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| NPRR Number | [1084](http://www.ercot.com/mktrules/issues/NPRR1084) | NPRR Title | Improvements to Reporting of Resource Outages and Derates |
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| Date | November 12, 2021 |
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| Submitter’s Information |
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| Cell Number |  |
| Market Segment | Investor Owned Utility (IOU) |

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| Comments |

CenterPoint Energy Houston Electric, LLC (CenterPoint Energy) appreciates the opportunity to comment on this Nodal Protocol Revision Request (NPRR). It is CenterPoint Energy’s understanding that ERCOT’s proposed modifications to the Protocols were drafted to address Resource Outages. While the current process for reporting transmission Outages to ERCOT has not been cited as an issue, ERCOT’s proposed changes will introduce new requirements for transmission Outage reporting. The proposed changes would require that any Outage be entered into the Outage Scheduler even if the Outage is less than two hours in duration.

Transmission Service Providers (TSPs) routinely identify substation breakers that require short term maintenance, resulting in Outages that typically last less than two hours. The existing rules allow this equipment to be removed from service, maintained, and returned to service within two hours without entering the Outage into the ERCOT Outage Scheduler. ERCOT’s proposed language in Section 3.1.4.5, Notice of Forced Outage or Unavoidable Extension of Planned, Maintenance, or Rescheduled Outage Due to Unforeseen Events, requires all Outages to be entered within one hour of the beginning of the Outage, even if the Outage lasted less than one hour. This would require the TSP to enter an equipment Outage into the Outage Scheduler even after it has been returned to service.

Another implication of the proposed language would impact how line Outages are executed. TSPs open substation breakers to de-energize the line and then open the line switch. Subsequently, the substation breakers are closed, restoring service to the corresponding substation bay. In accordance with the existing rules, those breaker Outages are not required to be entered into the ERCOT Outage Scheduler since they are executed in less than two hours.

ERCOT’s proposed language would require temporary transmission equipment Outages to be entered into the Outage Scheduler. Alternatively, CenterPoint Energy proposes language that differentiates Outage reporting requirements for transmission Outages and Resource outages.

These comments are filed on top of the ERCOT comments dated October 22, 2021.

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| Revised Cover Page Language |

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| NPRR Number | [1084](http://www.ercot.com/mktrules/issues/NPRR1084) | NPRR Title | Improvements to Reporting of Resource Outages, Derates, and Startup Loading Failures |
| Revision Description | This Nodal Protocol Revision Request (NPRR) allows ERCOT to provide important information about Resource Forced Outages, Forced Derates, and Startup Loading Failures to the public in a more complete and timely manner. Specifically, these changes will:* Require the entry of all Resource Outages into the Outage Scheduler, regardless of the duration of the Outage;
* Require the entry of Forced Derates into the Outage Scheduler for any Forced Derate greater than ten MW of the Seasonal net max sustainable rating of the Resource unless the Forced Derate is less than 2% the Seasonal net max sustainable rating of the Resource *and* the expected or actual duration is less than 30 minutes;
* Require the entry of all Resource Forced Outages and reportable Forced Derates into Outage Scheduler within one hour of the beginning of the Forced Outage or Forced Derate; and
* Require the entry of the reason for any Forced Outage or Forced Derate into the “nature of work” field in the Outage Scheduler. The cause codes included in the drop-down menu for the “nature of work” field will be expanded and the Outage Scheduler application will be modified to allow the “nature of work” field to be updated through the end of the Outage;
* Modify the definition of Startup Loading Failure to clarify that it is a Forced Outage subject to these reporting requirements; and
* Modify the definition of Forced Derate to establish thresholds only in the requirements and not in the definition. This allows for different thresholds for Real-Time updates and Outage Scheduler updates.
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| Business Case | During and following the February 2021 extreme cold weather event, regulators, legislators, and the public reasonably requested information from ERCOT about Resource Outages associated with the event. The Outage Scheduler is the initial source of record for ERCOT to compile and report Resource Outages. The value of the Outage Scheduler as a reliable source of Outage information is dependent on the timeliness and completeness of the data entered into that system by Resource Entities or Qualified Scheduling Entities (QSEs). The current requirements for entering Forced Outages and Forced Derates of Resources into the Outage Scheduler are inadequate for complete and timely reporting of all Forced Outages and Derates. Specifically, Forced Outages with a duration of less than two hours are not required to be entered into the Outage Scheduler, leading to an incomplete view of the number of Outages. In addition, there is no specified deadline for entering Forced Outages or Forced Derates into Outage Scheduler. This also results in incorrect reporting of the Real-Time and future MW impact of Forced Outages and Forced Derates, as this information is often not entered into Outage Scheduler until days after the fact. The Protocols also do not currently provide sufficient clarity as to the reporting of Startup Loading Failures. The revisions in this NPRR concerning submission of Forced Outage and Forced Derate information will also satisfy part of Item Number 5 on the TAC Emergency Conditions List, which identifies a need “to ensure more specific, complete, and accurate information for Forced Outages of Resources during Real-Time operational conditions.” The revisions proposed in this NPRR will not only improve the quality of ERCOT’s post-event reporting, but will ensure that ERCOT’s operators and engineers have more accurate and timely information about the availability and capability of Resources for use in future-looking studies. When Forced Outages and Forced Derates are not entered into the Outage Scheduler in a timely manner, ERCOT’s situational awareness, operational planning analyses, and operating plans can be negatively impacted. |

