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| NPRR Number | [902](http://www.ercot.com/mktrules/issues/NPRR902) | NPRR Title | ERCOT Critical Energy Infrastructure Information |
| Date of Decision | | October 23, 2019 | |
| Action | | Recommended Approval | |
| Timeline | | Normal | |
| Proposed Effective Date | | Upon system implementation but no earlier than July 1, 2020 | |
| Priority and Rank Assigned | | Priority – 2020; Rank – 2930 | |
| Nodal Protocol Sections Requiring Revision | | 1.3, Confidentiality  1.3.1, Restrictions on Protected Information  1.3.1.1, Items Considered Protected Information  1.3.1.2, Items Not Considered Protected Information  1.3.2, Procedures for Protected Information  1.3.3, Expiration of Confidentiality  1.3.2, ERCOT Critical Energy Infrastructure Information (new)  1.3.2.1, Items Considered ERCOT Critical Energy Infrastructure Information (new)  1.3.2.2, Restrictions on ERCOT Critical Energy Infrastructure Information (new)  1.3.2.3, Submission of ERCOT Critical Energy Infrastructure Information to ERCOT (new)  1.3.3, Reserved (new)  1.3.4, Protecting Disclosures to the PUCT and Other Governmental Authorities  1.3.5, Notice Before Permitted Disclosure  1.3.6, Exceptions  1.3.8, Commission Declassification  1.3.9, Expansion of Protected Information Status (delete)  2.1, Definitions  2.2, Acronyms and Abbreviations  3.10, Network Operations Modeling and Telemetry  3.10.2, Annual Planning Model  3.10.3, CRR Network Model  3.10.4, ERCOT Responsibilities  12.1, Overview  12.3, MIS Administrative and Design Requirements  16.12, User Security Administrator and Digital Certificates  17.3.2, Data Categories and Handling Procedures  17.4, Provision of Data to Individual Market Participants | |
| Related Documents Requiring Revision / Related Revision Requests | | None | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) clarifies parties’ responsibilities regarding ERCOT Critical Energy Infrastructure Information (ECEII). This NPRR defines ECEII, adds lists of items that are considered ECEII, specifies the restrictions imposed upon parties that receive or create ECEII, allows Market Participants to restrict individual access to ECEII within their organizations through the use of ECEII-eligible Digital Certificates, and provides a framework for the submission of ECEII to ERCOT. A process has been created for contesting ERCOT determinations regarding confidentiality status. This NPRR also deletes language in Section 1.3.1.2 that is duplicative of paragraph (1)(b) of Planning Guide Section 5.5.4, Notification to ERCOT Concerning Certain Project Developments  The Federal Energy Regulatory Commission (FERC), in a series of orders issued in 2003, adopted a definition of Critical Energy Infrastructure Information (CEII) and established regulations for submitting CEII to and obtaining CEII from FERC. Subsequent FERC orders further refined these regulations. While the FERC regulations do not require ERCOT to adopt similar rules regarding the handling of CEII, the Protocols currently include a definition for CEII, closely based on the FERC definition, although there are only minimal requirements regarding CEII in the current Protocols. In practice, ERCOT restricts access to CEII, and strongly believes that limiting access and requiring secure handling of CEII is reasonable and appropriate in connection with its role as the recipient and producer of vast amounts of information, some of which is sensitive for commercial or security reasons. The rules proposed in this NPRR are based on a review of FERC’s CEII regulations and similar rules adopted by other Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs).  The Market Information System (MIS) Secure Area was intended to be used for ERCOT to provide routine Market Participant access to information that is sensitive for security reasons – i.e., ECEII. Paragraph (1) of Section 12.1 states in part that “[t]he MIS Secure Area provides restricted access to critical energy infrastructure information.” While much of the information currently required by the Protocols and Other Binding Documents to be posted on the MIS Secure Area does constitute ECEII, ERCOT Staff has identified several instances in which information required to be posted on the MIS Secure Area is not ECEII and thus would be more appropriately located on the MIS Public Area. As a follow-up to this NPRR, ERCOT Staff intends to conduct a more comprehensive review of items required to be posted on the MIS Secure Area, and expects to submit one or more additional Revision Requests to relocate those items that do not constitute ECEII.  To ensure Market Participants will have sufficient time to adjust their processes to account for the changes enacted through this NPRR, ERCOT proposes that NPRR902 become effective no sooner than the first day of the seventh month following ERCOT Board approval (e.g., July 1, 2019 effective date if approved by the ERCOT Board at its December 2018 meeting). | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/news/presentations/2013/ERCOT%20Strat%20Plan%20FINAL%20112213.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: Clarifying current practices and providing additional detail and other enhancements based on industry practices and market expectations, and addressing an existing risk to the ERCOT System. | |
| Business Case | | Along with ERCOT, FERC and other ISOs and RTOs have recognized that there is a security risk associated with certain types of information in the possession of and exchanged among ISOs and RTOs, Governmental Authorities, industry members and other interested parties. As reflected in paragraph (1) of Section 12.1, ERCOT believes there is an existing obligation to limit disclosure of CEII, and while ERCOT and Market Participants have in practice limited disclosure of and access to information that meets the existing Protocol definition of CEII, the lack of more detailed rules and definitions has caused confusion as to what information should be protected and how that protection should be accomplished. | |
| Credit Work Group Review | | ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR902 and do not believe that it requires changes to credit monitoring activity or the calculation of liability. | |
| PRS Decision | | On 10/18/18, PRS unanimously voted to table NPRR902. All Market Segments were present for the vote.  On 9/12/19, PRS voted to recommend approval of NPRR902 as amended by the 9/4/19 ERCOT comments. There was one abstention from the Independent Generator (Luminant) Market Segment. All Market Segments were present for the vote.  On 10/10/19, PRS voted to endorse and forward to TAC the 9/12/19 PRS Report and Revised Impact Analysis for NPRR902 with a recommended priority of 2020 and a rank of 2890. There was one abstention from the Independent Generator (Luminant) Market Segment. All Market Segments were present for the vote. | |
| Summary of PRS Discussion | | On 10/18/18, participants requested tabling NPRR902 to have additional time to review the NPRR.  On 9/12/19, there was no discussion.  On 10/10/19, participants reviewed the Revised Impact Analysis and Business Case for NPRR902. | |
| TAC Decision | | On 10/23/19, TAC voted to recommend approval of NPRR902 as recommended by PRS in the 10/10/19 PRS Report as amended by the 10/16/19 ERCOT comments, with a revised rank of 2930 and a revised proposed effective date of upon system implementation but no earlier than July 1, 2020. There was one abstention from the Independent Generator (Luminant) Market Segment. All Market Segments were present for the vote. | |
| TAC Discussion | | On 10/23/19, participants reviewed the Revised Impact Analysis, Business Case, and 10/16/19 ERCOT comments for NPRR902. ERCOT Staff offered a revised rank of 2930 to correct a duplication, and proposed a clarified effective date. | |
| ERCOT Opinion | | ERCOT supports approval of NPRR902. | |

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| Sponsor | |
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| Company | ERCOT |
| Phone Number | 512-225-7035; 512-225-7093; 512-225-7017; 512-275-7447 |
| Cell Number |  |
| Market Segment | Not Applicable |

