ESI ID daily transition rate.  DF = Discount Factor applied to M1b if the Counter-Party is eligible for unsecured credit under Section 16.11.3, Requirements for Setting a Counter-Party’s Unsecured Credit Limit, or meets other creditworthiness standards that may be developed and approved by TAC and the ERCOT Board. |
| M2 |  | Multiplier for URTA. |
| RFAF | None | *Real-Time Forward Adjustment Factor*—The adjustment factor for RTM-related forward exposure as defined in Section 16.11.5.3.3, Forward Adjustment Factors. |
| DFAF | None | *Day-Ahead Forward Adjustment Factor*—The adjustment factor for DAM-related forward exposure as defined in Section 16.11.5.3.3. |
| *lrq* | Days | Look-back period for RTM to find the maximum of RTLE or URTA for all QSEs represented by the Counter-Party if any of the QSEs represented by the Counter-Party represent either Load or generation. |
| *lrt* | Days | Look-back period for RTM to find the maximum of RTLE or URTA for all QSEs represented by the Counter-Party if none of the QSEs represented by the Counter-Party represent either Load or generation. |

The above parameters are defined as follows:

| Parameter | Unit | Current Value\* |
| --- | --- | --- |
| *rtlcu* | Percentage | 110% |
| *rtlcd* | Percentage | 90% |
| *rtlfp* | Percentage | 150% |
| *ufd* | Days | 55 |
| *utd* | Days | 180 |
| *M1a* | Days | 8 |
| *B* | Days | 8 |
| *r* | none | 100,000 per day |
| *DF* | Percentage | 0 |
| *M2* | Days | 9 |
| *lrq* | Days | 40 |
| *lrt* | Days | 20 |
| \* The current value for the parameters referenced in this table above will be recommended by TAC and approved by the ERCOT Board. ERCOT shall update parameter values on the first day of the month following ERCOT Board approval unless otherwise directed by the ERCOT Board. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value. | | |

***16.11.5.3.1 Day-Ahead Liability Estimate***

(1) ERCOT shall estimate Day-Ahead Liability (DAL) for an Operating Day as the sum of estimates for the following DAM Settlement charges and payments:

(a) Section 4.6.2.1, Day-Ahead Energy Payment;

(b) Section 4.6.2.2, Day-Ahead Energy Charge;

(c) Section 4.6.3, Settlement for PTP Obligations Bought in DAM;

(d) Section 4.6.4.1.1, Regulation Up Service Payment;

(e) Section 4.6.4.1.2, Regulation Down Service Payment;

(f) Section 4.6.4.1.3, Responsive Reserve Service Payment;

(g) Section 4.6.4.1.4, Non-Spinning Reserve Service Payment;

|  |
| --- |
| [NPRR992: Insert item (h) below upon system implementation of NPRR863 and renumber accordingly:]  (h) Section 4.6.4.1.5, ERCOT Contingency Reserve Service Payment; |

(h) Section 4.6.4.2.1, Regulation Up Service Charge;

(i) Section 4.6.4.2.2, Regulation Down Service Charge;

(j) Section 4.6.4.2.3, Responsive Reserve Service Charge;

(k) Section 4.6.4.2.4, Non-Spinning Reserve Service Charge;

|  |
| --- |
| [NPRR992: Insert item (m) below upon system implementation of NPRR863 and renumber accordingly:]  (m) Section 4.6.4.2.5, ERCOT Contingency Reserve Service Charge; |

(l) Section 7.9.1.1, Payments and Charges for PTP Obligations Settled in DAM;

(m) Section 7.9.1.2, Payments for PTP Options Settled in DAM;

(n) Section 7.9.1.5, Payments and Charges for PTP Obligations with Refund Settled in DAM; and

(o) Section 7.9.1.6, Payments for PTP Options with Refund Settled in DAM.

***16.11. 5.3.2 Real-Time Liability Estimate***

(1) ERCOT shall estimate RTL for an Operating Day as the sum of estimates for the following RTM Settlement charges and payments:

(a) Section 6.6.3.1, Real-Time Energy Imbalance Payment or Charge at a Resource Node, using Real-Time Metered Generation (RTMG) as generation estimate;

(b) Section 6.6.3.2, Real-Time Energy Imbalance Payment or Charge at a Load Zone, using 14-day or seven-day-old LRS for Load estimate;

|  |
| --- |
| [NPRR829: Replace item (b) above with the following upon system implementation:]  (b) Section 6.6.3.2, Real-Time Energy Imbalance Payment or Charge at a Load Zone, using 14-day or seven-day-old LRS for Load estimate and Real-Time telemetry of net generation as the generation estimate; |

(c) Section 6.6.3.3, Real-Time Energy Imbalance Payment or Charge at a Hub;

(d) Section 6.6.3.4, Real-Time Energy Payment for DC Tie Import;

(e) Section 6.6.3.6, Real-Time Energy Charge for DC Tie Export Represented by the QSE Under the Oklaunion Exemption;

|  |
| --- |
| [NPRR1054: Delete item (e) above upon system implementation and renumber accordingly.] |

|  |
| --- |
| [NPRR917 and NPRR995: Insert applicable portions of item (f) below upon system implementation and renumber accordingly:]  (f) Section 6.6.3.9, Real-Time Payment or Charge for Energy from a Settlement Only Distribution Generator (SODG), Settlement Only Transmission Generator (SOTG), Settlement Only Distribution Energy Storage System (SODESS), or Settlement Only Transmission Energy Storage System (SOTESS), using the Real-Time telemetry, if provided, of net generation as the outflow estimate and the Real-Time Price for each SODG, SOTG, SODESS, or SOTESS site; |

(f) Section 6.6.4, Real-Time Congestion Payment or Charge for Self-Schedules; and

|  |
| --- |
| [NPRR1013: Insert items (g)-(k) below upon system implementation of the Real-Time Co-Optimization (RTC) project and renumber accordingly:]  (g) Section 6.7.5.1, Regulation Up Payments and Charges;  (h) Section 6.7.5.2, Regulation Down Payments and Charges;  (i) Section 6.7.5.3, Responsive Reserve Payments and Charges;  (j) Section 6.7.5.4, Non-Spinning Reserve Payments and Charges; and  (k) Section 6.7.5.5, ERCOT Contingency Reserve Service Payments and Charges. |

(g) Section 7.9.2.1, Payments and Charges for PTP Obligations Settled in Real-Time

***16.11.5.3.3 Forward Adjustment Factors***

(1) Forward adjustment factors are used to adjust TPEA based on electricity futures prices.

