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| PGRR Number | [052](http://www.ercot.com/mktrules/issues/PGRR052) | PGRR Title | Stability Assessment for Interconnecting Generation |
| Date Posted | | September 29, 2016 | |
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| Requested Resolution | | Normal | |
| Planning Guide Sections Requiring Revision | | 5.9, Quarterly Stability Assessment (new) | |
| Related Documents Requiring Revision/Related Revision Requests | | None | |
| Revision Description | | This Planning Guide Revision Request (PGRR) establishes a timeline for performing stability studies after the Full Interconnection Study (FIS) has been completed and model data or transmission system changes, not known during the FIS, become available prior to a new unit being brought on-line, in order to ensure that appropriate operating limits are established. | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/news/presentations/2013/ERCOT%20Strat%20Plan%20FINAL%20112213.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain)  *(please select all that apply)* | |
| Business Case | | A number of recent FISs have identified stability limits associated with generating levels below the full capacity of newly interconnecting generating unit(s). During the commissioning process for these units, the Interconnecting Entity (IE) provided updates to the model data used in the FIS having the potential to impact the results of the stability limit identified in the FIS.  In these instances, ERCOT established a Generic Transmission Constraint (GTC) in order to ensure that the new unit could be brought on-line with the expectation of being able to reliably operate the system. However, due to time constraints, these GTCs had to be established based on the FIS without consideration given to the new model data obtained from the IE.  There is the potential for transmission system changes which were not reflected in the FIS to be implemented between completion of the FIS and the date when an IE first seeks to connect to the transmission system. | |

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| Market Segment | Not Applicable |

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| Proposed Guide Language Revision |

5.9 Quarterly Stability Assessment

(1) ERCOT shall conduct a stability assessment every three months to assess the impact of planned new All-Inclusive Generation Resources connecting to the ERCOT System. The assessment shall derive the conditions to be studied with consideration given to the results of the Full Interconnection Study (FIS) stability studies for the All-Inclusive Generation Resources with planned initial synchronization in the period under study. ERCOT may study conditions other than those identified in the FIS stability studies.

(2) All-Inclusive Generation Resources that are not included in the assessment as described in this Section as result of the Interconnecting Entity (IE) failing to meet the prerequisites by the deadlines as listed in the table below will not be eligible for initial synchronization during that four month period. The timeline for the quarterly stability assessment shall be in accordance with the following table:

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| **All-Inclusive Generation Resource Initial Synchronization Date** | **Last Day for an IE to meet prerequisites as listed in paragraph (4) below** | **Completion of Quarterly Stability Assessment** |
| Upcoming January, February, March | Prior August 1 | End of October |
| Upcoming April, May, June | Prior November 1 | End of January |
| Upcoming July, August, September | Prior February 1 | End of April |
| Upcoming October, November, December | Prior May 1 | End of July |

(3) If the last day for an IE to meet prerequisites or if completion of the quarterly stability assessment as shown in the above table falls on a weekend or holiday, the deadline will extend to the next Business Day.

(4) Prerequisites to be satisfied prior to the planned new All-Inclusive Generation Resource being included in the quarterly stability assessment:

(a) The IE has provided all All-Inclusive Generation Resource data in accordance with the Resource Registration Glossary, Planning Model column, including but not limited to steady state, system protection and stability models. The All-Inclusive Generation Resource has met the requirements of Section 6.9, Addition of Proposed All-Inclusive Generation Resources to the Planning Models.

(b) The following elements must be complete:

(i) FIS studies;

(ii) SSO studies, if required;

(iii) Reactive Power Study; and

(iv) System improvements or mitigation plans that were identified in these studies as required prior to synchronizing a new All-Inclusive Generation Resource in order to meet the operational standards established in the Protocols, Planning Guide, Nodal Operating Guides, and Other Binding Documents.

(5) All studies identified in this paragraph (4) above are consistent with All-Inclusive Generation Resource data submitted by the IE as required by Section 6.9.

(6) ERCOT shall post to the Market Information System (MIS) Secure Area a report summarizing the results of the quarterly stability assessment within ten Business Days of completion.