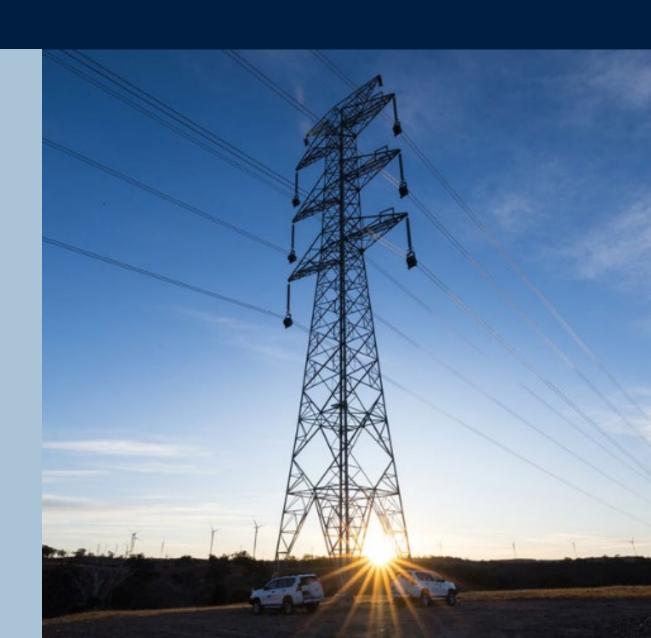


Process for generators proposing to alter a generating system

How to make changes to a generating system connected to the Queensland transmission network



About this document

An existing generator, storage provider, major load, or Network Service Provider, can apply to alter their generation system that is connected to the Queensland transmission network. This document is designed to help customers understand Powerlink's process in addressing proposals to alter a connected generation system under Chapter 5 of the National Electricity Rules (NER), where previously negotiated performance standards or power system requirements would be impacted.

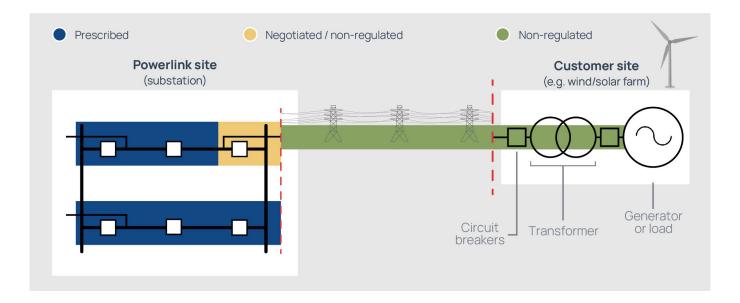
Responsibilities in proposals to alternate a generating system

Powerlink

Powerlink are a Government Owned Corporation that owns, develops, operates and maintains the high voltage electricity transmission network in Queensland. Our network extends 1,700 kilometres from Cairns to the New South Wales border. Our purpose is to connect Queenslanders to a world-class energy future.

Powerlink Queensland performs two primary connection service functions:

- The Transmission Network Service Provider (TNSP) for Queensland
- A service provider of contestable HV connection works



When assessing and facilitating changes to a connected generating system, Powerlink works with customers to specify and comply with the required technical standards and involves the Australian Energy Market Operator (AEMO) as needed.

We can support with:

A dedicated and experienced Connection and Development Manager from our Customer
Relations team who will assist to comply with the relevant rules and provide regular updates in
the application, scoping and coordinated delivery required Powerlink along with the
coordination of input from AEMO in altering your generating system

- Experts across:
 - Access policy and regulation
 - Design, network and system performance
 - Network operations and energy management
 - Our Maintenance Services team

AEMO

During an application to alter a generation system, AEMO evaluates and negotiates performance standards impacting power system security with TNSPs.

AEMO also reviews and assesses simulation models of power plants, systems of control and oversees commissioning and post-commissioning activities (following the deemed completion of construction activities).

AEMO charges the TNSP fees for their review and evaluation activities, which are passed through to the customer via Powerlink.

Customer

The customer, as the market participant and applicant, is responsible for ensuring the connection and generator performance adheres to the requirements stipulated by the NER and the conditions specified in the connection agreement.

Overview of the process to alter a generating system

We are committed to providing a transparent and efficient process to help you navigate the requirements under the NER.

Key milestones across the 5.3.9 process

Initial scoping discussion	5.3.9 Application to alter connected generator system (min. 12 months notice)	Response to 5.3.9	Delivery and Coordination (~6-24 months) Timeframe is dependent on complexity of request and changes required to GPS	5.3.10 Acceptance of altered generator performance standard by AEMO (~3-6 months)	
Customer and Powerlink discuss the 5.3.9 proposal prior to formal submissions. Powerlink's Planning team may also be involved.	Letter of intent stipulating 5.3.9 application to Powerlink and AEMO Description of alteration and potential impact Provide notice to Powerlink and AEMO for proposed generator outage Overall Project timeline	Scope of work and identified costs for Powerlink associated with assessment, implementation, and agreed activities Customer is informed of Commissioning Fees, as applicable	Payment received Trigger and negotiate assessment scope with AEMO Initiate agreed scope of works across PQ Management of scope of works until requirements of 5.3.10 are met. Variations to scope and commercial costs are managed until 5.3.10 are met.	Commissioning / Hold Point Testing Renegotiations to commercial terms and schedules Deed of Variation to C&AA negotiated	Deed of Variation executed Initiate scheduled outage

The process does not apply to modifications made to comply with the Primary Frequency Response Requirements.

Following an initial discussion with Powerlink, the customer can initiate the process by submitting an application to alter their connected generating system to Powerlink, describing the nature of the alteration and a proposed timetable for implementation. The application must include details of the generating unit design data and generating unit setting data in accordance with requirements of the NER, the Power System Model Guidelines, Power System Design Data Sheet and Power System Setting Data Sheet.

Powerlink will charge the customer a fee to cover the costs of assessing the submission. Powerlink must pay other Network Service Providers and AEMO as appropriate. These costs will also be passed on to the customer

Following variation of the existing connection agreement, the Network Service Provider and the Generator must jointly advise AEMO, including the details of any amended performance standards.

Exceptions to applying for an alteration to a generating system

Due to the dynamic energy market surrounding the energy transition, customers may instigate changes to connected generating plant before the plant is commissioned.

A detailed assessment will be required by Powerlink with involvement from AEMO to confirm next best actions to progress a connection to Powerlink's transmission network.

Please work closely with your appointed Connection and Development Manager to indicate if late project changes will need to be considered.

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