



## **Final Decision**

# **Electricity transmission network service providers Service Target Performance Incentive Scheme**

September 2014

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AER reference: 54673 - D14/119803



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## Shortened forms

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Electricity Law	National Electricity Law
Electricity Rules	National Electricity Rules
HVDC	High Voltage Direct Current
MAR	maximum allowed revenue
MIC	market impact component
MW	megawatt
NEM	National Electricity Market
STPIS	service target performance incentive scheme for electricity transmission network service providers
TNSP	transmission network service provider

## Executive Summary

This document outlines the Australian Energy Regulator's (AER) final decision to amend the service target performance incentive scheme (STPIS) for transmission network service providers (TNSPs).

The AER creates, administers and maintains the STPIS in accordance with the requirements of the National Electricity Rules (Electricity Rules). The purpose of the STPIS is to provide incentives to TNSPs 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.

From 1 July 2015, Directlink will be subject to the service and market impact components of the STPIS. This is the first time Directlink will be assessed under the STPIS, as it is currently assessed under the ACCC service standards guidelines for the current regulatory period 2006–2015.

Subsequent to the release of this scheme the AER has been reviewing the applicability of Version 4 to Directlink, particularly in light of exceptional outages of its equipment in 2012. Consequently the AER recognised that an amendment to the scheme was warranted to specifically address the Directlink situation.

In 2012, fire at the Mullumbimby end of Directlink caused extensive equipment damage resulting in a material long term reduction in its operational capability. The service component of the scheme includes clauses that enable the AER to adjust both the period over which performance is calculated and make adjustments for statistical outliers that may occur as a result of circumstances such as these when setting performance targets.

However, the market impact component had no such clauses. To promote consistency and avoid potential unintended consequences the AER is amending the STPIS. Ordinarily, the rolling target ensures the benchmark for setting performance targets is relevant to the TNSP's current maintenance and construction activities. The amendment will realign the period over which Directlink's targets and measures are calculated to avoid distortions from Directlink's recent historical performance which may distort the quality and reliability incentives for Directlink for the next regulatory control period. Without the amendment, Directlink may have received a reward for 'improved' performance even though its performance was merely a return to 'business as usual' operation.

Directlink was the only respondent to the AER's consultation on the proposed amendment. Directlink was supportive of the change.

# 1 Introduction

The AER is responsible for regulating the revenues of TNSPs in the NEM in accordance with the Electricity Rules.

Under clause 6A.7.4 of the Electricity Rules, the AER is responsible for establishing a STPIS. This scheme is designed to provide incentives for each TNSP to maintain or improve the reliability of transmission network services.

The existing version of the scheme (version 4) has three main components:

- the service component, which has an incentive of +/- 1 per cent of maximum allowed revenue (MAR). It has three main parameters: *loss of supply event frequency*, which measures the number of large and small interruption to supply events; *average outage duration*, which measures the average duration of loss of supply events; and *average circuit outage rate*, which is a new measure of the number of unplanned faults on the transmission network. The service component also includes a reporting only parameter which measures the number of times that protection and control equipment fails to operate correctly
- the market impact component (MIC), which has an incentive of 0 to 2 per cent of MAR. This component rewards TNSPs for reducing the market impact of transmission outages by measuring the impact on a rolling two calendar year basis compared to the average impact over the previous three calendar years, and
- the network capability component, which provides an incentive of 1.5 per cent of MAR subject to completion of projects that improve the capability of the transmission network at times most needed. The component is designed to influence a TNSP's operation and management of its network assets to develop one-off projects that can be delivered through low cost operational and capital expenditure (up to a total of 1 per cent of the proposed MAR per year). AEMO plays a part in prioritising the projects to deliver best value for money for consumers.

## 1.1 Directlink

The Directlink interconnector owned by the APA Group is a 59 kilometre, 180 megawatt (MW) High Voltage Direct Current (HVDC) interconnect connecting the New South Wales and Queensland markets. It comprises six AC/DC convertor stations (three at each end) and the six cables (three pairs) that link them, making up three circuits of 60 MW each (total of 180 MW). It is made up of both primary equipment (the major components operating at high voltage) and secondary equipment (necessary for the operation of the primary equipment).