(a) Futures Weekly Average Price (FWAP):

FWAP*w* = (1/*nfwh*) \* FHP *fwh, rhub*]

(b) Projected Real-Time Forward Average Price (PRFAP):

PRFAP = *RWF w* \* FWAP *w*]

(c) Projected Day-Ahead Forward Average Price (PDFAP):

PDFAP = *DWF w* \* FWAP *w*]

(d) Historic Real-Time Settled Average Price (HRSAP):

HRSAP = (1/*nhrh*) \* RTSPP *hrh, i, rhub*]/4

(e) Historic Day-Ahead Settled Average Price (HDSAP):

HDSAP = (1/*nhdh*) \* DASPP *hdh, rhub*]

(f) Real-Time Forward Adjustment Factor (RFAF):

RFAF = PRFAP/HRSAP

(g) Day-Ahead Forward Adjustment Factor (DFAF):

DFAF = PDFAP/HDSAP

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| Variable | Unit | Description |
| PRFAP | $/MWh | *Projected Real-Time Forward Average Price*⎯The average RTM price per MWh projected forward based on futures market prices. |
| PDFAP | $/MWh | *Projected Day-Ahead Forward Average Price*⎯The average DAM price per MWh projected forward based on futures market prices. |
| *w* | None | One of the three consecutive forward weeks beginning with the current Operating Day. |
| *RWFw* | None | *Real-Time Weight Factor for forward week w* such that |
| *DWFw* | None | *Day-Ahead Weight Factor for forward week w* such that |
| *fwh* | None | *Forward Week Hour*⎯An Operating Hour from a forward week *w*. |
| *nfwh* | None | *Number of Forward Week Hours*⎯Total number of hours in a forward week. |
| *rhub* | None | *Reference Hub*⎯The electrical Hub used as a reference for futures mark-to-market prices. |
| FWAP*w* | $/MWh | *Futures Weekly Average Price for week w*⎯The average futures price for the hours of the forward week *w*. |
| FHP*fwh, rhub* | $/MWh | *Futures Hourly Price of the Reference Hub rhub for Forward Week Hour fwh*⎯The most recent mark-to-market price available for an electricity futures product that is applicable to the forward week hour *fwh* for the reference Hub *rhub*.  ERCOT will disclose to the market the source of its selected electricity futures product(s) used for FHP. In the event that an ERCOT-selected electricity futures product(s) becomes unavailable or unsuitable for the intended purpose, ERCOT will select a substitute electricity futures product(s). ERCOT shall set the value of RFAF to 1 and DFAF to 1, and provide Notice of this change as soon as practicable, until such time as a substitute electricity futures product(s) is selected and implemented by ERCOT. ERCOT will notify Market Participants of any change in the electricity futures product(s) at least 60 days prior to the beginning of their use. In the event that 60 days’ Notice cannot be given, ERCOT will notify Market Participants as soon as practicable prior to use. |
| *hrh* | None | *Historic Real-Time Hour*⎯An Operating Hour that is settled and used in the most recent RTLE calculation. |
| *nhrh* | None | *Number of Historic Real-Time Hours*⎯Total number of historic Real-Time hours that are settled and used in the most recent RTLE calculation. |
| *i* | None | *Settlement Interval*⎯A 15-minute interval that is part of an Operating Hour. |
| RTSPP*hrh, i, rhub* | $/MWh | Real-Time Settlement Point Price for *i*th interval that is part of Operating Hour *hrh* for the Settlement Point *rhub*. |
| HRSAP | $/MWh | *Historic Real-Time Settled Average Price*⎯Theaverage historic Real-Time settled price. |
| HDSAP | $/MWh | *Historic Day-Ahead Settled Average Price*⎯The average historic Day-Ahead settled price. |
| *hdh* | None | *Historic Day-Ahead Hour*⎯An Operating Hour that is settled and used in the most recent DALE calculation. |
| *nhdh* | None | *Number of Historic Day-Ahead Hours*⎯Total number of historic day-ahead hours that are settled and used in the most recent DALE calculation. |
| DASPP*hrh, rhub* | $/MWh | Day-Ahead Settlement Point Price for Operating Hour *hdh* for the Settlement Point *rhub*. |
| RFAF | None | *Real-Time Forward Adjustment Factor.* |
| DFAF | None | *Day-Ahead Forward Adjustment Factor.* |

The above parameters are defined as follows:

| Parameter | Unit | Current Value\* |
| --- | --- | --- |
| *rhub* | None | ERCOT North Hub |
| *RWF1* | None | 1/3 |
| *RWF2* | None | 1/3 |
| *RWF3* | None | 1/3 |
| *DWF1* | None | 1/3 |
| *DWF2* | None | 1/3 |
| *DWF3* | None | 1/3 |
| \* The current value for the parameters referenced in the table above will be recommended by TAC and approved by the ERCOT Board. ERCOT shall update parameter values on the first day of the month following ERCOT Board approval unless otherwise directed by the ERCOT Board. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value. | | |

16.11.6 Maintenance of Required Financial Security

(1) A Counter-Party must, at all times, maintain its Financial Security at or above the amount of its Total Potential Exposure (TPE) minus its Unsecured Credit Limit. Each Counter-Party shall maintain any required Financial Security in a form acceptable to ERCOT, in ERCOT’s sole discretion. If at any time the Counter-Party does not meet ERCOT’s creditworthiness requirements, ERCOT may suspend the Counter-Party’s rights under these Protocols until it meets those creditworthiness requirements. ERCOT’s failure to suspend the Counter-Party’s rights on any particular occasion does not prevent ERCOT from suspending those rights on any subsequent occasion, including a CRR Account Holder’s ability to bid on future CRRs or a QSE’s ability to bid in the Day-Ahead Market (DAM).

(2) A Counter-Party is responsible at all times for maintaining:

(a) Secured Collateral in an amount equal to or greater than that Counter-Party’s

(i) TPES; plus

(ii) Net Positive Exposure of approved CRR Bilateral Trades; plus

(iii) ACL locked for CRR Auction, if any; and

(b) Remainder Collateral plus Financial Security defined as guarantees in paragraph (1) (a) of Section 16.11.4, Alternative Means of Satisfying ERCOT Creditworthiness Requirements, in an amount equal to or greater than that Counter-Party’s

(i) TPEA; minus

(ii) Unsecured Credit Limit.

(3) ERCOT shall promptly notify each Counter-Party of the need to increase its Financial Security, including whether Secured Collateral must be provided, and allow the Counter-Party time, as defined in paragraph (6)(a) below, to provide additional Financial Security to maintain compliance with this Section.

(4) When either the Counter-Party’s TPEA or TPES as defined in Section 16.11.5, Determination and Monitoring of Counter-Party Credit Exposure, reaches 90% of its requirement, ERCOT shall use reasonable efforts to electronically issue a warning to the Counter-Party’s Authorized Representative and credit contact advising the Counter-Party that it should consider increasing its Financial Security. However, failure to issue that warning does not prevent ERCOT from exercising any of its other rights under this Section.

