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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  |
| Date of Decision | August 31, 2023 |
| Action | Recommended Approval |
| Timeline | Normal |
| Proposed Effective Date | November 1, 2023  |
| Priority and Rank Assigned | Priority – 2024; Rank – 4020 (for automation) |
| Planning Guide Sections Requiring Revision  | 5.5, Generator Commissioning and Continuing Operations |
| Related Documents Requiring Revision/Related Revision Requests | None |
| 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.  |
| Reason for Revision |  Addresses current operational issues. Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/wcm/lists/144926/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 | 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.  |
| ROS Decision | On 1/5/23, ROS voted unanimously to table PGRR103 and refer the issue to the Operations Working Group (OWG) and Planning Working Group (PLWG). All Market Segments participated in the vote.On 4/6/23, ROS voted to recommend approval of PGRR103 as amended by the 3/23/23 PLWG comments. There was one abstention from the Independent Power Marketer (IPM) (SENA) Market Segment. All Market Segments participated in the vote. On 5/4/23, ROS voted unanimously to table PGRR103. All Market Segments participated in the vote.On 6/8/23, ROS voted to endorse and forward to TAC the 5/4/23 ROS Report and 6/6/23 Revised Impact Analysis for PGRR103 with a recommended priority of 2024 and rank of 4020. There was one abstention from the Independent Generator (Calpine) Market Segment. All Market Segments participated in the vote.  |
| Summary of ROS Discussion | On 1/5/23, ERCOT Staff presented PGRR103. Participants discussed potential options to mitigate Generation Resources and ESRs delays in achieving full commercial operation within 180 days of receiving ERCOT’s approval for Initial Synchronization, and whether the 180 day time limit was appropriate under certain circumstances. There was general agreement that additional discussion is warranted, including comments suggesting that potential commercial solutions be explored at the Wholesale Market Subcommittee (WMS).On 4/6/23, participants reviewed the PLWG comments. The Chair of the PLWG summarized discussions that took place at the working group regarding implementation. On 5/4/23, participants reviewed the 5/3/23 ERCOT comments. On 6/8/23, participants reviewed the 6/6/23 Revised Impact Analysis.  |
| TAC Decision | On 6/27/23, TAC voted unanimously to recommend approval of PGRR103 as recommended by ROS in the 6/8/23 ROS Report. All Market Segments participated in the vote. |
| Summary of TAC Discussion | On 6/27/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for PGRR103.  |
| ERCOT Board Decision | On 8/31/23, the ERCOT Board voted unanimously to recommend approval of PGRR103 as recommended by TAC in the 6/27/23 TAC Report. |
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| Opinions |
| Credit Review | Not applicable |
| Independent Market Monitor Opinion | IMM has no opinion on PGRR103. |
| ERCOT Opinion | ERCOT supports approval of PGRR103. |
| ERCOT Market Impact Statement | ERCOT Staff has reviewed PGRR103 and believes the market impact for PGRR103 helps alleviate reliability risk stemming from long delays in completing the Resource commission process by requiring Generation Resources and ESRs to complete all conditions required for commercial operation within 300 days of receiving ERCOT’s approval for Initial Synchronization above 20 MVA. |
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| **Sponsor** |
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| Market Segment | Not Applicable |

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| **Comments Received** |
| **Comment Author** | **Comment Summary** |
| ERCOT 013023 | Provided data in response to stakeholder requests showing the number of days between Part 2 and 3 approvals, and the geographical locations for the related interconnection request projects  |
| Joint Commenters 021323 | Proposed language revisions to address issues of longer than expected generator commissioning timelines and deleted ERCOT’s restatement of their authority for disconnections, and suggested having a single point of contact for projects across divisions at ERCOT |
| Southern Power 022223 | Supported 2/13/23 Joint Commenters comments with modifications that added two factors to the proposed good cause exception, deleted ERCOT response requirements for commissioning plan updates, checklist submissions, and test submittals, and increased the time limit to achieve the commissioning requirements to 300 days |
| RWE Renewables 022723 | Proposed that the time limit to receive approval for Initial Synchronization for projects above 20 MVA be 365 days and added provisions providing ERCOT the authority to grant revised timelines with documented cause from the Interconnecting Entity  |
| Joint Commenters 022823 | Revised the 2/13/23 Joint Commenters comments’ proposed redlines adjusting the ERCOT review requirement for test submittals from seven to 30 Business Days, and added language with a January 1, 2025 effective date establishing a seven Business Day response requirement for ERCOT for updates to the commissioning plan, checklist submissions, and the AVR and voltage test submittals, and proposed factors for consideration when ERCOT decides to grant a good cause exception |
| NextEra 030123 | Supported the 365-day period to achieve approval for Initial Synchronization for projects above 20 MVA proposed in the 2/27/23 RWE Renewables comments and the RWE-recommended provisions that provided an exception process for resources owners who are making reasonable efforts to achieve commercial operation date, and deleted last sentence in paragraph (2) of Section 5.5 stating that the revision is superfluous  |
| Lubbock Power & Light 030823 | Proposed an effective date of October 1, 2023 for PGRR103, increased the 180 day time limit to achieve commissioning requirements to 365 days, and allowed for good cause exception requests up to the 365 days  |
| PLWG 032323 | Proposed language revisions reflecting PLWG consensus resulting from discussions that took place at the March 22, 2023 PLWG meeting  |
| ERCOT 050323 | Proposed an alternative schedule for a Revised Impact Analysis for PGRR103 prior to the June 8, 2023, ROS meeting |
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| **Market Rules Notes** |

Please note the baseline Guide language in the following section has been updated to reflect the incorporation of the following PGRR into the Planning Guide:

* PGRR102, Dynamic Operation Model Improvement (incorporated 4/1/23)
	+ Section 5.5

Please note that the following PGRR also proposes revisions to the following section:

* PGRR109, Dynamic Model Review Process Improvement for Inverter-Based Resource (IBR) Modification
	+ Section 5.5

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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 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.

In the event a Generation Resource or ESR will be unable to complete all necessary construction and required testing to commence commercial operations and connect reliably to the ERCOT System within the 300 days, the Generation Resource or ESR may request a good cause exception with sufficient detail, and shall notify ERCOT prior to the planned commercial operation date and provide ERCOT with an updated commercial operation date that the Generation Resource or ESR can reasonably expect to commence operations in a reliable manner.

(3) No later than 30 days following the Resource Commissioning Date, the Resource Entity shall submit updates to the resource dynamic planning and operations 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, the IE shall include model updates with model quality tests.

(4) During continuing operations:

(a) Pursuant to paragraph (5)(c) of Section 6.2, the Resource Entity shall include model updates with 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.