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| NPRR Number | [974](http://www.ercot.com/mktrules/issues/NPRR974) | NPRR Title | Capacity Insufficiency Operating Condition Notice (OCN) Transparency |
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| Date | November 11, 2019 |
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| Submitter’s Information |
| Name | Dan Woodfin |
| E-mail Address | dwoodfin@ercot.com |
| Company | ERCOT |
| Phone Number | 512-248-3115 |
| Cell Number |  |
| Market Segment | Not applicable |

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| Comments |

ERCOT proposes an alternative, two-part solution to the issues addressed in this Nodal Protocol Revision Request (NPRR).

First, ERCOT proposes to revert the use of the Operating Condition Notice (OCN) for projected reserve capacity shortage to being issued when there is a projected shortage of available capacity for a future hour, rather than when there is a shortage of committed capacity for a future hour.

* ERCOT changed the use of this type of OCN several years ago in response to discussion by Market Participants at WMS of the need to provide advance notice to the market when ERCOT projected that it might have to issue a Reliability Unit Commitment (RUC) for capacity in some future hour.
* Due to changes in market rules and market behavior since that time, the use of an OCN in this manner this past summer led to such frequent issuances of these OCNs that the message that the OCNs were intended to send became muted.
* One solution to this issue would be to create separate and distinct types of OCNs for the advance notice of the need for a RUC for capacity and for a projected shortage of available capacity. However, in recent discussions with Market Participants, it does not appear that there is still a desire for advance notice of the need for a RUC for capacity. Thus ERCOT proposes to change its procedures to clarify that these types of OCNs will only be issued when there is a projected shortage of available capacity.

Second, ERCOT agrees that the information requested in this NPRR, the capacity shortage based on currently committed capacity and the capacity that is Off-Line but available to start, should be provided to the market not only upon issuance of an OCN, but on a continual basis.

* ERCOT believes that improved transparency from providing this information would be helpful to Market Participants and other stakeholders on an ongoing basis, not only when ERCOT issues an OCN (especially once the procedural change described above is implemented).
* The generation capacity that is Off-Line in the Current Operating Plan (COP) but available to be started in future hours is already posted on the Market Information System (MIS) Public Area in the Short-Term System Adequacy Report pursuant to paragraph (3)(g) of Protocol Section 3.2.3, System Adequacy Reports.
* ERCOT proposes to add two columns to the Short-Term System Adequacy Report to provide estimates of the available capacity from Generation Resources and the available capacity from reserves. In order to avoid issues of incorrect COPs for future days, this available capacity amount would be based on seasonal High Sustained Limits (HSLs) minus Resource Outages for non-Intermittent Renewable Resource (IRR) generation and forecasted output for IRRs.
* ERCOT suggests that it would be beneficial to modify the graph that is shown on the home page of ERCOT.com to include both the committed capacity (currently shown as “Available Capacity” on the graph) and the “real” Available Capacity (including the capacity that is Off-Line but able to start, subject to operational constraints). ERCOT would also propose to make a few other clarifying changes to the ERCOT webpage graphic, such as removal of the “Reserves” shaded area. These changes would also be made to the ERCOT mobile app.

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| Revised Cover Page Language |

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| **Nodal Protocol Sections Requiring Revision**  | 3.2.3, System Adequacy Reports6.5.9.3.1, Operating Condition Notice |
| Revision Description | This Nodal Protocol Revision Request (NPRR) requires ERCOT to include additional data about the amount of the projected capacity availability in the Short-Term System Adequacy Report. |

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| Revised Proposed Protocol Language |

***3.2.3 System Adequacy Reports***

(1) ERCOT shall publish system adequacy reports to assess the adequacy of Resources and Transmission Facilities to meet the projected Demand. ERCOT shall provide reports on a system-wide basis and by Forecast Zone, where applicable.