(5) ERCOT may suspend a Counter-Party when:

(a) That Counter-Party’s TPES as defined in Section 16.11.5, equals or exceeds 100% of its Secured Collateral; or

(b) That Counter-Party’s TPEA as defined in Section 16.11.5 equals or exceeds 100% of the sum of its Unsecured Credit Limit and its Remainder Collateral.

The Counter-Party is responsible at all times for managing its activity within both its TPEA and its TPES or increasing its Financial Security to avoid reaching its limits. Any failure by ERCOT to send a Notice as set forth in this Section does not relieve the Counter-Party from the obligation to maintain appropriate Financial Security in amounts equal to or greater than that Counter-Party’s TPES and TPEA as defined in Section 16.11.5.

(6) To the extent that a Counter-Party fails to maintain Secured Collateral in amounts equal to or greater than its TPES or Remainder Collateral in amounts equal to or greater than its TPEA, each as defined in Section 16.11.5:

(a) ERCOT shall promptly notify the Counter-Party of the amount by which its Financial Security must be increased, including whether Secured Collateral must be provided and allow it:

(i) Until 1500 on the second Bank Business Day from the date on which ERCOT delivered the Notice to increase its Financial Security if ERCOT delivered its Notice before 1500; or

(ii) Until 1700 on the second Bank Business Day from the date on which ERCOT delivered Notification to increase its Financial Security if ERCOT delivered its Notice after 1500 but prior to 1700.

ERCOT shall notify the QSE’s Authorized Representative(s) and Credit Contact if it has not received the required security by 1530 on the Bank Business Day on which the security was due; however, failure to notify the Counter-Party’s representatives or contact that the required security was not received does not prevent ERCOT from exercising any of its other rights under this Section.

(b) At the same time ERCOT notifies the Counter-Party that is the QSE, ERCOT may notify each LSE and Resource represented by the Counter-Party that the LSE or Resource may be required to designate a new QSE if its current QSE fails to increase its Financial Security.

(c) ERCOT is not required to make any payment to that Counter-Party unless and until the Counter-Party increases its Financial Security, including any Secured Collateral required. The payments that ERCOT will not make to a Counter-Party include Invoice receipts, CRR revenues, CRR credits, reimbursements for short payments, and any other reimbursements or credits under any other agreement between the Market Participant and ERCOT. ERCOT may retain all such amounts until the Counter-Party has fully discharged all payment obligations owed to ERCOT under the Counter-Party Agreement, other agreements, and these Protocols.

(d) ERCOT may reject any bids or offers in a CRR Auction from the Counter-Party until it has increased its Financial Security, including any Secured Collateral required. ERCOT may reject any bids or offers from the Counter-Party in the DAM until it has increased its Financial Security.

(7) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT may notify each LSE and Resource represented by the Counter-Party.

(8) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT shall release any payments held.

16.11.7 Payment Breach and Late Payments by Market Participants

(1) It is the sole responsibility of each Market Participant to ensure that the full amounts due to ERCOT, or its designee, if applicable, by that Market Participant, are paid to ERCOT by the applicable time and date specified in the Protocols. If no time is specified in the Protocols for a particular type of payment, then payment must be made by the close of the Bank Business Day on which payment is due.

(2) If a Market Participant receives separate Invoices for Subordinate QSE or various CRR Account Holder activity, netting by the Market Participant of the amounts due to ERCOT with amounts due to the Market Participant among those Invoices for payment purposes is not permitted. The amounts due to ERCOT on the separate Invoices for each Market Participant must be paid by the applicable time and date specified in the Protocols. If a Market Participant does not pay the full amount due to ERCOT for all such Invoices by the required time, ERCOT shall deduct any and all amounts due and unpaid from any amounts due to the same Market Participant before allocating short payments to other Market Participants.

(3) The failure of a Market Participant to pay when due any payment or Financial Security obligation owed to ERCOT or its designee, if applicable, under any Agreement with ERCOT, is a Late Payment and constitutes an event of “Payment Breach.” For purposes of designating a Late Payment, ERCOT shall consider multiple Invoices unpaid when due on a single Business Day by a single Market Participant as constituting one Late Payment. Any Payment Breach by a Market Participant under any agreement with ERCOT is a Default under all other agreements between ERCOT and the Market Participant unless cured within one Bank Business Day after ERCOT delivers to the Market Participant written notice of the Payment Breach.

(4) Upon a Payment Breach, ERCOT shall immediately attempt to contact the Market Participant’s Authorized Representative and/or Credit Contact named in the Counter-Party Credit Application telephonically to inform the Market Participant of the Payment Breach, and demand payment of the past due amount. ERCOT shall also provide the Market Participant with written notice of the Payment Breach via email. Upon a Payment Breach, ERCOT may impose remedies for Payment Breach, as set forth in Section 16.11.7.1, ERCOT’s Remedies, in addition to any other rights or remedies ERCOT has under any agreement, these Protocols or at common law.

(5) If a Market Participant makes a payment (or a partial payment, if allowed by these Protocols) or satisfies a collateral call to ERCOT after the required due date and time, or if a short-paid Invoice is settled by a draw on available security greater than the amount of Market Participant’s cash collateral held in excess of that required to cover its Total Potential Exposure (TPE) (“Excess Collateral”), then that payment will be deemed a “Late Payment.”

(6) For purposes of assessing if a payment is a Late Payment, the time of receipt of a payment will be determined as follows:

(a) For cash payments, the timestamp for when funds are credited to ERCOT’s bank account, or;

(b) For non-cash Financial Security,

(i) The timestamp of the email or facsimile, if the required documentation is delivered to ERCOT by email or facsimile, or;

(ii) The timestamp of the delivery receipt, if the required documentation is mailed or physically delivered to ERCOT.

(7) ERCOT may, in its sole discretion, and upon a Market Participant’s showing that the failure to pay when due was not within the control of the Market Participant, deem that a failure to pay when due was neither a Payment Breach nor a Late Payment.

(8) ERCOT shall track the number of Late Payments received from each Market Participant in each rolling 12-month period for purposes of imposing the Late Payment remedies set forth in Section 16.11.7.2, ERCOT’s Remedies for Late Payments by a Market Participant.

16.11.7.1 ERCOT’s Remedies

(1) In addition to all other remedies that ERCOT has under any agreement, common law or these Protocols, for Payment Breaches or other Defaults by a Market Participant, ERCOT has the following additional remedies.

