

The purpose of this information sheet is to provide a high-level overview of system strength, and how various related costs will be recovered from electricity consumers.

What is system strength?

System strength is a measure of how well the power system can return to normal operation following a disturbance, such as a sudden change in generation or load, or fault on the network.

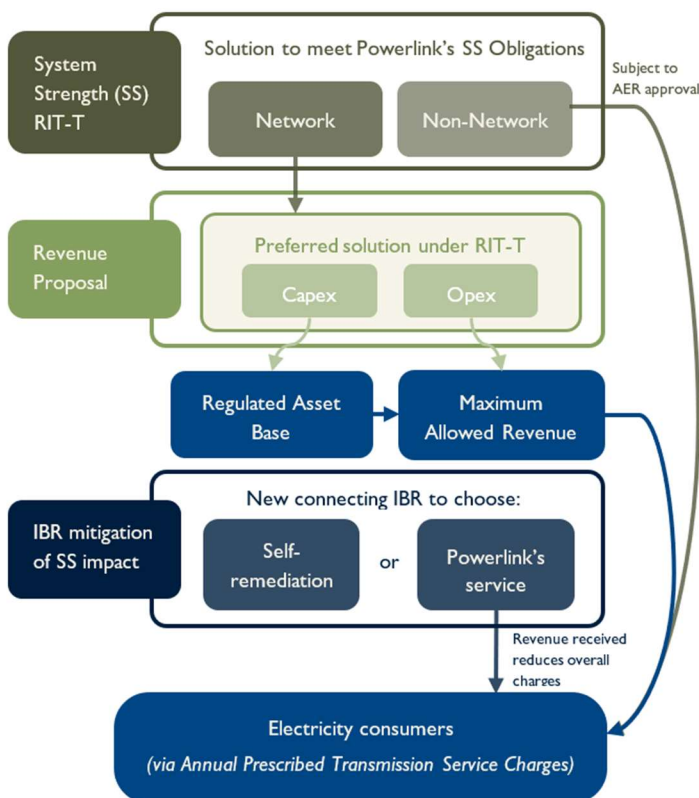
The retirement of synchronous generation, such as coal-fired power stations, and transition of the energy system to inverter-based resources (IBR) means system strength is now less freely available.

Powerlink's roles and responsibilities

Powerlink is Queensland's System Strength Service Provider and must take action to acquire and make available system strength services to meet its regulatory requirements from 2 December 2025. These new requirements were introduced through a change to the National Electricity Rules in 2021.¹

Figure 1 illustrates linkages between various components of system strength costs and how Powerlink will recover these.

Figure 1: System strength cost-recovery



Regulatory Investment Test for Transmission (RIT-T)

The RIT-T is a public cost-benefit analysis test that electricity Transmission Network Service Providers (TNSPs) must apply

to potential prescribed (regulated) investments in the transmission network that exceed \$8 million.

The RIT-T is used to identify the credible option (network or non-network) to address the identified need at the greatest net benefit (or least net cost) to the National Electricity Market.

Powerlink is currently undertaking a system strength RIT-T to assess the optimal portfolio mix of:

- **network solutions**, which may include new synchronous condensers and/or modifications to existing transmission assets to enhance system strength; and
- **non-network solutions** to procure system strength from third parties, such as battery providers.

Powerlink's System Strength RIT-T is at the Project Assessment Draft Report stage. See [Addressing system strength requirements in Queensland](#) for further details.

Revenue Proposal

Powerlink's 2027-32 Revenue Proposal will include forecasts consistent with development of its System Strength RIT-T for:

- **Capital Expenditure (Capex)** – new assets or equipment, such as synchronous condensers; and
- **Operating Expenditure (Opex)** – to operate and maintain these capital assets.

In its Revenue Proposal, forecast capex will be added to the Regulatory Asset Base. Both forecast capex and opex will form part of the Maximum Allowed Revenue.

IBR mitigation of system strength impact

New connecting IBR must mitigate their system strength by:

- self-remediation of their total system strength impact; or
- Powerlink's service (i.e. paying for their use of system strength resources procured by Powerlink).

Annual prescribed transmission service prices

From 2025/26, Powerlink has incorporated forecast system strength network support payments for that year in its prescribed transmission service prices.

Powerlink, like other system strength service providers in the National Electricity Market, can recover from (or return to) customers any differences between the actual and expected payments through its annual prescribed transmission service charges. However, this is subject to the AER's approval via an annual network support pass-through application.

For other brief overview documents or information related to system strength:

- See [explanations of Powerlink's service](#), including the calculation of system strength charges.
- See [Powerlink's 2025/26 System Strength Unit Prices](#).

¹ AEMC Rule Determination, National Electricity Amendment (Efficient Management of System Strength on the Power System) Rule 2021.