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| **Comments Received** | |
| Comment Author | **Comment Summary** |
| ERCOT 031319 | Proposed revisions in response to discussions with interested parties after December 4, 2019 and January 31, 2019 NPRR902 workshops; also addressed the applicability of the restrictions imposed on ECEII to ECEII created by a party itself, and to the handling of ECEII within an organization |
| Oncor 050319 | Proposed requiring Receiving, Disclosing, and Creating Parties to have internal procedures to ensure ECEII is securely maintained, and that internal distribution is reasonably restricted |
| ERCOT 060319 | Proposed revisions and clarifications to 5/3/19 Oncor comments |
| ERCOT 070819 | Proposed clarifications in response to issues raised at the June 17, 2019 NPRR902 workshop |
| MSCGI 071619 | Proposed creating a separate Digital Certificate permission level for ECEII to allow market Entities greater ability to manage those who have access to ECEII and what is done with ECEII internally |
| Joint NOIE 080719 | Expressed support for 7/8/19 ERCOT comments; proposed additional revisions to 7/16/19 MSCGI comments in consideration of entities subject to the Texas Public Information Act, Tex. Govt. Code §§ 552.001-.353 (TPIA) |
| ERCOT 090419 | Proposed clarifications in response to submitted comments and points raised at July 17 and August 15, 2019 PRS meetings |
| ERCOT 101619 | Proposed clarifications to the Revision Description in consideration of the language PRS recommended for approval |

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| Market Rules Notes |

Please note administrative changes to the language were made and authored as “ERCOT Market Rules.”

Please note the baseline Protocol language in the following section has been updated to reflect the incorporation of the following NPRR into the Protocols:

* NPRR845, RMR Process and Agreement Revisions (unboxed 4/5/19)
  + Section 1.3.1.2
* NPRR857, Creation of Direct Current Tie Operator Market Participant Role (incorporated 11/1/18)
  + Section 1.3.1.1
  + Section 3.10
  + Section 3.10.4
* NPRR885, Must-Run Alternative (MRA) Details and Revisions Resulting from PUCT Project No. 46369, Rulemaking Relating to Reliability Must-Run Service (incorporated 7/1/19)
  + Section 1.3.1.2
* NPRR899, Digital Certificate and User Security Administrator Clarifications and Opt Out Procedure (unboxed 9/1/19)
  + Section 16.12

Please note that the following NPRR(s) also propose revisions to the following section(s):

* NPRR928, Cybersecurity Incident Notification
  + Section 1.3.1.1
  + Section 1.3.4
  + Section 1.3.5
  + Section 1.3.6
* NPRR953, Addition of Relay Loadability Rating Definition
  + Section 3.10.3

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| Proposed Protocol Language Revision |

1.3 Confidentiality

(1) This Section 1.3 applies to Protected Information or ERCOT Critical Energy Infrastructure Information (ECEII) disclosed by a Market Participant to ERCOT or the Independent Market Monitor (IMM), by the IMM to ERCOT or a Market Participant, or by ERCOT to a Market Participant or the IMM. Section 1.3 also applies to specific categories of ECEII created by ERCOT, the IMM, or any Market Participant.

(2) As used in this Section 1.3:

(a) “Receiving Party” means ERCOT, the IMM or any Market Participant in its capacity as the recipient of Protected Information or ECEII from one of the others.

(b) “Disclosing Party” means ERCOT, the IMM or any Market Participant in its capacity as the provider of Protected Information or ECEII to one of the others.

(c) “Creating Party” means ERCOT, the IMM or any Market Participant in its capacity as the creator of any ECEII specifically listed in Section 1.3.2.1, Items Considered ERCOT Critical Energy Infrastructure Information.

(d) To disclose means to directly or indirectly disclose, reveal, distribute, report, publish, or transfer Protected Information or ECEII to any party other than to the Disclosing Party.

1.3.1 Restrictions on Protected Information

(1) A Receiving Party may not disclose Protected Information received from a Disclosing Party to any other Entity except as specifically permitted in this Section and in these Protocols. A Receiving Party may not knowingly use Protected Information for any illegal purpose.

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;

(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;

(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 180 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) information provided to a TSP or DSP under Section 9.17.2, Direct Current Tie Schedule Information;

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| ***[NPRR857: Replace item (u) above with the following upon system implementation:]***  (u) Direct Current Tie (DC Tie) Schedule information provided to a TSP or DSP under Section 9.17.2, Direct Current Tie Schedule Information; |

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

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| ***[NPRR829 and NPRR889: Replace applicable portions of paragraph (ee) above with the following upon system implementation:]***  (ee) Status of Settlement Only Generators (SOGs), including Outages, limitations, schedules, metered output 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 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; |

(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; and

(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.

1.3.1.2 Items Not Considered Protected Information

(1) Notwithstanding the definition of “Protected Information” in Section 1.3.1.1, Items Considered Protected Information, the following items are not Protected Information even if so designated:

(a) Data comprising Load flow cases, which may include estimated peak and off-peak Demand of any Load;

(b) Existence of Power System Stabilizers (PSSs) at each interconnected Generation Resource and PSS status (in service or out of service);

(c) Reliability Must-Run (RMR) Agreements;

(d) Studies, reports and data used in ERCOT’s assessment of whether an RMR Unit satisfies ERCOT’s criteria for operational necessity to support ERCOT System reliability but only if they have been redacted to exclude Protected Information under Section 1.3.1.1;

(e) Status of RMR Units;

(f) Black Start Agreements;

(g) RMR Settlement charges and payments;

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| ***[NPRR885: Insert items (h) and (i) below upon system implementation and renumber accordingly:]***  (h) Must-Run Alternative (MRA) Agreements;  (i) Settlement charges and payments for MRA Service; |

(h) Within two Business Days of a request from a potential generating Facility for a full resource interconnection study, the county in which the Facility is located, Facility fuel type(s), Facility nameplate capacity, and anticipated Commercial Operations Date(s) and signed generation interconnection agreements; and

(i) Any other information specifically designated in these Protocols or in the PUCT Substantive Rules as information to be posted to the Market Information System (MIS) Public Area or MIS Secure Area that is not specified as information that is subject to the requirements of Section 1.3, Confidentiality.

(2) Protected Information that Receiving Party is permitted or required to disclose or use under the Protocols or under an agreement between Receiving Party and a Disclosing Party does not cease to be regarded as Protected Information in all other circumstances not encompassed by these Protocols or such agreement by virtue of the permitted or required disclosure or use under these Protocols or such agreement.

1.3.1.3 Procedures for Protected Information

(1) The Receiving Party shall adopt procedures within its organization to maintain the confidentiality of all Protected Information. Such procedures must provide that:

(a) The Protected Information may be disclosed to the Receiving Party’s directors, officers, employees, representatives, and agents only on a “need to know” basis;

(b) The Receiving Party shall make its directors, officers, employees, representatives, and agents aware of Receiving Party’s obligations under this Section;

(c) If reasonably practicable, the Receiving Party shall cause any copies of the Protected Information that it creates or maintains, whether in hard copy, electronic format, or other form, to identify the Protected Information as such; and

(d) Before disclosing Protected Information to a representative or agent of the Receiving Party, the Receiving Party shall require a nondisclosure agreement with that representative or agent, except that a nondisclosure agreement shall not be required for the Receiving Party or Creating Party to disclose Protected Information to that party’s attorney. That nondisclosure agreement must contain confidentiality provisions substantially similar to the terms of this Section.

1.3.1.4 Expiration of Protected Information Status

(1) If PUCT Substantive Rules or other sections of the ERCOT Protocols require public posting (or posting to all Market Participants) of information identified as Protected Information in Section 1.3.1.1, Items Considered Protected Information, the Protected Information status of such information shall expire at the time such information is required to be posted.