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| **Market Rules Notes** |

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

* NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage (incorporated 9/1/21)
	+ Section 1.3.1.1

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

* NPRR1067, Market Entry Qualifications, Continued Participation Requirements, and Credit Risk Assessment
	+ Section 1.3.1.1
* NPRR1085, Ensuring Continuous Validity of Physical Responsive Capability (PRC) and Dispatch through Timely Changes to Resource Telemetry and Current Operating Plans (COPs)
	+ Section 3.1.4.4
	+ Section 3.1.4.7

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| Revised Proposed Protocol Language |

**1.3.1.1 Items Considered Protected Information**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(p) Credit limits identifiable to a specific QSE;

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

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

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

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

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

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

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

(i) PUCT Substantive Rules on performance measure reporting;

(ii) These Protocols or Other Binding Documents; or

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 2.1 DEFINITIONS

Forced Derate

The unavailability of a portion of a Resource’s capacity based on its Seasonal net max sustainable rating provided through the Resource Registration process. For Qualified Scheduling Entities (QSEs) representing Intermittent Renewable Resources (IRRs), the loss of a portion of the capacity shall be due to the unavailability of a portion of the equipment and shall not include capacity changes due to changes in the power source (e.g., wind speed at the Wind-powered Generation Resource (WGR) facility for a WGR, or changes in solar irradiance at the PhotoVoltaic Generation Resource (PVGR) facility for a PVGR).

**Startup Loading Failure**

A type of Forced Outage that results when a Generation Resource is unable to operate at Low Sustained Limit (LSL) at the time scheduled in the Current Operating Plan (COP) which occurs while the unit is ramping up to its scheduled MW output. A Startup Loading Failure ends when the Resource:

(a) Achieves its LSL;

(b) Is scheduled to go Off-Line; or

(c) Ceases the attempt the start the Generation Resource and changes its Resource Status to OUT.

**3.1.4.4 Management of Forced Outages or Maintenance Outages**

(1) In the event of a Forced Outage, the Resource Entity or QSE, as appropriate, or TSP must notify ERCOT as soon as practicable by:

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| ***[NPRR857: Replace paragraph (1) above with the following upon system implementation:]***(1) In the event of a Forced Outage, after the affected equipment is removed from service, the Resource Entity or QSE, as appropriate, TSP, or DCTO must notify ERCOT as soon as practicable of its action by:  |

(a) For Resource Outages:

(i) Changing the telemetered Resource Status, including a text description when it becomes known, of the cause of the Forced Outage; and

(ii) Updating the COP; and

(iii) Updating the Outage Scheduler.

(b) For Transmission Facilities Forced Outages:

(i) Changing the telemetered status of the affected Transmission Elements; and

(ii) Updating the Outage Scheduler with the expected return-to-service time.

(2) Forced Outages may require ERCOT to review and withdraw approval of previously approved or accepted, as applicable, Planned Outage, Maintenance Outage, or Rescheduled Outage schedules to ensure reliability.

(3) For Maintenance Outages, the Resource Entity or QSE, as appropriate, or TSP shall notify ERCOT of any Resource or Transmission Facilities Maintenance Outage according to the Maintenance Outage Levels by updating the COP and Outage Scheduler. ERCOT shall coordinate the removal of facilities from service within the defined timeframes as specified by the TSP, QSE or Resource Entity in its notice to ERCOT.

