

## Connection assessment transition framework (applicable to projects directly connecting to Project Energy Connect (PEC) or PEC infrastructure)

April 2024

Milestones	Connection Enquiry pre-requisites	Connection Application pre-requisites	5.3.4A/B approval pre-requisites	Registration and commissioning pre-requisites
Status	<ul style="list-style-type: none"> <li>Achieved in March 2023</li> </ul>	<ul style="list-style-type: none"> <li>Achieved in March 2024</li> </ul>	<ul style="list-style-type: none"> <li>In progress</li> </ul>	
PEC milestone	<ul style="list-style-type: none"> <li>PEC formally achieves Considered status</li> </ul>	<ul style="list-style-type: none"> <li>PEC detailed design complete (design data available including functional requirements of South Australia Intertrip Remedial Action Scheme (SAIT RAS))</li> </ul>	<ul style="list-style-type: none"> <li>Detailed design of SAIT RAS finalised and complete</li> </ul>	<ul style="list-style-type: none"> <li>SAIT RAS commissioned and in service (including impact assessment on Heywood Interconnector)</li> <li>PEC internetwork testing completed, and 500 MW transfer capacity released across PEC</li> </ul>
PEC model maturity	<ul style="list-style-type: none"> <li>PEC planning models (PSS/E) available via AEMO data request</li> <li>PEC PowerFactory model available</li> </ul>	<ul style="list-style-type: none"> <li>Standard or Detailed (S/D) data for Buronga and Dinawan synchronous condensers (syncons) available</li> </ul>	<ul style="list-style-type: none"> <li>PEC R1 dynamic models (PSS/E and PSCAD) available (including Buronga and Dinawan syncons)</li> </ul>	<ul style="list-style-type: none"> <li>PEC R2 dynamic models (PSS/E and PSCAD) available (including Buronga and Dinawan syncons)</li> </ul>

Milestones	Connection Enquiry pre-requisites	Connection Application pre-requisites	5.3.4A/B approval pre-requisites	Registration and commissioning pre-requisites
<b>PEC limit advice, Special Protection Schemes (SPS) and other considerations</b>	<ul style="list-style-type: none"> <li>Preliminary PEC Limit advice available</li> </ul>	<ul style="list-style-type: none"> <li>Preliminary PEC limit advice available</li> <li>Preliminary limit advice available for nearby key transmission lines</li> <li>For connections to the NSW end of PEC, updated NSW SPS details (including preliminary impact on existing SPS in NSW)</li> <li>SAIT RAS functional requirements available</li> </ul>	<ul style="list-style-type: none"> <li>AEMO PEC constraint equations available. AEMO constraint equations available for nearby key transmission lines</li> <li>For connections to the NSW end of PEC, updated NSW SPS details (including impact on existing SPS in NSW)</li> <li>SAIT RAS impact assessment and coordination of any new control schemes by newly proposed connecting plant completed</li> </ul>	<ul style="list-style-type: none"> <li>AEMO constraint equations for PEC and nearby key transmission lines available and active</li> <li>SAIT RAS, NSW SPS details and limit advice updated based on connecting plant impacts</li> </ul>

Notes:

- Connection proponents should note that Transgrid’s response to a connection enquiry or connection application regarding connection to PEC network infrastructure will need to consider the access arrangements for the South-West Renewable Energy Zone (SW REZ), which may affect a proponent’s ability to connect to PEC network infrastructure in NSW both within and outside the SW REZ. Connection Applicants should familiarise themselves with the regulatory and access arrangements for the SW REZ.
- Generator connections that intend to either “cut-in” to PEC transmissions lines, or PEC infrastructure, including substation nodes interfacing with PEC transmission lines, will need to account for SAIT RAS impacts as a pre-requisite to 5.3.4A/B approvals. This includes sensitivity studies of generator connections against SAIT RAS designs.

### Connection Application pre-requisites - Status

Criteria	Date	Status (as at Publication date)
PEC transmission line, transformer and reactive plant design parameters finalised with data available	Q1 2024	Completed
Functional requirements of South Australia Intertrip Remedial Action Scheme (SAIT RAS) available	Q2 2023	Completed
Standard or Detailed (S/D) data for Buronga and Dinawan synchronous condensers (syncons) available	Q2 2023	Completed
Preliminary PEC limit advice available	Q4 2023	Completed
Preliminary limit advice available for nearby key transmission lines	Q1 2024	Completed
Updated NSW SPS (including preliminary impact on existing SPS schemes in NSW) completed	Q1 2024	Completed
<b>Date</b>	<b>Q1 2024</b>	<b>Completed</b>