(2) ERCOT shall make the following information available on the MIS Public Area in a standard reporting format:

(a) Ancillary Service Obligation and Ancillary Service Supply Responsibility for each QSE. This information shall be made available 180 days after the Operating Day;

(b) Complete COP data for each QSE snapshot on each hour. This information shall be made available 60 days after the Operating Day; and

(c) In a separate report from item (b) above, complete COP data for each Resource for each update to that Resource’s COP. This information shall be made available 60 days after the Operating Day.

(3) ERCOT shall make available the AML for each QSE by LSE, by Load Zone and by Settlement Interval, from the True-Up settlement. This data shall be made available within two Business Days of the 180 day expiration of Protected Information status. Data for the posting will remain accessible for six months after such data are posted.

(4) The Protected Information status of information related to generation interconnection requests expires once ERCOT receives a request from an Interconnecting Entity (IE) for a Full Interconnection Study (FIS), except that information described in item (1)(m) of Section 1.3.1.1 shall remain Protected Information.

(5) Upon the expiration of the Protected Information status of any data specified in Section 1.3.1.1, which does not have specific posting requirements, that data must be made available to the extent required under Section 12, Market Information System.

(6) Information that is no longer Protected Information, but not posted, including Dispatch Instructions, is available on request under the ERCOT Request for Records and Information Policy. Requested information must be provided within a reasonable timeframe. For Dispatch Instructions, the information may be requested with respect to a specific Resource, where applicable, and by service type and Settlement Interval or as integrated over each Settlement Interval for Dispatch Instructions with sub-Settlement Interval frequency.

1.3.2 ERCOT Critical Energy Infrastructure Information

(1) ERCOT, the IMM, or any Market Participant may not disclose ECEII to any other Entity except as specifically permitted in this Section and in these Protocols.

(2) For purposes of subsection (e) of P.U.C. Subst. R. 25.362, Electric Reliability Council of Texas (ERCOT) Governance, ECEII constitutes “Protected Information” that shall be protected from public disclosure, except as otherwise provided therein and in these Protocols.

(3) ERCOT may classify information as ECEII, regardless of whether the submitter has designated the information as ECEII or has otherwise requested ECEII status for the information, upon determining that the information is included on the list of items considered ECEII in Section 1.3.2.1 or otherwise meets the definition of ECEII set forth in Section 2.1, Definitions. Upon determining that information for which ECEII status has not been requested should be designated as ECEII, ERCOT shall notify the submitter. A determination by ERCOT to classify information as ECEII is subject to review by the PUCT as set forth in Section 1.3.8, Commission Review of ERCOT Determinations Regarding Protected Information, or ERCOT Critical Energy Infrastructure Information Status.

(4) Different types of ECEII may involve different levels of security risk. In its discretion, ERCOT may restrict Market Participant access to ECEII created or received by ERCOT that poses a high level of security risk, provided that ERCOT shall disclose such information to any TDSP upon request and may disclose such information to any other Market Participant that ERCOT determines has a legitimate reliability-based need for that information, subject to the requirements and restrictions of this Section 1.3, Confidentiality. If ERCOT determines that ECEII that is required to be posted on the MIS Public or Secure Area pursuant to these Protocols or an Other Binding Document poses a high level of security risk, ERCOT shall remove such information from the MIS Public or Secure Area notwithstanding such posting requirement, and shall promptly submit a Revision Request to remove the requirement to post such information. If the Revision Request is withdrawn or rejected, ERCOT shall restore any information required to be posted to the MIS that had been removed pursuant to this paragraph.

(5) A Receiving Party or Creating Party of ECEII shall adopt procedures to ensure that ECEII is securely maintained and the organization’s internal distribution of ECEII is reasonably restricted to appropriate individuals.

(6) A Receiving Party or Creating Party may not knowingly use ECEII for any illegal purpose.

(7) Before disclosing ECEII to a representative or agent of the Receiving Party or Creating Party, the Receiving Party or Creating Party shall require a nondisclosure agreement with that representative or agent, except that a nondisclosure agreement shall not be required for the Receiving Party or Creating Party to disclose ECEII to that party’s attorney.

1.3.2.1 Items Considered ERCOT Critical Energy Infrastructure Information

(1) ECEII includes but is not limited to the following, so long as such information has not been disclosed to the public through lawful means:

(a) Detailed ERCOT System Infrastructure locational information, such as Global Positioning System (GPS) coordinates;

(b) Information that reveals that a specified contingency or fault results in instability, cascading or uncontrolled separation;

(c) Studies and results of simulations that identify cyber and physical security vulnerabilities of ERCOT System Infrastructure;

(d) Black Start Service (BSS) test results, individual Black Start Resource start-up procedures, cranking paths, and ERCOT and individual TSP Black Start plans;

(e) ERCOT, Transmission and/or Distribution Service Provider (TDSP), and Resource emergency operations plans;

(f) Detailed ERCOT Transmission Grid maps, other than maps showing only small portions of the ERCOT Transmission Grid such as those included in Regional Planning Group (RPG) Project ERCOT Independent Review reports;

(g) Detailed diagrams or information about connectivity between ERCOT’s and other Entities’ computer and telecommunications systems, such as internet protocol (IP) addresses, media access control (MAC) addresses, network protocols, and ports used; and

(h) Any information that is clearly designated as ECEII in writing by the Disclosing Party at the time the information is provided to Receiving Party, subject to the procedures set forth in paragraph (3) of Section 1.3.2.2, Submission of ERCOT Critical Energy Infrastructure Information to ERCOT.

1.3.2.2 Submission of ERCOT Critical Energy Infrastructure Information to ERCOT

(1) ECEII submitted to ERCOT shall be clearly labeled on the cover page and pages or portions of the information or otherwise clearly identify the information for which ECEII treatment is claimed, to the extent practicable. The submission of information labeled as ECEII constitutes a representation by the submitter that the information is ECEII as defined in these Protocols. The submitter shall also segregate those portions of the information that contain ECEII wherever feasible.

(2) Failure to request ECEII treatment or failure to conspicuously label or segregate ECEII information submitted to ERCOT in accordance with paragraph (1) above may result in non-ECEII treatment of the information by ERCOT and release of the information to the public.

(3) For any submission of information asserted to be ECEII, ERCOT may, at any time following the submission, request that the submitter provide a written justification for such treatment. The submitter shall provide such a justification, if any, within five Business Days. The justification must explain how the information, or any portion of the information, qualifies as ECEII, as such term is defined in Section 2.1, Definitions, and must identify any law, regulation, or order that protects the information, or any portion of the information, from disclosure. The request shall also include a statement of how long the ECEII designation should apply to the information and support for the period proposed. ERCOT shall consider any submitted justification before determining whether the information qualifies as ECEII. ERCOT shall not disclose or permit disclosure of any information protected from disclosure pursuant to law, regulation, or order. ERCOT shall notify the submitter of its determination within five Business Days after receiving the submission. ERCOT shall continue to treat as ECEII information originally claimed to be ECEII for five Business Days following the date ERCOT notified the submitter of its determination. A determination by ERCOT not to classify information as ECEII is subject to review by the PUCT as set forth in Section 1.3.8, Commission Review of ERCOT Determinations Regarding Protected Information or ERCOT Critical Energy Infrastructure Information Status.

1.3.3 RESERVED

1.3.4 Protecting Disclosures to the PUCT and Other Governmental Authorities

(1) Any disclosure that a Receiving Party makes to the PUCT must be made under applicable PUCT rules. For any disclosure of Protected Information or ECEII to the PUCT outside the scope of subsection (e) of P.U.C. Subst. R. 25.362, Electric Reliability Council of Texas (ERCOT) Governance, the Receiving Party must file that Protected Information or ECEII as confidential pursuant to subsection (d) of P.U.C. Proc. R. 22.71, Filing of Pleadings, Documents, and Other Materials.