16.11.7.1.1 No Payments by ERCOT to Market Participant

(1) ERCOT is not required to make any payment to a Market Participant unless and until the Market Participant satisfies the Payment Breach by paying the past due amount in full, including amounts due under Section 16.11.7.1.3, Aggregate Amount Owed by Breaching Market Participant Immediately Due. The payments that ERCOT will not make include Invoice receipts, CRR Auction revenues, CRR credits, reimbursements for short payments and any other reimbursements or credits under any and all other agreements between ERCOT and the Market Participant. ERCOT shall retain all such amounts, and may apply all withheld funds toward the payment of the delinquent amount(s), until the Market Participant has fully paid all amounts owed to ERCOT under any agreements and these Protocols. If the Market Participant should fail to pay the full amount due within the cure period, ERCOT may apply all funds it withheld toward the payment of the delinquent amount(s).

16.11.7.1.2 ERCOT May Draw On, Hold or Distribute Funds

(1) Upon a Payment Breach, ERCOT, at its option, without notice to the Market Participant and in its sole discretion, may immediately, or at any time before the Market Participant pays the past due amount in full, including amounts due under Section 16.11.7.1.3, Aggregate Amount Owed by Breaching Market Participant Immediately Due, draw on, hold or distribute to other Market Participants any Financial Security or other funds of the Market Participant in ERCOT’s possession. If the funds drawn exceed the amount applied to any Payment Breach, then ERCOT may hold those funds as Financial Security.

16.11.7.1.3 Aggregate Amount Owed by Breaching Market Participant Immediately Due

(1) ERCOT shall aggregate all amounts due it by the Market Participant under any agreement with ERCOT and these Protocols into a single amount to the fullest extent allowed by law. The entire unpaid net balance owed to ERCOT by the Market Participant, at ERCOT’s option, and its sole discretion, is immediately due and payable without further notice and demand for payment. Any such notice and demand for payment are expressly waived by the Market Participant.

16.11.7.1.4 Repossession of CRRs by ERCOT

(1) ERCOT, at its sole discretion, may repossess CRRs held by a Market Participant with a Payment Breach or other Default. ERCOT shall effect that repossession by sending a written notice to the Market Participant of the repossession and by removing the CRRs from the Market Participant’s CRR account. CRRs that settle in the same calendar month as the repossession but subsequent to the effective date of the repossession shall be voided. The Market Participant will neither be charged, nor entitled to credit, for the voided CRRs in the DAM Settlement. ERCOT shall offer a portfolio of CRRs containing all of the remaining unvoided repossessed CRRs, with each repossessed CRR in its existing configuration, in a one-time auction to Market Participants (other than the Market Participant(s) in Payment Breach or other Default) for sale to the highest bidder with a positive bid price for the entire portfolio. PTP Options with Refund and PTP Obligations with Refund will be voided and will not be included in the portfolio of repossessed CRRs available in the one-time auction. ERCOT shall offset net revenues from that sale against amounts owed to ERCOT by the Market Participant. If revenues from the sale exceed amounts owed to ERCOT then the excess shall be remitted to the Market Participant. If ERCOT receives no positive bids for the portfolio of CRRs in the one-time auction, ERCOT shall void all of the repossessed CRRs.

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| [NPRR1023: Replace paragraph (1) above with the following upon system implementation:]  (1) ERCOT, at its sole discretion, may repossess CRRs held by a Market Participant in Default under an Agreement with ERCOT. ERCOT shall effect that repossession by sending a written notice to the Market Participant of the repossession and by removing the Market Participant’s access to the repossessed CRRs. The repossessed CRRs will be handled as specified in Section 16.11.6.1.6, Liquidation of Repossessed or Forfeited CRRs. |

16.11.7.1.5 Declaration of Forfeit of CRRs

(1) At ERCOT’s sole discretion, if it does not receive full payment on the due date of a CRR Auction Invoice, may declare any of the CRR bids cleared and Pre-Assigned Congestion Revenue Rights (PCRRs) allocated to the Market Participant forfeited. ERCOT shall effect that forfeiture by sending a written notice to the Market Participant of the forfeiture and of not delivering the CRRs or PCRRs to the Market Participant’s CRR account. ERCOT shall either (a) offer all forfeited CRRs, with each forfeited CRR in its existing configuration, in a one-time auction to Market Participants (other than the Market Participant(s) in Payment Breach or other Default) for sale to the highest bidder with a positive bid price or (b) ERCOT shall make the related capacity available in subsequent CRR Auctions. Revenue from that sale shall be considered as CRR Auction revenue and distributed to QSEs based on Load Ratio Share as specified in Section 7.5.7, Method for Distributing CRR Auction Revenues.

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| [NPRR1023: Replace paragraph (1) above with the following upon system implementation:]  (1) At ERCOT’s sole discretion, if it does not receive full payment on the due date of a CRR Auction Invoice, it may declare any of the CRR bids cleared and Pre-Assigned Congestion Revenue Rights (PCRRs) allocated to the Market Participant forfeited. ERCOT shall effect that forfeiture by sending a written Notice to the Market Participant of the forfeiture and by not delivering the CRRs or PCRRs to the Market Participant’s CRR account. The forfeited CRRs or PCRRs will be liquidated as specified in Section 16.11.6.1.6, Liquidation of Repossessed or Forfeited CRRs. |

(2) ERCOT may also, at its sole discretion, honor any of the offers from Market Participants that were cleared in the CRR Auction by removing the CRRs from the Market Participant’s CRR account. ERCOT shall offset net revenues due to the Market Participant from CRRs offered and cleared against amounts owed to ERCOT by the Market Participant.

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| [NPRR1023: Replace paragraph (2) above with the following upon system implementation:]  (2) ERCOT may also, at its sole discretion, honor any of the sell offers that were cleared in the CRR Auction made by a Market Participant who fails to fully pay the CRR Auction Invoice when due. ERCOT shall offset net revenues due to the Market Participant from CRRs offered and cleared against amounts owed to ERCOT by the Market Participant. |

16.11.7.1.6 Revocation of a Market Participant’s Rights and Termination of Agreements

(1) ERCOT may revoke a breaching Market Participant’s rights to conduct activities under these Protocols. ERCOT may also terminate the breaching Market Participant’s agreements with ERCOT.

(2) If ERCOT revokes a Market Participant’s rights or terminates the Market Participant’s agreements, then the provisions of Section 16.2.5, Suspended or Terminated Qualified Scheduling Entity – Notification to LSEs and Resource Entities Represented, and Section 16.2.6.1, Designation as an Emergency Qualified Scheduling Entity or Virtual Qualified Scheduling Entity, apply.

(3) If a breaching Market Participant is also an LSE (whether or not the Default occurred pursuant to the Market Participant’s activities as an LSE), then:

(a) Within 24 hours of receiving notice of the Payment Breach, the Market Participant shall provide to ERCOT all the information regarding its Electric Service Identifiers (ESI IDs) set forth in the ERCOT Retail Market Guide; and

(b) 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 15.1.3.1, Mass Transition Process, without the necessity of obtaining any order from or other action by the PUCT.

