Service Target Performance Incentive Scheme (STPIS)

An Overview | December 2015

What is the Service Target Performance Incentive Scheme (STPIS)?

The Australian Energy Regulator (AER) published its first STPIS for electricity transmission network service providers (TNSPs) in 2007[1]. Since then, the scheme has been reviewed and updated several times. The AER released its Final Determination on Version 5 of the STPIS in October 2015[2].

The STPIS operates on a calendar year basis and is designed to provide performance incentives for electricity transmission network service providers to improve or maintain a high level of service for the benefit of participants in the National Electricity Market (NEM) and end users of electricity.

The latest version of the STPIS (Version 5) has three components:

- Service Component (SC) – which measures network reliability;
- Market Impact Component (MIC) – which aims to improve network availability at times of most importance to the market; and
- Network Capability Component (NCC) – which is designed to deliver improved capability from existing network assets to benefit customers and wholesale market outcomes.

Powerlink is currently subject to Version 3 of the STPIS. In its next regulatory period, from 1 July 2017 to 30 June 2022, Powerlink will be subject to Version 5 of the STPIS.

Version 3 to Version 5 – What has changed?

The following table summarises the changes from Version 3 to Version 5 of the STPIS as it applies to Powerlink.

	From (Version 3)	$ at risk	To (Version 5)	$ at risk*	Change Summary
SC	• Revenue at risk is ±1.0% MAR • Network availability and reliability focus • Loss of Supply Event Frequency • Event outage duration	±$9.4m	• Revenue at risk is ±1.25% MAR • Network reliability focus • Loss of Supply Event Frequency • Unplanned event outage duration	±$10.0m	Greater emphasis on network reliability – unplanned outages only
MIC	• Revenue at risk +2.0% MAR (bonus only) • Target based on fixed 5-year history	+$18.8m	• Revenue at risk ±1.0% MAR (bonus/penalty) • Target based on fixed 5 median years from past 7 year history	±$8.0m	Materially stronger incentive to deliver improvements in network availability
NCC	• Not applicable	-	• NCIPAP projects - pro-rata based allowance up to 1% MAR each year • Incentive of 1.5 times average annual project cost • Penalty clawback arrangement up to 3.5% final year MAR	+$20.0m** -$28.0m**	Opportunity for Powerlink to deliver market benefits to customers

* Assuming an average indicative annual MAR of $800m.
MAR = Maximum Allowed Revenue

** $ at risk are total for the 5 year regulatory period.
NCIPAP = Network Capability Incentive Parameter Action Plan

1. Prior to this, the Australian Competition and Consumer Commission (ACCC) developed Service Standards Guidelines for TNSPs in 2003.
2. The AER subsequently amended its Final STPIS V5 of 17 September 2015 and released a revised version on 1 October 2015. See AER website [http://www.aer.gov.au].

STPIS Overview

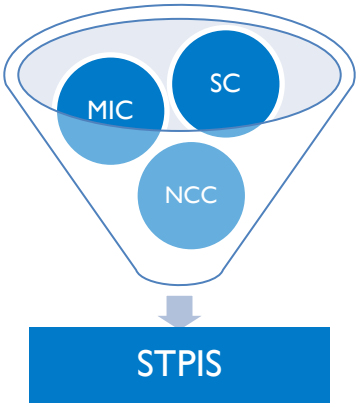
Version 3 – How Powerlink's performance is currently measured?

Service Component measures network availability and reliability with the following three parameters:

- ***Transmission circuit availability*** - measures available hours of Powerlink's network as a percentage. Its sub-parameters include peak, transmission line, transformer and reactive plant availabilities.
- ***Loss of supply event frequency*** - measures the reliability of energy supplied by Powerlink, by counting number of loss of supply events where the system minutes lost exceed the set thresholds – large threshold of 0.75 system minutes and small threshold of 0.10 system minutes.
- ***Average outage duration*** - measures the average duration (in minutes) of Powerlink's operational response to unplanned outage events.

Market Impact Component measures the number of dispatch intervals when an outage of Powerlink's network results in a constraint binding with a marginal value greater than $10/MWh (the MIC count).

Powerlink's annual MIC count is compared to the AER target (an average of the historical five years' performance).



Version 5 – How Powerlink's performance is likely to be measured?

Service Component is the indicator for network reliability using the following four parameters:

- ***Unplanned outage circuit event rate*** - measures the average number of times unplanned outages occur on Powerlink's network. Its sub-parameters are based on notice times - fault (immediate) and forced (<24 hrs) outages - for transmission line, transformer and reactive plant.
- ***Loss of supply event frequency*** - remains identical to Version 3, except for Powerlink having revised and more challenging set thresholds – large threshold of 0.40 system minutes and small threshold of 0.05 system minutes.
- ***Average outage duration*** - measures the average time (minutes) it takes Powerlink to restore unplanned loss of supply events.
- ***Proper operation of equipment*** - is a report-only parameter that counts the number of failures of protection or control systems, SCADA[3] system, and also counts the number of incorrect operational isolation of primary or secondary equipment.

Market Impact Component is the indicator for network availability. The measure largely remains unchanged from Version 3, with the AER target now being an average of the median five of the last seven years' performance. A cap for unplanned events and a floor of 100 DI counts are also applied to mitigate volatility.

Powerlink's annual MIC count is measured against the AER target.

Network Capability Component requires Powerlink to submit a network capability incentive parameter action plan (NCIPAP) which consists of a set of projects designed to improve network limitations and are ranked in priority based on likely benefit for customers and wholesale market outcomes.

Each project is assessed for success against delivering the benefit, on time and within budget.

The progress taken towards reaching the priority project improvement target for each project in the NCIPAP will be reviewed annually by the AER as part of the annual compliance reporting.

[3]Supervisory Control and Data Acquisition

See AER website [http://www.aer.gov.au] for further detail.