(2) For any disclosure of Protected Information to the Commodity Futures Trading Commission (CFTC) pursuant to a request made under the CFTC’s authority in accordance with the Commodity Exchange Act and the CFTC’s regulations, ERCOT, as the Receiving Party, shall timely submit to the CFTC a written request for confidential treatment of the Protected Information in accordance with the applicable provisions of the Commodity Exchange Act and CFTC regulations.

(3) Before making a disclosure under order of a Governmental Authority other than the PUCT and the CFTC, the Receiving Party or Creating Party shall seek a protective order from such Governmental Authority to protect the confidentiality of Protected Information or ECEII.

(4) Nothing in this Section authorizes any disclosure of Protected Information or ECEII to the PUCT or other Governmental Authority; this Section merely creates requirements on disclosures that are authorized under other sections of these Protocols.

1.3.5 Notice Before Permitted Disclosure

(1) Before making any disclosure under Section 1.3.4, Protecting Disclosures to the PUCT and Other Governmental Authorities, or under Section 1.3.6, Exceptions, the Receiving Party shall promptly notify the Disclosing Party in writing and, with the exception of information disclosed pursuant to paragraph (3) of Section 1.3.6, shall assert confidentiality and take reasonable steps to cooperate with the Disclosing Party in seeking to protect the Protected Information or ECEII from disclosure by confidentiality agreement, protective order, aggregation of information, or other reasonable measures. Notwithstanding the foregoing, ERCOT is not required to provide notice to the Disclosing Party of disclosures made under items (1)(b) or (1)(l) of Section 1.3.6.

(2) If the Disclosing Party is not also the Creating Party, upon receipt of the notice required by paragraph (1) above, the Disclosing Party shall promptly notify the Creating Party, unless, after making reasonable efforts, the Disclosing Party is unable to identify the Creating Party.

1.3.6 Exceptions

(1) The Receiving Party or Creating Party may, without violating Section 1.3, Confidentiality, disclose Protected Information or ECEII:

(a) To governmental officials, Market Participants, the public, or others as required by any law, regulation, or order, or by these Protocols, but any Receiving Party or Creating Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEII by protective order, by aggregating information, or otherwise if reasonably possible; or

(b) If ERCOT is the Receiving Party or Creating Party and disclosure to the PUCT, Reliability Monitor or IMM of the Protected Information or ECEII is required by ERCOT pursuant to applicable Protocol, law, regulation, or order; or

(c) For Protected Information, if the Disclosing Party has given its prior written consent to the disclosure, which consent may be given or withheld in Disclosing Party’s sole discretion; or

(d) For Protected Information, if the Protected Information, before it is furnished to the Receiving Party, has been disclosed to the public through lawful means; or

(e) For Protected Information, if the Protected Information, after it is furnished to the Receiving Party, is disclosed to the public other than as a result of a breach by the Receiving Party of its obligations under Section 1.3; or

(f) If reasonably deemed by the disclosing Receiving Party to be required to be disclosed in connection with a dispute between the Receiving Party and the Disclosing Party, but the disclosing Receiving Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEII by protective order, by aggregating information, or otherwise if reasonably possible; or

(g) To a TSP or DSP engaged in the ERCOT Transmission Grid or Distribution System planning and operating activities, provided that the TSP or DSP has executed a confidentiality agreement with ERCOT with requirements substantially similar to those in Section 1.3. ERCOT shall post on the ERCOT website a list of all TSPs and DSPs that have confidentiality agreements in effect with ERCOT; or

(h) For Protected Information, to a vendor or prospective vendor of goods and services to ERCOT or a TDSP, so long as such vendor or prospective vendor:

(i) Is not a Market Participant, except that ERCOT or the TDSP may disclose Protected Information to a vendor or prospective vendor that is also an Independent Market Information System Registered Entity (IMRE) to the extent appropriate for the vendor to carry out its responsibilities in such capacity or for the prospective vendor to engage in commercial discussions; and

(ii) Has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or

(i) For ECEII, to a vendor or prospective vendor of goods and services, so long as such vendor or prospective vendor has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or

(j) To the North American Electric Reliability Corporation (NERC) or the NERC Regional Entity if required for compliance with any applicable NERC or NERC Regional Entity requirement, but any Receiving Party or Creating Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEII as reasonably possible; or

(k) To ERCOT and its consultants, the IMM, the Reliability Monitor, and members of task forces and working groups of ERCOT, if engaged in performing analysis of abnormal system conditions, disturbances, unusual events, and abnormal system performance, or engaged in tasks involving ERCOT Critical Energy Infrastructure Information (ECEII) for support of the ERCOT Transmission Grid. Notwithstanding the foregoing sentence, task forces and working groups may not receive Ancillary Service Offer prices or other competitively sensitive price or cost information before expiration of its status as Protected Information, and each member of a task force or working group shall execute a confidentiality agreement with requirements substantially similar to those in Section 1.3, prior to receiving any Protected Information or ECEII. Data to be disclosed under this exception to task forces and working groups must be limited to clearly defined periods surrounding the relevant conditions, events, or performance under review and must be limited in scope to information pertinent to the condition or events under review and may include the following:

(i) QSE Ancillary Service awards and deployments, in aggregate and by type of Resource;

(ii) Resource facility availability status, including the status of switching devices, auxiliary loads, and mechanical systems that had a material impact on Resource facility availability or an adverse impact on the transmission system operation;

(iii) Individual Resource information including Base Points, maximum/minimum generating capability, droop setting, real power output, and reactive output;

(iv) Resource protective device settings and status;

(v) Data from COPs;

(vi) Resource Outage schedule information; and

(vii) Black Start Service (BSS) test results and ERCOT’s Black Start plan, including individual Black Start Resource start-up procedures, cranking paths, and individual TSP Black Start plans; or

(l) To the CFTC if requested from ERCOT by the CFTC as part of an investigation or regulatory inquiry authorized pursuant to the Commodity Exchange Act and the CFTC’s regulations or if required to be submitted to the CFTC pursuant to any other law, provided that ERCOT, as the Receiving Party or Creating Party, must timely submit a written request for confidential treatment in accordance with the CFTC’s regulations or other applicable law.

(2) Protected Information may not be disclosed to other Market Participants prior to ten days following the Operating Day under review.

(3) ERCOT may disclose, and may authorize a Receiving Party or Creating Party to disclose, ECEII to the public or to any person under the provisions of this paragraph, except for ECEII otherwise protected from disclosure pursuant to law, regulation, or order.

(a) ERCOT may propose to disclose ECEII that is not otherwise protected from disclosure pursuant to law, regulation, or order. Any Receiving Party or Creating Party other than ERCOT may request ERCOT authorization to disclose such ECEII.

(i) ERCOT may propose to disclose ECEII that is not otherwise protected from disclosure pursuant to law, regulation, or order if it determines that the public benefit of the proposed disclosure of ECEII outweighs the potential harm resulting from the disclosure. ERCOT shall issue a Market Notice regarding ERCOT’s intent to disclose the ECEII, subject to objection as further provided in paragraph (c) below.

(ii) A request by a Receiving Party or Creating Party other than ERCOT for authorization to disclose ECEII shall be submitted by e-mail to ERCOT’s General Counsel. If the ECEII is not otherwise protected from disclosure pursuant to law, regulation, or order, and ERCOT determines that the public benefit of the proposed disclosure of ECEII outweighs the potential harm resulting from the disclosure, ERCOT shall issue a Market Notice authorizing the ECEII to be disclosed, subject to objection as further provided in paragraph (c) below. ERCOT shall make such a determination no later than five Business Days following the date it receives the request.