(4) After revocation of its rights or termination of its Agreement with ERCOT, the Market Participant will remain liable for all charges or costs associated with any continued activity related to the Counter-Party’s relationship with ERCOT and any expenses arising from the consequences of such termination or revocation.

16.11.7.2 ERCOT’s Remedies for Late Payments by a Market Participant

(1) If a Market Participant makes any Late Payments, and even if ERCOT does not immediately implement the above-referenced remedies for any Payment Breach by a Market Participant, the Market Participant is subject to the actions enumerated in this Section.

(2) This Section does not waive ERCOT’s right to impose remedies for Payment Breach, as set forth in Section 16.11.7.1, ERCOT’s Remedies, in addition to any other rights or remedies ERCOT has under any agreement, these Protocols, or at common law, for any Payment Breach by the Market Participant in each rolling 12-month period for purposes of imposing the Late Payment remedies set forth in this Section.

16.11.7.2.1 First Late Payment in Any Rolling 12-Month Period

(1) For the first Late Payment in any rolling 12-month period, ERCOT shall take Level I Enforcement action, as described in Section 16.11.7.2.5, Level I Enforcement.

(2) ERCOT shall send written notice to the Market Participant’s Authorized Representative and/or Credit Contact via email, advising the Market Participant of the action required under Level I Enforcement.

16.11.7.2.2 Second Late Payment in Any Rolling 12-Month Period

(1) For the second Late Payment in any rolling 12-month period, ERCOT shall take Level II Enforcement action, as described in Section 16.11.7.2.6, Level II Enforcement.:

(2) ERCOT shall send written notice to the Market Participant’s Authorized Representative and/or Credit Contact via email, advising the Market Participant of the action required under Level II Enforcement.

16.11.7.2.3 Third Late Payment in Any Rolling 12-Month Period

(1) For the third Late Payment in any rolling 12-month period, ERCOT shall take Level III Enforcement action, as described in Section 16.11.7.2.7, Level III Enforcement.

(2) ERCOT shall send written notice to the Market Participant’s Authorized Representative and/or Credit Contact via email, advising the Market Participant of the action required under Level III Enforcement, and informing the Market Participant that a fourth Late Payment in any rolling 12-month period shall result in ERCOT taking action under Section 16.11.7.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements.

16.11.7.2.4 Fourth Late Payment in Any Rolling 12-Month Period

(1) For the fourth Late Payment resulting from a Payment Breach in any rolling 12-month period, ERCOT shall take action under Section 16.11.7.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements.

16.11.7.2.5 Level I Enforcement

(1) Under Level I Enforcement, ERCOT shall notify the Market Participant to comply with one of the following requirements:

(a) If the Market Participant has not provided Financial Security, the Market Participant shall now provide Financial Security, within two Bank Business Days, in an amount at or above 110% of the amount of the Market Participant’s TPE less the Unsecured Credit Limit; or any other liability to ERCOT that the Market Participant has or is expected to have for activity in the ERCOT Region, whichever applies.

(b) If the Market Participant has already provided Financial Security, the Market Participant shall increase its Financial Security, within two Bank Business Days, to an amount at or above 110% of its TPE less the Unsecured Credit Limit or any other liability to ERCOT that the Market Participant has or is expected to have for activity in the ERCOT Region, whichever applies.

(2) Increased Financial Security requirements under this Section remain in effect for a minimum of 60 days and remain in effect thereafter until ERCOT, at its sole discretion, determines to reduce such Financial Security requirements to the normally applicable levels.

16.11.7.2.6 Level II Enforcement

(1) Under Level II Enforcement, ERCOT shall notify the Market Participant that the Market Participant shall provide Financial Security, within two Bank Business days, in the form of a cash deposit or letter of credit, as chosen by ERCOT at its sole discretion, at 115% of the Market Participant’s TPE less the Unsecured Credit Limit or for any other liability to ERCOT that the Market Participant has or is expected to have for activity in the ERCOT Region.

(2) Increased Financial Security requirements under this Section remain in effect for a minimum of 60 days and remain in effect thereafter until ERCOT, at its sole discretion, determines to reduce such Financial Security requirements to the normally applicable levels.

16.11.7.2.7 Level III Enforcement

(1) Under Level III Enforcement, ERCOT shall notify the Market Participant that the Market Participant shall provide Financial Security within two Bank Business Days at 120% of the Market Participant’s TPE less the Unsecured Credit Limit or for any other liability to ERCOT that the Market Participant has or is expected to have for activity in the ERCOT Region. Required Financial Security in excess of TPE must be in the form of a cash deposit.

(2) Increased Financial Security requirements under this Section remain in effect for a minimum of 90 days and remain in effect thereafter until ERCOT, at its sole discretion, determines to reduce such Financial Security requirements to the normally applicable levels.

16.11.8 Release of Market Participant’s Financial Security Requirement

(1) Following the termination of a Market Participant’s Standard Form Market Participant Agreement, ERCOT shall retain Financial Security to cover potential future obligations of the terminated Market Participant. These obligations may include, but are not limited to, Resettlement Statements, Final or True-Up Settlements, and Default Uplift Invoices.

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| [NPRR1023: Replace paragraph (1) above with the following upon system implementation:]  (1) Following the termination of a Market Participant’s Standard Form Market Participant Agreement, ERCOT shall retain Financial Security to cover potential future obligations of the terminated Market Participant. These obligations may include, but are not limited to, the Invoices associated with the liquidation of repossessed or forfeited CRRs, Resettlement Statements, Final or True-Up Settlements, and Default Uplift Invoices. |

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| [NPRR1023: Insert paragraph (2) below upon system implementation and renumber accordingly:]  (2) Regardless of whether a Market Participant’s Agreement with ERCOT has been terminated, ERCOT shall not return or release any Financial Security of a Market Participant from whom CRRs were repossessed or forfeited until all such repossessed or forfeited CRRs have been voided, settled in the DAM, or sold in a CRR Auction in accordance with Section 16.11.6.1.6, Liquidation of Repossessed or Forfeited CRRs, and all Invoices associated with the liquidation have been paid in full. |

(2) Required Financial Security for potential future obligations of a terminated Market Participant will be the maximum of the Counter-Party’s TPE, as applicable, or $5,000.

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| [NPRR1023: Replace paragraph (2) above with the following upon system implementation:]  (3) Except as specified in paragraph (2) above, required Financial Security for potential future obligations of a terminated Market Participant will be the maximum of the Counter-Party’s TPE, as applicable, or $5,000. |

(3) If a terminated Market Participant elects to withdraw non-cash Financial Security following termination, and ERCOT determines that Financial Security continues to be necessary to cover potential future obligations, then the terminated Market Participant must provide ERCOT with Cash Collateral in the amount determined by ERCOT under this section before ERCOT will return or release the non-cash Financial Security to the terminated Market Participant.

