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| NPRR Number | [1161](https://www.ercot.com/mktrules/issues/NPRR1161) | NPRR Title | Clarify AVR Notification Requirements for IRRs |
| Date of Decision | | April 13, 2023 | |
| Action | | Recommended Approval | |
| Timeline | | Normal | |
| Proposed Effective Date | | August 1, 2023 | |
| Priority and Rank Assigned | | Not applicable | |
| Nodal Protocol Sections Requiring Revision | | 6.5.5.1, Changes in Resource Status | |
| Related Documents Requiring Revision/Related Revision Requests | | Nodal Operating Guide Revision Request (NOGRR) 246, Related to NPRR1161, Clarify AVR Notification Requirements for IRRs | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) clarifies that Intermittent Renewable Resources (IRRs), who remain synchronized to the ERCOT System but are not able to provide Reactive Power when not providing real power, do not have to notify ERCOT other than the Real-Time telemetered status. | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](https://www.ercot.com/files/docs/2018/12/13/ERCOT_Strategic_Plan_2019-2023.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain)  *(please select all that apply)* | |
| Business Case | | Some Market Participants reported to ERCOT that their procedures to comply with notification requirements related to Automatic Voltage Regulator (AVR) status changes would cause them to make daily or much more frequent voice calls to ERCOT that are not necessary following approval of NPRR1138, Communication of Capability and Status of Online IRRs at 0 MW Output. This clarification will prevent unnecessary voice notifications to ERCOT Operators.  NPRR1138 requires the IRRs to telemeter a status of “Off” when the IRR is not producing real power output and is not capable of providing Reactive Power. It is normal for a unit that is Off-Line to have its AVR telemeter “Off” and no verbal notification made. The unique nature of IRRs remaining synchronized to the ERCOT System during night or no wind conditions technically meets the definition of “On-Line” and thus causes the need for clarification. Generation Resources that are capable of providing Reactive Power when not producing real power should still verbally notify ERCOT in addition to AVR telemetry as this is an abnormal operating status. | |
| PRS Decision | | On 3/8/23, PRS voted unanimously to recommend approval of NPRR1161 as submitted. All Market Segments participated in the vote.  On 4/13/23 PRS voted unanimously to endorse and forward to TAC the 3/8/23 PRS Report as revised by PRS and the 2/7/23 Impact Analysis for NPRR1161. All Market Segments participated in the vote. | |
| Summary of PRS Discussion | | On 3/8/23, participants reviewed NPRR1161.  On 4/13/23, participants reviewed the 2/7/23 Impact Analysis and a correction of a defined term. | |
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| **Opinions** | | | |
| Credit Review | | ERCOT Credit Staff and the Market Credit Work Group (MCWG) have reviewed NPRR1161 and do not believe that it requires changes to credit monitoring activity or the calculation of liability. | |
| Independent Market Monitor Opinion | | To be determined | |
| ERCOT Opinion | | To be determined | |
| ERCOT Market Impact Statement | | To be determined | |

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| Market Segment | Not applicable |

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| **Comments Received** | |
| **Comment Author** | **Comment Summary** |
| None |  |
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| **Market Rules Notes** | |

None

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| Proposed Protocol Language Revision |

6.5.5.1 Changes in Resource Status

(1) Each QSE shall notify ERCOT of a change in Resource Status via telemetry and through changes in the Current Operating Plan (COP) as soon as practicable following the change.

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| [NPRR1085: Replace paragraph (1) above with the following upon system implementation:]  (1) Each QSE shall notify ERCOT via telemetry of a change in Resource Status that is not related to a Forced Outage as soon as practicable but no longer than 15 minutes after the change in status occurs and through changes in the Current Operating Plan (COP) as soon as practicable but no longer than 60 minutes after the change in status of the Resource occurs. |

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| [NPRR1085: Insert paragraph (2) below upon system implementation and renumber accordingly:]  (2) When an On-Line Resource is experiencing an event that may affect its availability and/or capability and that requires further actions to stabilize the Resource and/or determine the impact of the event, the QSE may change the Resource Status to ONHOLD within 15 minutes of experiencing an event. Following this Resource Status change, the telemetered HSL and any other applicable telemetry of the Resource as specified in paragraph (2) of Section 6.5.5.2, Operational Data Requirements, shall be updated as soon as practicable but no longer than 15 minutes after the change in Resource Status to ONHOLD. After the QSE has determined the impact of the event, the QSE shall change the Resource Status to its updated status as soon as practicable but no longer than 60 consecutive minutes of being in the ONHOLD status. |

(2) Each QSE shall promptly inform ERCOT when the operating mode of its Generation Resource’s Automatic Voltage Regulator (AVR) or Power System Stabilizer (PSS) is changed while the Resource is On-Line. The QSE shall also provide the Resource’s AVR or PSS status logs to ERCOT upon request. For each Generation Resource that is On-Line but not producing real power and is not capable of providing Reactive Power, each QSE must still telemeter its AVR status to ERCOT, but is not required to provide verbal notifications of its AVR status changes to ERCOT during these operating conditions.

(3) Each QSE shall immediately report to ERCOT and the TSP any inability of the QSE’s Generation Resource required to meet its reactive capability requirements in these Protocols.

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| [NPRR1085: Insert paragraph (5) below upon system implementation and renumber accordingly:]  (5) Each QSE shall timely update the telemetered Resource Status unless in the reasonable judgment of the QSE, such compliance would create an undue threat to safety, undue risk of bodily harm, or undue damage to equipment. The QSE is excused from updating the telemetered Resource Status only for so long as the undue threat to safety, undue risk of bodily harm, or undue damage to equipment exists. The time for updating the telemetered Resource Status begins once the undue threat to safety, undue risk of bodily harm, or undue damage to equipment no longer exists. |

(4) A QSE or Resource Entity may use a Generation Resource or ESR to serve Customer Load as part of a Private Microgrid Island (PMI) in any circumstance in which the Customer Load and the Resource are both disconnected from the ERCOT System due to an Outage of the transmission and/or distribution system, provided that the configuration complies with the requirements of paragraph (7) of Section 10.3.2.3, Generation Netting for ERCOT-Polled Settlement Meters, and provided that the QSE or Resource Entity has notified the Transmission and/or Distribution Service Provider (TDSP) of the establishment of a PMI configuration. The QSE shall ensure that the Load served by the Resource in the PMI configuration is de-energized at the time it is reconnected to the ERCOT System following the PMI configuration. All operations in a PMI configuration and any reconnection of Load following a PMI configuration shall be coordinated with the TDSP.

(5) A TDSP shall not intentionally disconnect, or direct another TDSP to disconnect, a Generation Resource or ESR included in a PMI configuration from the ERCOT System except in the following circumstances:

(a) An approved or accepted Planned or Maintenance Outage of a Transmission Facility reasonably requires, or would otherwise result in, the disconnection of the Resource from the ERCOT System;

(b) The Resource is a Distribution Generation Resource or Distribution Energy Storage Resource (DESR), and disconnection of the Resource is required for Distribution System maintenance;

(c) The TDSP’s disconnection of the Resource is necessary to maintain the security of the TDSP’s system or the ERCOT System;

(d) The TDSP’s disconnection of the Resource is necessary to protect the public from a safety risk attributable to the operation of the Resource; or

(e) ERCOT directs the disconnection of the Resource.

(6) For each Intermittent Renewable Resource (IRR) synchronized to the ERCOT System and not capable of providing real power due to a lack of fuel, the Resource Entity and QSE shall send ERCOT, via telemetry, a Real-Time On-Line status and HSL and LSL of 0.