(b) The Market Notice issued pursuant to paragraph (a)(i) or (ii) above shall identify the ECEII to be disclosed; the party requesting the disclosure; the public benefit justifying the proposed disclosure; the date on which the information may be disclosed, which shall be no sooner than five Business Days following the date of the Market Notice; and, if the proposed disclosure is not to the public, the persons to whom ECEII would be disclosed. The authorization shall be effective unless a Market Participant submits an objection pursuant to paragraph (c) below.

(c) Any Market Participant may submit written objections to the proposed disclosure. Such objections shall be submitted by e-mail to ERCOT’s General Counsel no later than the end of the fourth Business Day following the issuance of the Market Notice described in paragraph (b) above. Failure to object to the proposed allowance of ECEII disclosure pursuant to this paragraph shall constitute a waiver of any such objection for all purposes. ERCOT shall provide notice of the objection to the party requesting authorization to disclose ECEII no later than the end of the Business Day following receipt of the objection. The party requesting authorization to disclose ECEII shall not disclose the ECEII if it has been notified of any objection pursuant to this paragraph unless and until ERCOT issues a second Market Notice authorizing disclosure, as provided in paragraph (d) below.

(d) If one or more objections to disclosure is submitted pursuant to paragraph (c) above, ERCOT shall issue a second Market Notice describing each such objection and stating whether the objection affects ERCOT’s determination as to the proposed disclosure of ECEII. If ERCOT determines that the ECEII should still be disclosed notwithstanding these objections, the second Market Notice shall establish the date on which the ECEII may be disclosed, which shall be no sooner than the fifth Business Day following the issuance of the second Market Notice. ERCOT’s determination in the second Market Notice is a final decision that may be challenged at the PUCT without using the processes described in Section 20, Alternative Dispute Resolution. If ERCOT authorizes a non-public disclosure of ECEII, the party disclosing the ECEII shall require each recipient of ECEII to enter into a nondisclosure agreement that includes the restrictions against disclosure described in Section 1.3.2, ERCOT Critical Energy Infrastructure Information, as a condition for obtaining the ECEII.

(e) Notwithstanding anything in this Section, ERCOT may disclose ECEII to any federal, state or local government official without issuing a Market Notice if ERCOT determines that such disclosure is necessary to facilitate the government official’s public duties and that the delay associated with providing the Notice otherwise required by this paragraph (3) would impair that government official’s ability to take action to address a public emergency. As soon as practicable, but no later than 24 hours following the disclosure:

(i) ERCOT shall provide Notice to the Disclosing Party and all Market Participants materially impacted by the disclosure; and

(ii) ERCOT shall issue a Market Notice describing the disclosure, unless ERCOT determines that such a Notice could jeopardize public safety or welfare, in which case no Notice is required.

(iii) Each Disclosing Party, other than ERCOT, shall provide Notice to each Creating Party whose information has been disclosed pursuant to this paragraph (e).

(f) Notwithstanding anything in this Section, any Receiving Party or Creating Party other than ERCOT may disclose ECEII to any federal, state or local government official without requesting prior authorization from ERCOT if the Receiving Party or Creating Party determines that such disclosure is necessary to facilitate the government official’s public duties and that the delay associated with requesting prior ERCOT authorization as otherwise required by this paragraph (3) would impair that government official’s ability to take action to address a public emergency.

(i) The Receiving Party or Creating Party shall provide Notice to ERCOT and all Market Participants materially impacted by the disclosure as soon as practicable, but no later than 24 hours following the disclosure.

(ii) ERCOT shall issue a Market Notice describing the disclosure as soon as practicable, but no later than 24 hours following receipt of notice from the Receiving Party or Creating Party, unless ERCOT determines that such a Notice could jeopardize public safety or welfare, in which case no Notice is required.

1.3.8 Commission Review of ERCOT Determinations Regarding Protected Information or ERCOT Critical Energy Infrastructure Information Status

(1) A determination by ERCOT that one or more items are or are not Protected Information or ECEII, or that the public benefit of the proposed disclosure of ECEII outweighs the potential harm resulting from the disclosure, is a final decision that may be challenged at the PUCT without using the processes described in Section 20, Alternative Dispute Resolution. Any Entity materially affected by ERCOT’s determination shall, as a condition for seeking relief at the PUCT, notify ERCOT’s General Counsel no later than 1700 Central Prevailing Time (CPT) on the date five Business Days following the date ERCOT notified the submitter of its determination and shall file any complaint against ERCOT no later than 35 days following the date of the final decision, pursuant to P.U.C. Proc. R. 22.251, Review of Electric Reliability Council of Texas (ERCOT) Conduct. If an Entity materially affected by ERCOT’s determination notifies ERCOT that it is challenging ERCOT’s determination and files a complaint no later than 35 days following the ERCOT determination, ERCOT shall not disclose the information until the PUCT issues a final order authorizing such release.

2.1 DEFINITIONS

ERCOT System Infrastructure

The transmission, distribution and generation assets that comprise the ERCOT System and the physical and virtual cyber assets used to control the ERCOT System.

ERCOT Critical Energy Infrastructure Information (ECEII)

Specific engineering, vulnerability, or detailed design information concerning proposed or existing ERCOT System Infrastructure that:

(a) Relates details about the production, generation, transportation, transmission or distribution of energy;

(b) Could foreseeably be useful to a person planning an attack on ERCOT System Infrastructure;

(c) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. § 552, and has not been disclosed to the public through lawful means; and

(d) Does not simply give the general location of the ERCOT System Infrastructure.

2.2 ACRONYMS

**ECEII** ERCOT Critical Energy Infrastructure Information

3.10 Network Operations Modeling and Telemetry

(1) ERCOT shall use the physical characteristics, ratings, and operational limits of all Transmission Elements of the ERCOT Transmission Grid and other information from the Transmission Service Providers (TSPs) and Resource Entities to specify limits within which the transmission network is defined in the network models made available to Market Participants as noted below and used to operate the ERCOT Transmission Grid as updated. If a Private Use Network is not registered as a Resource Entity, then ERCOT shall use equivalent model data provided by TSPs, if available, that represents the Private Use Network in the TSPs’ modeling systems for use in the Network Operations Model.

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| ***[NPRR857: Replace paragraph (1) above with the following upon system implementation:]***  (1) ERCOT shall use the physical characteristics, ratings, and operational limits of all Transmission Elements of the ERCOT Transmission Grid and other information from Transmission Service Providers (TSPs), Direct Current Tie Operators (DCTOs), and Resource Entities to specify limits within which the transmission network is defined in the network models made available to Market Participants as noted below and used to operate the ERCOT Transmission Grid as updated. If a Private Use Network is not registered as a Resource Entity, then ERCOT shall use equivalent model data provided by TSPs, if available, that represents the Private Use Network in the TSPs’ modeling systems for use in the Network Operations Model. |

(2) Because the ERCOT market requires accurate modeling of Transmission Elements in order to send accurate Base Points and pricing signals to Market Participants, ERCOT shall manage the Network Operations Model. By providing Base Points and pricing signals by Electrical Bus to Market Participants, the Market Participants’ responses result in power flows on all Transmission Elements that ERCOT must monitor and, if necessary for reliability reasons, manage within ratings provided by the TSP and Resource Entity and limits assigned by ERCOT including Generic Transmission Limits (GTLs) as may be defined in Section 3.10.7.6, Use of Generic Transmission Constraints and Generic Transmission Limits.