(4) Upon ERCOT’s sole determination that no sums remain owed or are necessary to cover potential future obligations to ERCOT by the terminated Market Participant, ERCOT shall return or release any Financial Security held by ERCOT to the terminated Market Participant.

16.11.9 Acceleration

(1) Upon termination of a Market Participant’s rights as a Market Participant and any other agreement(s) between ERCOT and the Market Participant, all sums owed to ERCOT are immediately accelerated and are immediately due and owing in full. At that time, ERCOT may immediately draw upon the Market Participant’s Financial Security and shall use those funds to offset or recoup all amounts due to ERCOT.

**ERCOT Nodal Protocols**

**Section 23**

**Form A: Congestion Revenue Right (CRR) Account Holder Application for Registration**

**September 1, 2021TBD**

Date Received: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CONGESTION REVENUE RIGHT (CRR) ACCOUNT HOLDER**

**APPLICATION FOR REGISTRATION**

This application is for approval as a CRR Account Holder by the Electric Reliability Council of Texas Inc. (ERCOT) in accordance with the ERCOT Protocols. Information may be inserted electronically to expand the reply spaces as necessary. ERCOT will accept the completed, executed application via email to [MPRegistration@ercot.com](mailto:MPRegistration@ercot.com) (.pdf version), via facsimile to (512) 225-7079, or via mail to Market Participant Registration, 7620 Metro Center Drive, Austin, Texas 78744. In addition to the application, ERCOT must receive an application fee in the amount of $500 via check or wire transfer. ERCOT must also receive a background check fee in the amount of $350 per Principal via check or wire transfer. If you need assistance filling out this form, or if you have any questions, please call (512) 248-3900.

This application must be signed by the Authorized Representative, Backup Authorized Representative or an Officer of the company listed herein, as appropriate. ERCOT may request additional information as reasonably necessary to support operations under the ERCOT Protocols.

**PART I – ENTITY Information**

|  |  |
| --- | --- |
| **Legal Name of the Applicant:** |  |
| **Legal Address of the Applicant:** | Street Address: |
|  | City, State, Zip: |
| **DUNS¹ Number:** |  |

¹ Defined in Section 2.1, Definitions.

**Check if entity is a Non-Opt In Entity (NOIE).**

**1. Authorized Representative (“AR”)**.Defined inSection 2.1, Definitions.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**2. Backup AR**. *(Optional)* This person may sign any form for which an AR’s signature is required and will perform the functions of the AR in the event the AR is unavailable.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**3. Type of Legal Structure**. (Please indicate only one.)

Individual  Partnership  Municipally Owned Utility

Electric Cooperative  Limited Liability Company  Corporation

Other:

If Applicant is not an individual, provide the state in which the Applicant is organized,      , and the date of organization:

**4. User Security Administrator (USA)**.As defined in Section 16.12, User Security Administrator and Digital Certificates, the USA is responsible for managing the Market Participant’s access to ERCOT’s computer systems through Digital Certificates.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**5. Backup USA**. *(Optional)* This person may perform the functions of the USA as defined in the ERCOT Protocols in the event the USA is unavailable.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**6. Cybersecurity**. This contact is responsible for communicating Cybersecurity Incidents.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**7. Allocation Eligibility**.Indicate if the Applicant is eligible for the allocation described below:

**Pre-Assigned Congestion Revenue Right (PCRR) Allocations.** ERCOT shall allocate PCRRs to eligible Municipally Owned Utilities (MOUs) and Electric Cooperatives (ECs) pursuant to Section 7.4, Allocation of Pre-Assigned Congestion Revenue Rights.

**8. Proposed commencement date for service:**

**PART II – BANKING INFORMATION FOR FUNDS TRANSFERS**

**1. Banking Information.** Applicant must be able to conduct Electronic Funds Transfers (EFTs) for the settlement of financial transactions with ERCOT.

|  |  |
| --- | --- |
| **Bank Name:** |  |
| **Account Name:** |  |
| **Account No.:** |  |
| **ABA Number:** |  |

**2. Accounts Payable Contact (Settlement & Billing).**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | |
| **City:** |  | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** |  | | | | **Fax:** |  | | | |
| **Email Address:** | | |  | | | | | | |

**3. Backup Accounts Payable Contact (Settlement & Billing).** *(Optional)*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | |
| **City:** |  | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** |  | | | | **Fax:** |  | | | |
| **Email Address:** | | |  | | | | | | |

**PART III – ADDiTIONAL REQUIRED Information**

**1. Officers and Principals.** Provide the name of all officers and the name and position of all Principals, as defined by Section 16.1.2, Principal of a Market Participant. ERCOT will perform an individual background check on each Principal of the Applicant. In addition, ERCOT will obtain the names of all individuals and/or entities listed with the Texas Secretary of State as having binding authority for the Applicant. ERCOT will use this list of individuals to determine who can execute such documents as the Standard Form Market Participant Agreement (Section 22, Attachment A), Amendment to the Standard Form Market Participant Agreement (Section 22, Attachment C), Digital Certificate Audit Attestation, etc. Alternatively, additional documentation (Articles of Incorporation, Board Resolutions, Delegation of Authority, Secretary’s Certificate, etc.) can be provided to prove binding authority for the Applicant.

**2. Affiliates and Other Registrations.** Provide the name, legal structure, and relationship of each of the Applicant’s affiliates, if applicable. See Section 2.1, Definitions, for the definition of “Affiliate.” Please also provide the name and type of any other ERCOT Market Participant registrations held by the Applicant. *(Attach additional pages if necessary.)*

|  |  |  |
| --- | --- | --- |
| **Affiliate Name**  (or name used for other ERCOT registration) | **Type of Legal Structure**  (partnership, limited liability company, corporation, etc.) | **Relationship**  (parent, subsidiary, partner, affiliate, etc.) |
|  |  |  |
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|  |  |  |

**3. Disclosures.** Provide the following disclosures involving Applicant, its predecessors, Affiliates, or Principals:

A) Any civil or criminal litigation filed against Applicant within the last ten years that resulted in a conviction of fraud, theft, larceny, deceit, deceptive trade practices, or a violation of securities laws or customer protection laws;

B) Any complaint or disciplinary action filed against Applicant within the last ten years with the Securities and Exchange Commission (SEC), Commodities Futures Trading Commission (CFTC), Federal Energy Regulatory Commission (FERC), a self-regulatory organization, Independent System Operator or Regional Transmission Organization, or a state public utility commission or securities board;

C) Any default by Applicant, or revocation of Applicant’s right to operate in any other energy market, within the last ten years;

D) Any bankruptcy by Applicant within the last ten years; and

E) Any other information ERCOT deems reasonably necessary to complete the background check (e.g., Social Security Number(s), birth dates, and home addresses).