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| ***[NPRR857: Replace paragraph (3) above with the following upon system implementation:]***(3) For Maintenance Outages, the Resource Entity or QSE, as appropriate, TSP, or DCTO shall notify ERCOT of any Resource or Transmission Facilities Maintenance Outage according to the Maintenance Outage Levels by updating the COP and Outage Scheduler. ERCOT shall coordinate the removal of facilities from service within the defined timeframes as specified by the TSP, DCTO, QSE, or Resource Entity in its notice to ERCOT. |

(4) ERCOT may require supporting information describing Forced Outages and Maintenance Outages. ERCOT may reconsider and withdraw approvals of other previously approved Transmission Facilities Outage or an Outage of a Reliability Resource as a result of Forced Outages or Maintenance Outages, if necessary, in ERCOT’s determination to protect system reliability. When ERCOT approves a Maintenance Outage, ERCOT shall coordinate timing of the appropriate course of action under these Protocols.

(5) Removal of a Resource or Transmission Facilities from service under Maintenance Outages must be coordinated with ERCOT. To minimize harmful impacts to the system in urgent situations, the equipment may be removed immediately from service, provided notice is given immediately, by the Resource Entity or TSP, to ERCOT of such action.

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| ***[NPRR857: Replace paragraph (5) above with the following upon system implementation:]***(5) Removal of a Resource or Transmission Facilities from service under Maintenance Outages must be coordinated with ERCOT. To minimize harmful impacts to the system in urgent situations, the equipment may be removed immediately from service, provided the Resource Entity, TSP, or DCTO immediately gives notice of such action to ERCOT. |

**3.1.4.5 Notice of Forced Outage or Unavoidable Extension of Planned, Maintenance, or Rescheduled Outage Due to Unforeseen Events**

(1) If a Planned, Maintenance, or Rescheduled Outage is not completed within the ERCOT-approved timeframe and the Transmission Facilities or Resources are in such a condition that they cannot be restored at the Outage schedule completion date, the requesting party shall submit to ERCOT a Forced Outage (unavoidable extension) form describing the extension of the Outage and providing a revised return date.

(2) Any transmission Forced Outage that occurs in Real-Time must be entered into the Outage Scheduler if it is to remain an Outage for longer than two hours within two hours of the beginning of the Forced Outage.

(3) Any Resource Forced Outage that occurs in Real-Time must be entered into the Outage Scheduler within one hour of the beginning of the Forced Outage.

(4) If the QSE is to receive the exemption described in paragraph (6)(d) of Section 8.1.1.4.1, Regulation Service and Generation Resource/Controllable Load Resource Energy Deployment Performance, the QSE will notify ERCOT Operators by voice communication of every Forced Outage, Forced Derate, or Startup Loading Failure within 15 minutes.

(5) For a Startup Loading Failure, the Resource Entity or its designee must enter a Forced Outage in the Outage Scheduler if the Resource was in an Off-Line status prior to the Startup Loading Failure or update the existing Outage for the Resource if the Resource was on Outage prior to the Startup Loading Failure. The Resource Entity or its designee must also provide a text entry in the supporting information field of the Outage Scheduler that includes the following:

(a) A statement that a Startup Loading Failure occurred;

(b) An explanation of the cause of the Startup Loading Failure using the best available information at the time the Outage or update to the existing Outage is entered, which must be updated if more accurate information becomes available; and

(c) The start time and end time of the Startup Loading Failure portion of the Outage.  Multiple consecutive startup attempts may be aggregated into a single Startup Loading Failure event with a single start and end time.

**3.1.4.7 Reporting of Forced Derates**

(1) The Resource Entity or its designee must enter a Forced Derate into the Outage Scheduler within one hour of the beginning of the Forced Derate for any Forced Derate greater than ten MW unless the Forced Derate is less than 2% of the Seasonal net max sustainable rating of the Resource and the expected or actual duration is less than 30 minutes.

**3.1.6.2 Resources Outage Plan**

(1) Resource Entity Outage submittals shall include the following information:

(a) The primary and alternate phone number of the Resource Entity’s Single Point of Contact for Outage Coordination;

(b) The Resource identified by the name in the Network Operations Model;

(c) The net megawatts of capacity the Resource Entity anticipates will be available during the Outage (if any);

(d) The estimated start and finish dates for each Planned and Maintenance Outage;

(e) An estimate of the acceptable deviation in the Outage schedule (i.e., the earliest start date and the latest finish date for the Outage); and

(f) The nature of work to be performed during the Outage. For a Forced Outage or Forced Derate, the “nature of work” field in the Outage Scheduler shall indicate the best available information about the cause of the Forced Outage or Forced Derate at the time the Outage or derate is entered and shall be updated as soon as more accurate information becomes available.

(2) When ERCOT accepts a Maintenance Outage, ERCOT shall coordinate the timing of the appropriate course of action within the Resource-specified timeframe. The QSE shall notify ERCOT of the Outage and coordinate the time.