|  |  |  |  |
| --- | --- | --- | --- |
| NPRR Number |  | NPRR Title | Credit Risk Assessment and Associated Enforcement  |
| Date Posted |  |
|  |  |
| Requested Resolution  | Normal |
| Nodal Protocol Sections Requiring Revision  | Include Section No. and Title |
| Related Documents Requiring Revision/Related Revision Requests | Include title of document to be revised (i.e. Operating Guide, Telemetry Standards, etc.) or related Revision Request number and title. |
| Revision Description | Describe the basic function of the Revision Request. |
| Reason for Revision |  Addresses current operational issues. Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/wcm/lists/144926/ERCOT_Strategic_Plan_2019-2023.pdf) or directed by the ERCOT Board). Market efficiencies or enhancements Administrative Regulatory requirements Other: (explain)*(please select all that apply)* |
| Business Case | Describe qualitative benefits (Examples: satisfies regulatory requirements, data transparency enhancement, etc.), quantitative benefits (benefit calculations), impacts to market segments and other information relating to the impacts or benefits of the NPRR. |

|  |
| --- |
| Sponsor |
| Name |  |
| E-mail Address |  |
| Company |  |
| Phone Number |  |
| Cell Number |  |
| Market Segment |  |

|  |
| --- |
| **Market Rules Staff Contact** |
| **Name** |  |
| **E-Mail Address** |  |
| **Phone Number** |  |

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| Proposed Protocol Language Revision |

16.11.1 ERCOT Creditworthiness Requirements for Counter-Parties

(1) Each Counter-Party shall meet ERCOT’s creditworthiness standards as provided in this Section. 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 its sole discretion. If at any time the Counter-Party does not meet ERCOT’s creditworthiness requirements, then 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 Congestion Revenue Right (CRR) Account Holder’s ability to bid on future CRRs or a Qualified Scheduling Entity’s (QSE’s) ability to bid in the Day-Ahead Market (DAM).

(2) ERCOT shall monitor the creditworthiness of Counter-Parties on an ongoing basis. Creditworthiness is assessed to determine whether a Counter-Party’s creditworthiness has changed in such a manner that, as determined by ERCOT in its sole discretion:

(a) The Counter-Party’s Unsecured Credit Limit, as calculated in Section 16.11.2, is not appropriate with respect to the financial risk created by the Counter-Party’s activities under these Protocols; or

(c) The TPEA or the TPES for the Counter-Party calculated under paragraphs (x) or (x) below does not adequately reflect the financial risk created by that Counter-Party’s activities under these Protocols; or

(c) The Counter-Party represents an unreasonable credit risk. A determination by ERCOT that a Counter-Party represents an unreasonable credit risk constitutes a breach under these Protocols.

(3) To provide a framework for the assessment of Counter-Party creditworthiness, ERCOT will assign each active Counter-Party an internal credit score. The score will utilize:

(a) A quantitative component computed using an internal credit scoring model maintained by ERCOT and;

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

 (i) A material change of which ERCOT becomes aware;

(ii) Information obtained from a background check performed in accordance with Section 16.2.1.1;

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

(iv) Information obtained in connection with the risk framework verification process, as described in Section 16.16.3; or

(v) Any other information that ERCOT, in its sole discretion, considers relevant in making an assessment of Counter-Party credit risk.

(c) ERCOT, in its sole discretion, may reassess the qualitative component of the internal credit score at any time.

(d) Based on applicable updated information, a Counter-Party may request that the qualitative component of its credit assessment be updated at any time.

***16.11.2 Credit Scoring Model***

(1) ERCOT shall maintain one or more quantitative internal credit scoring models to provide a baseline assessment of Counter-Party creditworthiness.

(a) The scoring models will utilize financial metrics obtained from both audited and unaudited Counter-Party financial statements provided in accordance with Section 16.11.5, Monitoring of a Counter-Party’s Creditworthiness and Credit Exposure by ERCOT.

(b) The specific financial metrics and methodology utilized by the models shall be described in an Other Binding Document. As appropriate, ERCOT may develop different models applicable to different Market Participant industry segments.