**Disclosures.** Provide the name of any Principal of the Applicant that is now, or was at any point in time, a Principal of any other Entity that is now, or was at any point in time, a registered ERCOT Market Participant, along with the name of the relevant ERCOT Market Participant and the dates during which the Principal of the Applicant was a Principal of the other Entity.

**4. Counter-Party Credit Application.** Complete the Counter-Party Credit Application, located at http://www.ercot.com/services/rq/credit, and submit as instructed in conjunction with this application, in accordance with Section 16.8, Registration and Qualification of Congestion Revenue Rights Account Holders.

**5. Annual Certification Form to Meet ERCOT Additional Minimum Participation.** Complete Section 22 Attachment J, Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements, and submit in conjunction with this application, pursuant to Section 16.16.3, Verification of Risk Management Framework.

**6. Qualified Scheduling Entity (QSE) Acknowledgment.** Provide all information requested in Attachment A below and have the document executed by both parties, ***ONLY*** if the Applicant is a Non-Opt-In Entity (NOIE) and eligible for PCRRs.

**PART IV – SIGNATURE**

I affirm that I have personal knowledge of the facts stated in this application and that I have the authority to submit this application form on behalf of the Applicant. I further affirm that all statements made and information provided in this application form are true, correct and complete, and that the Applicant will provide to ERCOT any changes in such information in a timely manner.

|  |  |
| --- | --- |
| Signature of AR, Backup AR or Officer: |  |
| Printed Name of AR, Backup AR or Officer: |  |
| Date: |  |

**Attachment A – QSE Acknowledgment**

**Acknowledgment by Designated QSE for**

**Scheduling and Settlement Responsibilities with ERCOT**

**Applicable only if CRRAH is a NOIE and eligible for Pre-Assigned CRRs**

The Applicant below has named the QSE listed below as its designated QSE to represent the Applicant for scheduling and Settlement transactions with ERCOT.

The Applicant’s designated QSE, listed below, hereby acknowledges that it does represent the Applicant and that it shall be responsible for the Applicant’s scheduling and Settlement transactions with ERCOT pursuant to the ERCOT Protocols.

The requested effective date for such representation is:      [[1]](#footnote-1)\*\*

or

Establish partnership at the earliest possible date

Acknowledgment by **QSE**:

|  |  |
| --- | --- |
| Signature of AR for QSE: |  |
| Printed Name of AR: |  |
| Email Address of AR: |  |
| Date: |  |
| Name of Designated QSE: |  |
| DUNS of Designated QSE: |  |

Acknowledgment by **Applicant**:

|  |  |
| --- | --- |
| Signature of AR for MP: |  |
| Printed Name of AR: |  |
| Email Address of AR: |  |
| Date: |  |
| Name of MP: |  |
| DUNS No. of MP: |  |

**ERCOT Nodal Protocols**

**Section 23**

**Form G: QSE Application and Service Filing for Registration Form**

**September 1, 2021TBD**

**QUALIFIED SCHEDULING ENTITY (QSE)**

**APPLICATION AND SERVICE FILING FOR REGISTRATION**

This application is for approval as a Qualified Scheduling Entity (QSE) by Electric Reliability Council of Texas Inc. (ERCOT) in accordance with the ERCOT Protocols. ERCOT will accept the completed, executed application via email to [MPRegistration@ercot.com](mailto:MPRegistration@ercot.com) (.pdf version), via facsimile to (512) 225-7079, or via mail to Market Participant Registration, 7620 Metro Center Drive, Austin, Texas 78744. In addition to the application, ERCOT must receive an application fee in the amount of $500 via check. ERCOT must also receive a background check fee in the amount of $350 per Principal via check or wire transfer. If you need assistance filling out this form, or if you have any questions, please call (512) 248-3900.

This application must be signed by the Authorized Representative, Backup Authorized Representative or an Officer of the company listed herein, as appropriate. ERCOT may request additional information as reasonably necessary to support operations under the ERCOT Protocols.

**PART I – ENTITY Information**

|  |  |
| --- | --- |
| **Legal Name of the Applicant:** |  |
| **Legal Address of the Applicant:** | Street Address: |
|  | City, State, Zip: |
| **DUNS¹ Number:** |  |

¹Defined in Section 2.1, Definitions.

**Check if Applying as an Emergency Response Service (ERS) Only QSE.**

**1. Authorized Representative (“AR”).** Defined in Section 2.1, Definitions.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**2. Backup AR.** *(Optional)* This person may sign any form for which an AR’s signature is required and will perform the functions of the AR as defined in the ERCOT Protocols in the event the AR is unavailable.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**3. Type of Legal Structure.** (Please indicate only one.)

Individual  Partnership  Municipally Owned Utility

Electric Cooperative  Limited Liability Company  Corporation

Other:

If Applicant is not an individual, provide the state in which the Applicant is organized,      , and the date of organization:      .

**4. User Security Administrator (USA).** As defined in Section 16.12, User Security Administrator and Digital Certificates, the USA is responsible for managing the Market Participant’s access to ERCOT’s computer systems through Digital Certificates.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**5. Backup USA.** *(Optional)* This person may perform the functions of the USA as defined in the ERCOT Protocols in the event the USA is unavailable.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**6. Cybersecurity.** This contact is responsible for communicating Cybersecurity Incidents.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**7. 24x7 Control or Operations Center.** As defined in item (1)(k) of Section 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity, the 24x7control or operations center is responsible for operational communications and shall have sufficient authority to commit and bind the QSE.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Desk Name:** | | |  | | | | | | |
| **Address:** | |  | | | | | | | |
| **City:** |  | | | | **State:** |  | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | |
| **Email Address:** | | | |  | | | | | |

**8. Compliance Contact.** This person is responsible for compliance related issues.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**9. Proposed commencement date for service:**

**PART II – BANKING INFORMATION FOR FUNDS TRANSFERS**

**1. Banking Information.** Applicant must be able to conduct Electronic Funds Transfers (EFTs) for the settlement of financial transactions with ERCOT.

|  |  |
| --- | --- |
| **Bank Name:** |  |
| **Account Name:** |  |
| **Account No.:** |  |
| **ABA Number:** |  |

**2. Accounts Payable Contact (Settlement & Billing).**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**Backup Accounts Payable Contact (Settlement & Billing).** *(Optional)*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**PART III – DECLARATION OF SUBORDINATE QSEs**

If the QSE intends to partition itself into subordinate QSEs (Sub-QSEs), please enter information for each Sub-QSE below. If a Sub-QSE will have a different 24x7 Contact than the QSE, please provide that information in the spaces provided below. The Sub-QSE name must have a reference to the Legal Entity Name. For example: Legal Name of Market Participant (SQ1), Legal Name of Market Participant (SQ2), etc.