(2) ERCOT shall generate and post a “Medium-Term System Adequacy Report” on the MIS Secure Area. ERCOT shall update the report monthly using the latest aggregate Generation Resource capacity and Load Resource capacity. The data will be provided for each week, starting with the second week, of a rolling 36-month period. The Medium-Term System Adequacy Report will provide:

(a) Generation Resource capacity at the time of forecasted weekly peak Demand;

(b) Load Resource capacity at the time of the forecasted weekly peak Demand;

(c) Weekly peak forecast Demand described in Section 3.2.2, Demand Forecasts;

(d) Calculated system reserve, highlighting any deficiency hours, that excludes Load Resource capacity;

(e) Calculated system reserve, highlighting any deficiency hours, that includes Load Resource capacity shown as a reduction in forecast Demand;

(f) Ancillary Service requirements; and

(g) Transmission constraints that have a high probability of being binding in the Security-Constrained Economic Dispatch (SCED) or Day-Ahead Market (DAM) given the forecasted system conditions for each week excluding the effects of any transmission or Resource Outages.

(3) ERCOT shall generate and post short-term adequacy reports on the MIS Public Area. ERCOT shall update these reports hourly following updates to the Seven-Day Load Forecast, except where noted otherwise. The short-term adequacy reports will provide:

(a) For Generation Resources, the available On-Line Resource capacity for each hour, using the COP for the first seven days and considering Resources with a COP Resource Status listed in paragraph (5)(b)(i) of Section 3.9.1, Current Operating Plan (COP) Criteria;

(b) ERCOT shall post a total system-wide capacity of Resource Outages as reflected in the Outage Scheduler that are accepted or approved. The Resource Outage capacity amount shall be based from each Resource’s current Seasonal High Sustained Limit (HSL) and posted each hour for the top of each Operating Hour for the next 168 hours. This posted information will exclude specific Resource information and Outages related to Mothballed or Decommissioned Generation Resources, and will be aggregated on a system-wide basis in three categories:

(i) IRRs with an Outage Scheduler nature of work other than “New Equipment Energization”;

(ii) Other Resources with an Outage Scheduler nature of work other than “New Equipment Energization”; and

(iii) Resources with an Outage Scheduler nature of work “New Equipment Energization”;

(c) For Load Resources, the available capacity for each hour using the COP for the first seven days and considering Resources with a COP Resource Status of ONRGL, ONCLR, or ONRL;

(d) Forecast Demand for each hour described in Section 3.2.2;

(e) Ancillary Service requirements for the Operating Day and subsequent days, updated daily;

(f) Transmission constraints that have a high probability of being binding in SCED or DAM given the forecasted system conditions for each week including the effects of any transmission or Resource Outages. The binding constraints may not be updated every hour;

(g) For Generation Resources, the available Off-Line Resource capacity that can be started for each hour, using the COP for the first seven days and considering Resources with a COP Resource Status of OFF or OFFNS and temporal constraints; and

(h) Following each Hourly Reliability Unit Commitment (HRUC), the available On-Line capacity from Generation Resources, based on Real-Time telemetry, for which the COP Resource Status is OFF, OUT, or EMR for all hours within the HRUC Study Period. The available On-Line capacity will consider those Resources with a Real-Time Resource Status listed in paragraph (5)(b)(i) of Section 3.9.1 excluding SHUTDOWN.

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| ***[NPRR962: Insert paragraph (i) below upon system implementation:]***(i) For each Direct Current Tie (DC Tie), the sum of any ERCOT-approved DC Tie Schedules for each 15-minute interval for the first seven days. The sum shall be displayed as an absolute value and classified as a net import or net export. |

(j) The available capacity for each hour for the next seven days. For day one, and for day two following the execution of the Day-Ahead Reliability Unit Commitment (DRUC) on day one, the available capacity will be the sum of the values calculated in paragraphs (a) and (g) above, except that for IRRs the forecasted output will be used instead of COP values, and Direct Current Tie (DC Tie) Exports will be subtracted. For the remaining hours of the seven days, the available capacity will be calculated as the sum of the Seasonal HSLs for non-IRR Generation Resources including seasonal Private Use Network capacity and the forecasted output for IRRs minus the total capacity of accepted or approved Resource Outages.