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| ***[NPRR857: Replace paragraph (2) above with the following upon system implementation:]***  (2) Because the ERCOT market requires accurate modeling of Transmission Elements in order to send accurate Base Points and pricing signals to Market Participants, ERCOT shall manage the Network Operations Model. By providing Base Points and pricing signals by Electrical Bus to Market Participants, the Market Participants’ responses result in power flows on all Transmission Elements that ERCOT must monitor and, if necessary for reliability reasons, manage within ratings provided by each TSP, DCTO, and Resource Entity and limits assigned by ERCOT including Generic Transmission Limits (GTLs) as may be defined in Section 3.10.7.6, Use of Generic Transmission Constraints and Generic Transmission Limits. |

(3) TSPs and Resource Entities shall provide ERCOT with equipment ratings and update the ratings as required by ERCOT. ERCOT may request TSPs and Resource Entities to provide detailed information on the methodology, including data for determination of each requested rating. ERCOT may review and comment on the methodology. ERCOT shall post all methodologies on the Market Information System (MIS) Secure Area within seven days following a change in methodology.

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| ***[NPRR857: Replace paragraph (3) above with the following upon system implementation:]***  (3) Each TSP, DCTO, and Resource Entity shall provide ERCOT with equipment ratings and update the ratings as required by ERCOT. ERCOT may request that a TSP, DCTO, or Resource Entity provide detailed information on the methodology, including data for determination of each requested rating. ERCOT may review and comment on the methodology. ERCOT shall post all methodologies on the Market Information System (MIS) Secure Area within seven days following a change in methodology. |

(4) ERCOT must use system ratings consistent with the ratings expected to be used during Real-Time for the system condition being modeled, including Dynamic Ratings using expected temperatures for those system conditions. For each model, ERCOT shall post ratings and the ambient temperatures used to calculate the ratings on the MIS Secure Area when the model is published.

(5) ERCOT shall use consistent information within and between the various models used by ERCOT in a manner that yields consistent results. For operational and planning models that are intended to represent the same system state the results should be consistent and the naming should be identical.

(6) ERCOT shall use a Network Operations Model Change Request (NOMCR) process to control all information entering the Network Operations Model. In order to allow for construction schedules, each NOMCR must be packaged as a single package describing any incremental changes and referencing any prerequisite NOMCRs, using an industry standard data exchange format. A package must contain a series of instructions that define the changes that need to be made to implement a network model change. ERCOT shall verify each package for completeness and accuracy prior to the period it is to be implemented.

(7) ERCOT shall use an automated process to manage the Common Information Model (CIM) compliant packages loaded into the Network Operations Model as each construction phase is completed. ERCOT shall reject any NOMCRs that are not CIM compliant. Each CIM compliant NOMCR must also be associated with commands to update the graphical displays associated with the network model modification. During the testing phase, each NOMCR must be tested for proper sequencing and its effects on downstream applications.

(8) ERCOT shall track each data submittal received from TSPs via the NOMCR process and from Resource Entities via the Resource Registration process. Resource Registration data is converted by ERCOT to the appropriate NOMCR format through implementation and final testing of the change. ERCOT shall notify each TSP and Resource Entity when the requested change is processed and implemented in accordance with Section 3.10.1, Time Line for Network Operations Model Changes. ERCOT shall also provide the submitting TSP a link to a Network Operations Model containing the change for verifying the implementation of the NOMCR and associated one-line displays. ERCOT shall post all NOMCRs on the MIS Certified Area for TSPs only within five Business Days following receipt of the NOMCR, consistent with the requirements regarding ERCOT Critical Energy Infrastructure Information (ECEII) set forth in Section 1.3, Confidentiality. When posting a NOMCR, each change must be posted using the CIM data exchange format showing incremental changes to the last Network Operations Model for TSPs only, to facilitate TSPs in updating their internal network models to reflect changes made at ERCOT. For each NOMCR, ERCOT shall post on the MIS Certified Area for TSPs only the current status on the in-service date for each NOMCR, including any prerequisite NOMCRs provided by the requestor.

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| ***[NPRR857: Replace paragraph (8) above with the following upon system implementation:]***  (8) ERCOT shall track each data submittal received from TSPs and DCTOs via the NOMCR process and from Resource Entities via the Resource Registration process. Resource Registration data is converted by ERCOT to the appropriate NOMCR format through implementation and final testing of the change. ERCOT shall notify each TSP, DCTO, and Resource Entity when the requested change is processed and implemented in accordance with Section 3.10.1, Time Line for Network Operations Model Changes. ERCOT shall also provide the submitting TSP and DCTO a link to a Network Operations Model containing the change for verifying the implementation of the NOMCR and associated one-line displays. ERCOT shall post all NOMCRs on the MIS Certified Area for TSPs only within five Business Days following receipt of the NOMCR, consistent with the requirements regarding ERCOT Critical Energy Infrastructure Information (ECEII) set forth in Section 1.3, Confidentiality. When posting a NOMCR, each change must be posted using the CIM data exchange format showing incremental changes to the last Network Operations Model for TSPs only, to facilitate TSPs in updating their internal network models to reflect changes made at ERCOT. For each NOMCR, ERCOT shall post on the MIS Certified Area for TSPs only the current status on the in-service date for each NOMCR, including any prerequisite NOMCRs provided by the requestor. |

(9) ERCOT shall update the Network Operations Model under this Section and coordinate it with the planning models for consistency to the extent applicable.

(10) Any requestor of any changes in system topology or telemetry must receive approval from ERCOT before connecting of any associated equipment to the ERCOT Transmission Grid. ERCOT shall notify a requestor of any deficiencies in its submittal for changes in system topology or telemetry. ERCOT shall accept corrections to the submittal if the requestor has corrected any deficiencies by the required submittal date specified in Section 3.10.1. ERCOT shall post any changes to an NOMCR on the MIS Certified Area for TSPs within three Business Days of accepting corrections.

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| ***[NPRR857: Replace paragraph (10) above with the following upon system implementation:]***  (10) Any requestor of any changes in system topology or telemetry must receive approval from ERCOT before connecting of any associated equipment to the ERCOT Transmission Grid. ERCOT shall notify a requestor of any deficiencies in its submittal for changes in system topology or telemetry. ERCOT shall accept corrections to the submittal if the requestor has corrected any deficiencies by the required submittal date specified in Section 3.10.1. ERCOT shall post any changes to a NOMCR on the MIS Certified Area for TSPs and DCTOs within three Business Days of accepting corrections. |

(11) On receipt of the information set forth in Section 3.10.7, ERCOT System Modeling Requirements, ERCOT shall review the information and notify the requestor of any required modifications. ERCOT may, at its discretion, require changes or more details regarding the work plan for any new or relocated facilities. The requestor shall notify ERCOT and any other affected Entities as soon as practicable of any ERCOT requested changes to the work plan. The requestor shall consult with other Entities likely to be affected and shall revise the work plan, following any necessary or appropriate discussions with ERCOT and other affected Entities. ERCOT shall approve or reject the request, including any revisions made by the requestor, within 15 days of receipt of the complete request and any revisions. Following ERCOT approval, ERCOT shall publish a summary of the revised NOMCR on the MIS Certified Area for TSPs.

