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| PGRR Number | [103](https://www.ercot.com/mktrules/issues/PGRR103) | PGRR Title | Establish Time Limit for Generator Commissioning Following Approval to Synchronize |

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| Date | February 22, 2023 |

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| Submitter’s Information | |
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| Market Segment | Independent Generator |

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| Comments |

Southern Power Company (Southern Power) proposes the following revisions, on top of the 2/13/23 Joint Commenter’s comments to Planning Guide Revision Request (PGRR) 103, which:

* Add two factors to ERCOT’s good cause exception review process: (1) the Resource Entity has taken reasonable efforts to complete the commissioning requirements and has provided timely communications to ERCOT, and (2) the cumulative number of days it has taken ERCOT to respond with information about the validity of the Resource Entity’s checklist submissions and test submittals;
* Remove the proposed timeline that ERCOT must respond to commissioning plan updates, checklist submissions, and test submittals; and
* Increase the proposed 180-day time limit to 300 days.

Southern Power supports the Joint Commenters’ proposal to establish a good cause exception through which ERCOT may consider the facts and determine if it is appropriate to grant the Resource Entity additional time to complete commissioning requirements. Southern Power has commissioned multiple Generation Resources with varying times required to complete the commissioning process. Resource Entities can make reasonable efforts to complete commissioning requirements but still encounter delays because of unique challenges, such as supply chain issues or local transmission system conditions that require multiple reactive power tests for individual portions of a Generation Resource in order to fully demonstrate a facility’s reactive power capability. A good cause exception should be available to a Resource Entity that makes reasonable efforts to complete the commissioning requirements and communicates status updates to ERCOT, rather than a Resource Entity that does not make reasonable efforts and is unresponsive to ERCOT comments. Accordingly, Southern Power proposes that ERCOT consider in its good cause exception evaluation whether the Resource Entity has taken reasonable efforts to complete the commissioning requirements and has provided timely communications to ERCOT.

While Southern Power supports the Joint Commenters’ proposal that ERCOT be required to respond to checklist submissions and test submittals within a shorter amount of time than the 30 days described in ERCOT’s Resource Interconnection Handbook, Southern Power recognizes the difficulty ERCOT faces in obtaining staff with the required technical expertise to support such a timely review. As an alternative, Southern Power recommends that the time limit to achieve the commissioning requirements be increased to 300 days[[1]](#footnote-1) and that ERCOT’s good cause exception review process consider the amount of time that ERCOT has taken to respond with information about the validity of checklist submissions and test submittals. If a Resource Entity waits approximately 30 days for a test submittal multiple times, such time waiting to receive feedback may significantly contribute to the overall time spent in the commissioning process.

It is Southern Power’s understanding that ERCOT’s current applications/tools cannot track the days between checklist/test submittals and when ERCOT responds with information about the validity of such submittals, and that it would be difficult to change ERCOT’s applications/tools to allow for such tracking. As a short-term solution, Resource Entities may track relevant information (i.e., the time it took for ERCOT to respond with information about the validity of a checklist/test submittal) to support their potential qualification for a good cause exception. Southern Power supports continued evaluation of a longer-term solution that would allow for automated tracking of this information via ERCOT’s applications/tools. Finally, Southern Power recommends that ERCOT clearly define its policy of only reviewing Automatic Voltage Regulator (AVR) and reactive power test submittals when all the applicable AVR and reactive power tests have been submitted.

ERCOT must monitor material occurrences of non-compliance with ERCOT procedures.[[2]](#footnote-2) Treatment of Resource Entities that fail to comply with the proposed commissioning timeline should be consistent with ERCOT’s treatment of other instances of non-compliance with ERCOT Protocols and rules.

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| Revised Cover Page Language |