(c) The Other Binding Document shall also indicate the relative weightings of the quantitative credit scoring model result and ERCOT’s qualitative assessment used to determine the overall internal credit score for a Counter-Party.

(d) Revisions to the credit scoring Other Binding Document will be approved by the Credit Work Group and the Technical Advisory Committee (TAC). ERCOT shall implement approved revisions to the models on the first day of the month following TAC approval unless otherwise directed by TAC. ERCOT shall provide a Market Notice prior to implementation of a change to the quantitative credit scoring models.

(e) ERCOT will update each Counter-Party’s credit score under the models within 60 days of receiving updated audited or unaudited financial statements.

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 paragraph (1) of Section 16.11.5, Monitoring of a Counter-Party’s Creditworthiness and Credit Exposure by ERCOT, 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) As warranted by a change in a Counter-Party’s creditworthiness, ERCOT has the discretion to adjust Unsecured Credit Limits and to reasonably request any Counter-Party or guarantor, if applicable, to provide updated financial information in support of Unsecured Credit Limit calculations. ERCOT will provide a Counter-Party written Notice of a change to that Counter-Party’s Unsecured Credit Limit 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.

16.11.5 Determination and Monitoring of Counter-Party Credit Exposure

16.11.4.1 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 16.11.3, 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 16.11.3. 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) 25%, or such other percentage based on available statistics regarding payment default under bankruptcy reorganization plans, of any short payment amounts being repaid to ERCOT under a bankruptcy reorganization plan that are due more than one year from the date of the calculation.  |
| 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[{$\sum\_{e}^{ }\sum\_{i=1}^{96} \sum\_{p}^{ } $**[**L *i, od, p* \* RTSPP *i, od, p*]/*n*}, {$\sum\_{e}^{ } \sum\_{i=1}^{96} \sum\_{p}^{ } $**[[[**L *i, od, p* \* *T2***-** G *i, od, p* \* (1-*NUCADJ*) \* *T3*] \* RTSPP *i, od, p*] + [RTQQNET *i, od, p*\* *T5*]]**/***n*},  {$\sum\_{e}^{ } \sum\_{i=1}^{96} \sum\_{p}^{ } $**[**G *i, od, p* \* *NUCADJ* \* *T1* \* RTSPP *i, od, p***]/**n}, {$\sum\_{e}^{ } \sum\_{i=1}^{96} \sum\_{p}^{ } $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 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 |
| IMCE | $ | *Initial Minimum Current Exposure* IMCE = TOA \* (EFFCAP \* *nm* \* *cif%*)Where:EFFCAP = *Effective Cap.* The greater of Value of Lost Load (VOLL), as described in the Methodology for Implementing Operating Reserve Demand Curve (ORDC) to Calculate Real-Time Reserve Price Adder, or the SWCAP, as determined in accordance with Public Utility Commission of Texas (PUCT) Substantive Rules.  |
|

|  |  |  |  |
| --- | --- | --- | --- |
| [NPRR978: Replace the variable “IMCE” above with the following upon system implementation:]

|  |  |  |
| --- | --- | --- |
| 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%. |
| 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%. |
| *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 16.11.4.3.3, 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 shall provide written or electronic 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. Where practicable, 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.

16.11.4.2 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 16.11.3, 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 16.11.4.1, 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.

16.11.4.3 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 16.11.4.2, 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 16.11.4.3.2, 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 DaysWhere:*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 DaysWhere:*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* + CARDWhere: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 16.11.4.3.1, 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 16.11.2, 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 16.11.4.3.3, Forward Adjustment Factors. |
| DFAF | None | *Day-Ahead Forward Adjustment Factor*—The adjustment factor for DAM-related forward exposure as defined in Section 16.11.4.3.3. |
| *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 Monitoring of a Counter-Party’s Creditworthiness and Credit Exposure by ERCOT

(1) ERCOT shall monitor the creditworthiness and credit exposure of each Counter-Party or its guarantor, if any. To enable ERCOT to monitor creditworthiness, 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.

(d) Notice of a material change. A Counter-Party shall inform ERCOT within one Business Day if it has experienced a material change in its operations, financial condition or prospects that might adversely affect the Counter-Party and require a revision to its Unsecured Credit Limit and/or Total Potential Exposure. .