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| ***[NPRR857: Replace paragraph (11) above with the following upon system implementation:]***  (11) On receipt of the information set forth in Section 3.10.7, ERCOT System Modeling Requirements, ERCOT shall review the information and notify the requestor of any required modifications. ERCOT may, at its discretion, require changes or more details regarding the work plan for any new or relocated facilities. The requestor shall notify ERCOT and any other affected Entities as soon as practicable of any ERCOT requested changes to the work plan. The requestor shall consult with other Entities likely to be affected and shall revise the work plan, following any necessary or appropriate discussions with ERCOT and other affected Entities. ERCOT shall approve or reject the request, including any revisions made by the requestor, within 15 days of receipt of the complete request and any revisions. Following ERCOT approval, ERCOT shall publish a summary of the revised NOMCR on the MIS Certified Area for TSPs and DCTOs. |

3.10.2 Annual Planning Model

(1) For each of the next six years, ERCOT shall develop models for annual planning purposes that contain, as much as practicable, information consistent with the Network Operations Model. The “Annual Planning Model” for each of the next six years is a model of the ERCOT power system (created, approved, posted, and updated regularly by ERCOT) as it is expected to operate during peak Load conditions for the corresponding future year.

(2) By October 15th of each year, ERCOT shall update, for each of the next six years, the ERCOT Planning Model and post it to the MIS Secure Area

(3) ERCOT shall make available to TSPs and/or Distribution Service Provider (DSPs) and all appropriate Market Participants, consistent with the requirements regarding ECEII set forth in Section 1.3, the transmission model used in transmission planning. ERCOT shall provide model information through the use of the Electric Power Research Institute (EPRI) and North American Electric Reliability Corporation (NERC) sponsored CIM and web-based Extensible Markup Language (XML) communications or Power System Simulator for Engineering (PSS/E) format.

(4) ERCOT shall post the schedule for updating transmission information on the MIS Secure Area.

(5) ERCOT shall coordinate updates to the Annual Planning Model with the Network Operations Model to ensure consistency of data within and between the Annual Planning Model and Network Operations Model to the extent practicable.

3.10.3 CRR Network Model

(1) ERCOT shall develop models for Congestion Revenue Right (CRR) Auctions that contain, as much as practicable, information consistent with the Network Operations Model. Names of Transmission Elements in the Network Operations Model and the CRR Network Model must be identical for the same physical equipment.

(2) ERCOT shall verify that the names of Hub Buses and Electrical Buses used to describe the same device in any Hub are identically named in both the Network Operations Model and the CRR Network Model.

(3) Each CRR Network Model must include:

(a) A system-wide diagram including all modeled Transmission Elements (except those within Private Use Networks) and Resource Nodes;

(b) Station one-line diagrams for all Settlement Points (indicating the Settlement Point that the Electrical Bus is a part of) and including all Hub Buses used to calculate Hub prices (if applicable), except those within Private Use Networks;

(c) Generation Resource locations;

(d) Transmission Elements;

(e) Transmission impedances;

(f) Transmission ratings;

(g) Contingency lists;

(h) Data inputs used in the calculation of Dynamic Ratings, and

(i) Other relevant assumptions and inputs used for the CRR Network Model.

(4) ERCOT shall make available to TSPs and/or DSPs and all appropriate Market Participants, consistent with the requirements regarding ECEII set forth in Section 1.3, the CRR Network Model. ERCOT shall provide model information through the use of the EPRI and NERC-sponsored CIM and web based XML communications or PSS/E format.

3.10.4 ERCOT Responsibilities

(1) ERCOT shall design, install, operate, and maintain its systems and establish applicable related processes to meet the State Estimator Standards for Transmission Elements that under typical system conditions potentially affect the calculation of Locational Marginal Prices (LMPs) as described in Section 3.10.7.5, Telemetry Standards, and Section 3.10.9, State Estimator Standards. ERCOT shall post all documents relating to the State Estimator Standards on the MIS Secure Area.

(2) During Real-Time, ERCOT shall calculate LMPs and take remedial actions to ensure that actual flow on a given Transmission Element is less than the Normal Rating and any calculated flow due to a contingency is less than the applicable Emergency Rating and 15-Minute Rating.

(3) ERCOT shall install Network Operations Model test facilities that will accommodate execution of a test Real-Time sequence and preliminary test LMP calculator to demonstrate the correct operation of new Network Operations Models prior to releasing the model to Market Participants for detail testing and verification. The Network Operations Model test facilities support power flow and contingency analyses to test the data set representation of a proposed transmission model update and simulate LMP calculations using typical test data.

(4) ERCOT shall install EMS test and simulation facilities that accommodate execution of the State Estimator (SE) and LMP calculator, respectively. These facilities will be used to conduct tests prior to placing a new model into ERCOT’s production environment to verify the new model’s accuracy. The EMS test facilities allow a potential model to be tested before replacing the current production environment model. The EMS test and simulation facilities must perform Real-Time security analysis to test a proposed transmission model before replacing the current production environment model. The EMS SE test facilities must have Real-Time ICCP links to test the state estimation function using actual Real-Time conditions. The EMS LMP test facilities must accept data uploads from the production environment providing Qualified Scheduling Entity (QSE) Resource offers, and telemetry via ICCP. If the production data are unavailable, ERCOT may employ a data simulation tool or process to develop test data sets for the LMP test facilities. For TSPs, ERCOT shall acquire model comparison software that will show all differences between subsequent versions of the Network Operations Model and shall make this information available to TSPs only within one week following test completion. For non-TSP Market Participants, ERCOT shall post the differences within one week following test completion between subsequent versions of the Redacted Network Operations Model on the MIS Secure Area. This comparison shall indicate differences in device parameters, missing or new devices, and status changes.

(5) When implementing Transmission Element changes, ERCOT shall correct errors uncovered during testing that are due to submission of inaccurate information. Each TSP and Resource Entity shall provide reasonably accurate information at the time of the original submission.

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| ***[NPRR857: Replace paragraph (5) above with the following upon system implementation:]***  (5) When implementing Transmission Element changes, ERCOT shall correct errors uncovered during testing that are due to submission of inaccurate information. Each TSP, DCTO, and Resource Entity shall provide reasonably accurate information at the time of the original submission. |

(6) ERCOT may update the model on an interim basis, outside of the timeline described in Section 3.10.1, Time Line for Network Operations Model Changes, for the correction of temporary configuration changes in a system restoration situation, such as after a storm, or correction of impedances and ratings.

(7) Interim updates to the Network Operations Model caused by unintentional inconsistencies of the model with the physical transmission grid may be made. If an interim update is implemented, ERCOT shall report changes to the PUCT Staff and the IMM. ERCOT shall provide Notice via electronic means to all Market Participants and post the Notice on the MIS Secure Area detailing the changed model information and the reason for the interim update within two Business Days following the report to PUCT Staff and the IMM.

(8) A TSP and Resource Entity, with ERCOT’s assistance, shall validate its portion of the Network Operations Model according to the timeline provided in Section 3.10.1. ERCOT shall provide TSPs access, consistent with the requirements regarding ECEII set forth in Section 1.3, to an environment of the ERCOT EMS where the Network Operations Model and the results of the Real-Time SE are available for review and analysis within five minutes of the Real-Time solution. This environment is provided as a tool to TSPs to perform power flow studies, contingency analyses and validation of SE results.