(k) The available capacity for reserves for each hour, which will be the available capacity calculated in paragraph (j) above minus the forecasted Demand for that hour.

6.5.9.3.1 Operating Condition Notice

(1) ERCOT will issue an Operating Condition Notice (OCN) to inform all QSEs of a possible future need for more Resources due to conditions that could affect ERCOT System reliability. OCNs are for informational purposes only, and ERCOT exercises no additional operational authority with the issuance of this type of notice, but may solicit additional information from QSEs in order to determine whether the issuance of an Advisory, Watch, or Emergency Notice is warranted. The OCN is the first of four levels of communication issued by ERCOT in anticipation of a possible Emergency Condition.

(2) When time permits, ERCOT will issue an OCN before issuing an Advisory, Watch, or Emergency Notice. However, issuance of an OCN may not require action on the part of any Market Participant, but rather serves as a reminder to QSEs and TSPs that some attention to the changing conditions may be warranted. OCNs serve to communicate to QSEs the need to take extra precautions to be prepared to serve the Load during times when contingencies are most likely to arise.

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| [NPRR857: Replace paragraph (2) above with the following upon system implementation:](2) When time permits, ERCOT will issue an OCN before issuing an Advisory, Watch, or Emergency Notice. However, issuance of an OCN may not require action on the part of any Market Participant, but rather serves as a reminder to QSEs, TSPs, and DCTOs that some attention to the changing conditions may be warranted. OCNs serve to communicate to QSEs the need to take extra precautions to be prepared to serve the Load during times when contingencies are most likely to arise. |

(3) Reasons for OCNs include, but are not limited to, unplanned transmission Outages, and weather-related concerns such as anticipated freezing temperatures, hurricanes, wet weather, and ice storms.

(4) ERCOT will monitor actual and forecasted weather for the ERCOT Region and adjacent NERC regions. When adverse weather conditions are expected, ERCOT may confer with TSPs and QSEs regarding the potential for adverse reliability impacts and contingency preparedness. Based on its assessment of the potential for adverse conditions, ERCOT may require information from QSEs representing Resources regarding the Resources’ fuel capabilities. Requests for this type of information shall be for a time period of no more than seven days from the date of the request. The specific information that may be requested shall be defined in the Operating Guides. QSEs representing Resources shall provide the requested information in a timely manner, as defined by ERCOT at the time of the request.

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| [NPRR857: Replace paragraph (4) above with the following upon system implementation:](4) ERCOT will monitor actual and forecasted weather for the ERCOT Region and adjacent NERC regions. When adverse weather conditions are expected, ERCOT may confer with TSPs, DCTOs, and QSEs regarding the potential for adverse reliability impacts and contingency preparedness. Based on its assessment of the potential for adverse conditions, ERCOT may require information from QSEs representing Resources regarding the Resources’ fuel capabilities. Requests for this type of information shall be for a time period of no more than seven days from the date of the request. The specific information that may be requested shall be defined in the Operating Guides. QSEs representing Resources shall provide the requested information in a timely manner, as defined by ERCOT at the time of the request. |

(5) QSEs and TSPs are expected to establish and maintain internal procedures for monitoring actual and forecasted weather and for implementing appropriate measures when the potential for adverse weather or other conditions (which could threaten ERCOT System reliability) arise.

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| [NPRR857: Replace paragraph (5) above with the following upon system implementation:](5) QSEs, TSPs, and DCTOs are expected to establish and maintain internal procedures for monitoring actual and forecasted weather and for implementing appropriate measures when the potential for adverse weather or other conditions (which could threaten ERCOT System reliability) arise. |