(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 (a) of Section 16.11.3 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 16.11.4, 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 16.11.4, equals or exceeds 100% of its Secured Collateral; or

(b) That Counter-Party’s TPEA as defined in Section 16.11.4 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 16.11.4.

(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 16.11.4:

(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.

16.11.6 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, is paid to ERCOT by close of the Bank Business Day on which it 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 close of the Bank Business Day on which it is due. 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 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 16.11.6.1, 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 as allowed by these Protocols or a collateral call to ERCOT after the 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 is a “Late Payment.” 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, waive the Payment Breach as a Late Payment. 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 16.11.6.2, ERCOT’s Remedies for Late Payments by a Market Participant.

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| --- |
| ***[NPRR702: Replace paragraph (5) above with the following upon system implementation:]***(5) If a Market Participant makes a payment or a partial payment as allowed by these Protocols or a collateral call to ERCOT after the 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 Excess Cash Collateral, then that payment is a “Late Payment.” 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, waive the Payment Breach as a Late Payment. 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 16.11.6.2. |

16.11.6.1 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.

16.11.6.1.1 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 16.11.6.1.3, 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).

16.11.6.1.2 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 16.11.6.1.3, 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.

16.11.6.1.3 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.

16.11.6.1.4 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.

16.11.6.1.5 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.

(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.

16.11.6.1.6 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 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.

16.11.6.2 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 16.11.6.1, 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.

16.11.6.2.1 First Late Payment in Any Rolling 12-Month Period

(1) For the first Late Payment resulting from a Payment Breach in any rolling 12-month period, ERCOT shall review the circumstances and reason for the Late Payment, and shall, at its sole discretion, determine whether it should take Level I Enforcement action, as described in Section 16.11.6.2.5, Level I Enforcement, against the Market Participant.

(2) If ERCOT determines that it will take Level I Enforcement action against the Market Participant, 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 by the Market Participant under Level I Enforcement.

16.11.6.2.2 Second Late Payment in Any Rolling 12-Month Period

(1) For the second Late Payment resulting from a Payment Breach in any rolling 12-month period, ERCOT shall review the circumstances and reason for the Late Payment, and shall take action as follows:

(a) Level I Enforcement - If ERCOT did not take Level I Enforcement action in the case of the first Late Payment, ERCOT shall take Level I Enforcement action, as described in Section 16.11.6.2.5, Level I Enforcement.

(b) Level II Enforcement - If ERCOT did take Level I Enforcement action in the case of the first Late Payment, ERCOT shall take Level II Enforcement action, as described in Section 16.11.6.2.6, 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 I Enforcement or Level II Enforcement.

16.11.6.2.3 Third Late Payment in Any Rolling 12-Month Period

(1) For the third Late Payment resulting from a Payment Breach in any rolling 12-month period, ERCOT shall review the circumstances and reason for the Late Payment, and shall take action as follows:

(a) Level II Enforcement - If ERCOT did not take Level II Enforcement action in the case of the second Late Payment, ERCOT shall take Level II Enforcement action, as described in Section 16.11.6.2.6, Level II Enforcement.

(b) Level III Enforcement - If ERCOT did take Level II Enforcement action in the case of the second Late Payment, ERCOT shall take Level III Enforcement action, as described in Section 16.11.6.2.7, 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 II or Level III Enforcement, and informing the Market Participant that a fourth Late Payment in any 12-month rolling period shall result in ERCOT taking action under Section 16.11.6.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements.

16.11.6.2.4 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 16.11.6.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements.

16.11.6.2.5 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.

16.11.6.2.6 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 110% 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.

16.11.6.2.7 Level III Enforcement

(1) Under Level III Enforcement, ERCOT shall:

(a) Advise the Authorized Representative and/or Credit Contact that a fourth Late Payment in the rolling 12-month period shall result in ERCOT taking action under Section 16.11.6.1.6, Revocation of a Market Participant’s Rights and Termination of Agreements; or

(b) Take action under Section 16.11.6.1.6.