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| ***[NPRR857: Replace paragraph (8) above with the following upon system implementation:]***  (8) TSPs, DCTOs, and Resource Entities, with ERCOT’s assistance, shall validate their portion of the Network Operations Model according to the timeline provided in Section 3.10.1. ERCOT shall provide TSPs access, consistent with the requirements regarding ECEII set forth in Section 1.3, to an environment of the ERCOT EMS where the Network Operations Model and the results of the Real-Time SE are available for review and analysis within five minutes of the Real-Time solution. This environment is provided as a tool to TSPs to perform power flow studies, contingency analyses and validation of SE results. |

(9) ERCOT shall make available to TSPs, consistent with the requirements regarding ECEII, the Network Operations Model used to manage the reliability of the transmission system as well as proposed Network Operations Models to be implemented at a future date. ERCOT shall post on the MIS Secure Area the Redacted Network Operations Model, consistent with the requirements regarding release of ECEII, as well as proposed Redacted Network Operations Models to be implemented at a future date. ERCOT shall provide model information through the use of the EPRI and NERC-sponsored CIM and web-based XML communications.

12.1 Overview

(1) ERCOT shall create and maintain an electronic Market Information System (“ERCOT Market Information System” or “MIS”). Part of the MIS contains information available to the public in the MIS Public Area; part of the MIS contains information available only to applicable Entities in the MIS Secure Area; and part of the MIS contains information available only to an individual Market Participant in the MIS Certified Area.

(2) The MIS Secure and Certified Areas provide restricted access to ERCOT Critical Energy Infrastructure Information (ECEII), to the extent that the Protocols or any Other Binding Document requires such information to be posted thereon. All ECEII posted on the MIS Secure or Certified Area shall be subject to the restrictions in Section 1.3.2, ERCOT Critical Energy Infrastructure Information. ECEII posted on the MIS Secure or Certified Area may be accessed only by those individuals that are issued ECEII-eligible Digital Certificates. .

(3) ERCOT shall also create and maintain an Internet website with public and restricted areas.

12.3 MIS Administrative and Design Requirements

(1) The Market Information System (MIS) must comply with the administrative and design requirements specified as follows:

(a) ERCOT shall ensure that all Market Participants have access to the ERCOT MIS on a nondiscriminatory basis.

(b) The MIS must, at a minimum, provide all information required under any regulations of the Public Utility Commission of Texas (PUCT) or other Governmental Authorities.

(c) The MIS must include any available information that may be used by a Qualified Scheduling Entity (QSE) to estimate or verify bills for all ERCOT-provided settlements.

(d) At the request of an Eligible Transmission Service Customer, ERCOT shall provide the methodology and data to independently reproduce information contained in the MIS related to the operation of the ERCOT market.

(e) The MIS must include security measures to safeguard ERCOT Critical Energy Infrastructure Information (ECEII) and protect the confidentiality of Protected Information as required by these Protocols.

(f) The MIS must comply with industry standards for commercial websites, including query and search functionality.

(g) The MIS must provide easy navigation based on the posting list described in paragraph (4) of Section 12.2, ERCOT Responsibilities, above for document retrieval. This navigability must include hyperlinks between listings and the MIS posted information.

(h) The MIS must provide easy navigation to the Other Binding Documents described in paragraph (5) of Section 12.2 above. This navigability must include hyperlinks between listings and the documents.

16.12 User Security Administrator and Digital Certificates

(1) Each Market Participant is allowed access to certain ERCOT computer systems through the use of Digital Certificates upon execution of the Standard Form Market Participant Agreement (as provided for in Section 22, Attachment A, Standard Form Market Participant Agreement), and completion of applicable registration and qualification requirements. Digital Certificates expire after one year.

(2) A User Security Administrator (USA) is responsible for managing the Market Participant’s access to non-public ERCOT computer systems through Digital Certificates. A USA may also be responsible for managing the Market Participant’s access to the online Resource Integration and Ongoing Operations (“RIOO”) system, which does not require a Digital Certificate. Each Market Participant that will receive Digital Certificate(s) must, as part of the application for registration with ERCOT, designate an individual employee or authorized agent as its USA, and optionally, a backup USA. If a Market Participant has designated a backup USA and the primary USA fails to perform, or is unable to perform, the functions required of a USA, then the backup USA shall perform any and all functions required of the primary USA. The Market Participant is responsible for revising its USA list as the need arises. The Market Participant’s USA is responsible for registering all Market Participant’s Digital Certificate holders (“Certificate Holders”) and administering the use of Digital Certificates on behalf of the Market Participant. ERCOT Critical Energy Infrastructure Information (ECEII) posted on the Market Information System (MIS) Secure or Certified Area may be accessed only by those individuals that are issued ECEII-eligible Digital Certificates. Each Market Participant that will receive Digital Certificates and having more than one ERCOT functional registration must designate a USA for each registration (which may be the same employee or authorized agent) and shall manage each registration separately for the purposes of this Section. Once the Market Participant completes registration requirements, ERCOT shall send the USA a copy of the Digital Certificate user guide.

(3) Only Market Participants registered with ERCOT as either a Municipally Owned Utility (MOU) or an Electric Cooperative (EC), and as a Distribution Service Provider (DSP) and/or Load Serving Entity (LSE), may be eligible to opt out of designating a USA and receiving Digital Certificates if the Market Participant demonstrates to ERCOT’s satisfaction that it does not need a Digital Certificate to perform its obligations under the ERCOT Protocols, market guides, or other applicable rules.

(4) An eligible Market Participant that wishes to opt out of designating a USA and receiving Digital Certificates shall submit a request form, found on the ERCOT website, confirming its desire to opt out subject to ERCOT’s review and approval. ERCOT will notify the requesting Market Participant of its approval or disapproval of the request within 14 Business Days. ERCOT may subsequently revoke, at its sole discretion, Market Participant’s election to opt out if the Market Participant’s lack of a Digital Certificate causes administrative burdens or reliability concerns. ERCOT will send notice of revocation to the Market Participant who will have ten Business Days to fill out a Notice of Change of Information (NCI) form (Section 23, Form E, Notice of Change of Information) and submit it to ERCOT. Once the NCI is submitted, the request for a Digital Certificate will be subject to the same requirements applicable to the processing of an initial request by a new Market Participant.

(5) Market Participants that have received approval from ERCOT to opt out of designating a USA and receiving Digital Certificates are not excused from obligations under the ERCOT Protocols, other than the obligations required in this Section 16.12 regarding Digital Certificates. Market Participants who opt out shall still be required to submit the Digital Certificate Audit Attestation (DCAA) required by paragraph (2) of Section 16.12.3, Market Participant Audits of User Security Administrators and Digital Certificates, for the portion of the year, if any, during which they had a USA and Digital Certificate(s).

(6) A Market Participant that has been granted approval by ERCOT to opt out of designating a USA and receiving Digital Certificates will not have access to information that would ordinarily be retrievable with a Digital Certificate. A Market Participant that has been granted approval by ERCOT to opt out of designating a USA and receiving Digital Certificates may, at any time, cancel its opt-out status by submitting an NCI form (Section 23, Form E).

17.3.2 Data Categories and Handling Procedures

ERCOT shall develop, and refine based on experience, a detailed catalog of all data categories that it can acquire and the procedures that it will use to handle such data, including procedures for protecting Protected Information and ERCOT Critical Energy Infrastructure Information (ECEII). This catalog must include documentation of the meaning of the data elements, and must be updated upon any change in systems (e.g. Energy and Market Management System (EMMS) or Settlements) that affect the data elements or interpretation of these elements.

17.4 Provision of Data to Individual Market Participants

Data requested by a Market Participant that is not available to the requesting Market Participant via the Market Information System (MIS) may be provided by ERCOT to the requesting Market Participant subject to constraints on ERCOT’s resources and applicable restrictions on Protected Information and ERCOT Critical Energy Infrastructure Information (ECEII), but this Section is not an authorization to release Protected Information or ECEII of other Entities. ERCOT shall accommodate these requests on a nondiscriminatory basis.