**Sub-QSE One (SQ1)**

**Name:**       **Proposed commencement date for service:**

**24x7 Contact information same?  Yes  No (If no, complete the section below)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**Sub-QSE Two (SQ2)**

**Name:**       **Proposed commencement date for service:**

**24x7 Contact information same?  Yes  No (If no, complete the section below)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**Sub-QSE Three (SQ3)**

**Name:**       **Proposed commencement date for service:**

**24x7 Contact information same?  Yes  No (If no, complete the section below)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**Sub-QSE Four (SQ4)**

**Name:**       **Proposed commencement date for service:**

**24x7 Contact information same?  Yes  No (If no, complete the section below)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name:** | | |  | | | | **Title:** |  | | |
| **Address:** | |  | | | | | | | | |
| **City:** |  | | | | **State:** |  | | | **Zip:** |  |
| **Telephone:** | |  | | | | **Fax:** |  | | | |
| **Email Address:** | | | |  | | | | | | |

**PART IV – ADDiTIONAL REQUIRED Information**

**1. Officers and Principals.** Provide the name of all officers and the name and position of each Principal, as defined by Section 16.1.2, Principal of a Market Participant. ERCOT will perform an individual background check on each Principal of the Applicant. In addition, ERCOT will obtain the names of all individuals and/or entities listed with the Texas Secretary of State as having binding authority for the Applicant. ERCOT will use this list of individuals to determine who can execute such documents as the Standard Form Market Participant Agreement (Section 22, Attachment A), Amendment to Standard Form Market Participant Agreement (Section 22, Attachment C), Digital Certificate Audit Attestation, etc. Alternatively, additional documentation (Articles of Incorporation, Board Resolutions, Delegation of Authority, Secretary’s Certificate, etc.) can be provided to prove binding authority for the Applicant.

**2. Affiliates and Other Registrations.** Provide the name, legal structure, and relationship of each of the Applicant’s affiliates, if applicable. See Section 2.1, Definitions, for the definition of “Affiliate.” Please also provide the name and type of any other ERCOT Market Participant registrations held by the Applicant. *(Attach additional pages if necessary.)*

**3. Disclosures.** Provide the following disclosures involving Applicant, its predecessors, Affiliates, or Principals:

A) Any civil or criminal litigation filed against Applicant within the last ten years that resulted in a conviction of fraud, theft, larceny, deceit, deceptive trade practices, or a violation of securities laws or customer protection laws;

B) Any complaint or disciplinary action filed against Applicant within the last ten years with the Securities and Exchange Commission (SEC), Commodities Futures Trading Commission (CFTC), Federal Energy Regulatory Commission (FERC), a self-regulatory organization, Independent System Operator or Regional Transmission Organization, or a state public utility commission or securities board;

C) Any default by Applicant, or revocation of Applicant’s right to operate in any other energy market, within the last ten years;

D) Any bankruptcy by Applicant within the last ten years; and

E) Any other information ERCOT deems reasonably necessary to complete the background check (e.g., Social Security Number(s), birth dates, and home addresses).

**Disclosures.** Provide the name of any Principal of the Applicant that is now, or was at any point in time, a Principal of any other Entity that is now, or was at any point in time, a registered ERCOT Market Participant, along with the name of the relevant ERCOT Market Participant and the dates during which the Principal of the Applicant was a Principal of the other Entity.

**4.** **Counter-Party Credit Application.** Complete the Counter-Party Credit Application, located at http://www.ercot.com/services/rq/credit, and submit as instructed in conjunction with this application, in accordance with Section 16.2, Registration and Qualification of Qualified Scheduling Entities.

|  |  |  |
| --- | --- | --- |
| **Affiliate Name**  (or name used for other ERCOT registration) | **Type of Legal Structure**  (partnership, limited liability company, corporation, etc.) | **Relationship**  (parent, subsidiary, partner, affiliate, etc.) |
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|  |  |  |

**5. Annual Certification Form to Meet ERCOT Additional Minimum Participation.** Complete Section 22, Attachment J, Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements, and submit in conjunction with this application, pursuant to Section 16.16.3, Verification of Risk Management Framework.

**PART V – SIGNATURE**

I affirm that I have personal knowledge of the facts stated in this application and that I have the authority to submit this application form on behalf of the Applicant. I further affirm that all statements made and information provided in this application form are true, correct and complete, and that the Applicant will provide to ERCOT any changes in such information in a timely manner.

|  |  |
| --- | --- |
| Signature of AR, Backup AR or Officer: |  |
| Printed Name of AR, Backup AR or Officer: |  |
| Date: |  |

**ERCOT Fee Schedule**

***TBD***

The following is a schedule of ERCOT fees currently in effect.

|  |  |  |
| --- | --- | --- |
| **Description** | **Nodal Protocol Reference** | **Calculation/Rate/Comment** |
| ERCOT System Administration fee | 9.16.1 | $0.555 per MWh to fund ERCOT activities subject to Public Utility Commission of Texas (PUCT) oversight. This fee is charged to all Qualified Scheduling Entities (QSEs) based on Load represented. |
| Private Wide Area Network fees | 9.16.2 | Actual cost of using third party communications network - Initial equipment installation cost not to exceed $25,000, and monthly network management fee not to exceed $1,500. |
| ERCOT Generation Interconnection fee (Not Refundable) | NA | Application to interconnect generation meeting the requirements of Planning Guide Section 5.1.1, Applicability, to the ERCOT Transmission Grid.  $5,000 (less than or equal to 150MW)  $7,000 (greater than 150MW) |
| Full Interconnection Study Application fee (Not Refundable) | NA | $15 per MW – to support ERCOT system studies and coordination. Applicable MW amount per Planning Guide Section 5, Generation Resource Interconnection or Change Request. |
| Map Sale fees | NA | $20 - $40 per map request (by size) |
| Qualified Scheduling Entity Application fee | 9.16.2 | $500 per Entity |
| Competitive Retailer Application fee | 9.16.2 | $500 per Entity |
| Congestion Revenue Right (CRR) Account Holder Application fee | 9.16.2 | $500 per Entity |
| Independent Market Information System Registered Entity fee (IMRE) | 9.16.2 | $500 per Entity |
| Counter-Party Background Check Fee | 9.16.2 | $350 per Principal |
| Voluminous Copy fee | NA | $0.15 per page in excess of 50 pages |

1. \*\**Actual effective date will depend on time needed to implement the relationship in ERCOT systems once ERCOT has received all necessary information (a minimum of three Business Days), and may be later than the requested effective date. ERCOT will notify the parties of the actual effective date*. [↑](#footnote-ref-1)