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| Revision Description | This Planning Guide Revision Request (PGRR) requires an Interconnecting Entity to complete all conditions for commercial operation of a Generation Resource or Energy Storage Resource (ESR) within 300 days of receiving approval for Initial Synchronization above 20 MVA from ERCOT. |
| Business Case | As of December 20, 2022, 53 projects representing more than 11,180 MW of capacity in Generator Interconnection or Modification (GIM) received approval for Initial Synchronization under Part 2 (or Part 2b, where applicable) of the ERCOT New Generator Commissioning Checklist more than 180 days ago, and still have not received their Part 3 approval required for full commercial operation. Of these, 36 projects representing 8,151 MW received approval for Initial Synchronization under Part 2 (or 2b) more than one year ago, and 18 projects representing 3,137 MW received approval for Initial Synchronization more than two years ago.  Delays in completing the Resource commissioning process create a reliability risk because, in aggregate, there could be a significant amount of generation on the ERCOT System that is not providing system support services. Specifically, any Generation Resource or ESR whose Qualified Scheduling Entity (QSE) has not requested approval of Part 3 of the ERCOT New Generator Commissioning Checklist for the Resource may not have an operational Automatic Voltage Regulator (AVR), Power System Stabilizer (PSS), or turbine speed governor, and may not have demonstrated the Resource’s Reactive Power capability through testing.  To alleviate this reliability risk, this PGRR limits the time between Initial Synchronization and commercial operation by requiring Generation Resources and ESRs to complete all conditions required for commissioning and to require submittal of Part 3 of the ERCOT New Generator Commissioning Checklist within 300 days of receiving ERCOT’s approval for Initial Synchronization. This period is more than a reasonable amount of time to complete the necessary requirements. |

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| Revised Proposed Guide Language |

5.5 Generator Commissioning and Continuing Operations

(1) For each interconnecting Generation Resource or Energy Storage Resource (ESR), each Interconnecting Entity (IE) shall meet the conditions established by ERCOT before proceeding to Initial Energization, Initial Synchronization, and commercial operations. These conditions may require proof of meeting applicable ERCOT requirements, which may include, but are not limited to, reactive capability, Voltage Ride-Through (VRT) standards, dynamic model template submission, Automatic Voltage Regulator (AVR), Primary Frequency Response (PFR), Power System Stabilizer (PSS), Subsynchronous Resonance (SSR) models, and telemetry.

(2) Within 300 days of receiving ERCOT’s approval for Initial Synchronization above 20 MVA of a new or repowered Generation Resource or ESR, a Resource Entity shall ensure the Resource meets the conditions established by ERCOT for commercial operations and shall submit a request to ERCOT to commission the Resource, unless ERCOT determines in its sole and reasonable discretion to grant a good cause exception to this deadline. ERCOT may consider the following factors when deciding whether to grant a good cause exception:

(a) The Resource Entity has updated all relevant dates in the online Resource Integration and Ongoing Operations (RIOO) system;

(b) The Resource Entity has updated the commissioning plan with sufficient detail to explain why the plan has changed and any corrective actions necessary to complete commissioning including, but not limited to, ordering additional equipment;

(c) The Resource Entity has taken reasonable efforts to complete the commissioning requirements and has provided timely communications to ERCOT;

(d) The cumulative number of days it has taken ERCOT to respond with information about the validity of the Resource Entity’s checklist submissions and test submittals; and/or

(e) ERCOT needs additional time to review and is satisfied with the communication from the Resource Entity.

(3) No later than 30 days following the Resource Commissioning Date, the Resource Entity shall submit updates to the resource dynamic planning models based on “as-built” or “as-tested” data and provide a plant verification report as required by paragraph (5)(b) of Section 6.2, Dynamics Model Development. Pursuant to paragraph (5)(c) of Section 6.2, any necessary model updates shall be accompanied with model quality tests.

(4) During continuing operations:

(a) Pursuant to paragraph (5)(c) of Section 6.2, any necessary model updates shall be accompanied by model quality tests.

(b) The Resource Entity shall provide ERCOT with a plant verification report as required by paragraph (5)(b) of Section 6.2 at the following times:

(i) No later than 30 days after implementing a settings change as required by paragraph (7) of Section 6.2;

(ii) No earlier than 12 months and no later than 24 months following the later of the Resource Commissioning Date or March 1, 2021; and

(iii) A minimum of every ten years.

1. ERCOT’s January 30, 2023, comments include summary data of the number of days between approval for Part 2, Request for Initial Synchronization, and approval for Part 3, Request to Commission a Resource. The average number of days taken to complete the commissioning process for the 80th percentile data set is 286 days and Southern Power believes that 300 days is a fair compromise position, given ERCOT’s preference to avoid other solutions (e.g., a quicker response timeline on checklist submissions and test submittals) that may require additional full-time employees. [↑](#footnote-ref-1)
2. See 16 Texas Administrative Code §25.503(j). [↑](#footnote-ref-2)