Directlink has been in service for more than 14 years; it first came into operation on 25 July 2000 as an unregulated Market Network Service Provider, earning revenue from the NEM by providing a market network service between the New South Wales and Queensland power grids. In March 2006, Directlink converted to a regulated interconnector (i.e. a prescribed service) following application for conversion and an AER determination allowing conversion of Directlink to a regulated interconnector.

Under version 4 of the STPIS (December 2012), Directlink will be subject to the service component and the MIC, from 1 July 2015. This is the first time Directlink will be assessed under the STPIS, as it is currently assessed under the ACCC service standards guidelines for the current regulatory period 2006–2015.

## **1.2 Review of the scheme**

In early 2014, the AER identified that a severe outage of the Directlink interconnector may require a limited amendment to the STPIS to ensure that incentives consistent with the intention of the scheme and the normal operation of the assets were maintained. In August 2012, Directlink's equipment associated with one of the three DC systems that comprise the DC interconnector transmission asset was damaged by a fire at its Mullumbimby site. Directlink took the relevant system out of service to repair the damage caused by the fire. Subsequent outages occurred on other systems to minimise the likelihood of further damage. The System 1 outage continues today and will continue until mid-2015. As a result the DC interconnector will be operated at substantially lower capacity for around three years in total.

## **1.3 Draft scheme and explanatory statement**

On 28 May 2014, the AER issued a draft scheme with an accompanying Explanatory Statement. The AER proposed one amendment to the scheme in relation to the market impact component. The change was designed to be specific to Directlink.

The period for submissions closed on 10 July 2014, with the AER receiving one submission from Directlink.



## **2 Amendments to the scheme**

### **2.1 Service component**

The service component is worth up to +/-1 per cent of MAR. Under version 4 of the STPIS, the only service component parameter which will apply to Directlink in the coming regulatory control period is the 'average circuit outage rate'.

#### **Draft decision**

The AER assessed whether the Mullumbimby fire would affect the setting of the performance target for the average circuit outage rate parameter. As the measure for average circuit outage rate is the 'number of events', we considered the fire and the consequential faults would have a lower impact than if it was time based. Accordingly we did not propose any changes to STPIS version 4 relating to the service component.

#### **Issues raised in submissions**

Directlink did not raise any concerns with the AER's proposed approach in the draft decision.

#### **AER considerations and final decision**

As set out in the draft decision, the AER will maintain the service component as per version 4 of the scheme. We also note that the scheme provides sufficient flexibility (see clauses 3.2(h) and (k)) to require a performance target to be based on a different period, or alter the performance targets, if the AER is satisfied that the use of a different period is consistent with the objectives of the scheme.

### **2.2 Market impact component**

The MIC provides financial rewards to TNSPs for improvements in their performance measured against a performance target. A TNSP may earn an additional revenue increment of up to 2 per cent of its MAR. Unlike the service component, the MIC has no financial penalty.

The MIC provides an incentive to TNSPs to minimise the impact of transmission outages that can affect NEM wholesale market outcomes. It measures performance against the market impact parameter, which is the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than \$10/MWh.

In STPIS version 4, the MIC annual performance target is adjusted each year based the rolling average of performance history over the three previous calendar years. The annual performance measure is the rolling average performance in the two most recent calendar years. The performance measure is compared to the performance target to determine whether an incentive payment is made.

In our Framework and Approach paper we advised of our intention to apply the MIC in version 4 of the STPIS (version 4 of the STPIS was introduced in December 2012). The MIC has not previously applied to Directlink.

#### **Draft decision**

The AER identified that amendments were required to the method for determining MIC targets for Directlink in light of the Mullumbimby fire. Ordinarily, the rolling target ensures the benchmark for setting performance targets is relevant to the TNSP's current maintenance and construction activities. The AER identified three reasons for a specific Directlink amendment:

- Directlink’s current maintenance and construction activities during the period are not ‘business as usual’ maintenance;
- Unlike other TNSPs, Directlink has only one major asset to operate and maintain; and,
- Performance targets set for other TNSPs were based on the historical performance which was typical.

The AER was concerned that using the methodology set out in the scheme may result in a target that was not reflective of Directlink’s typical performance. That is we were concerned that to apply version 4 of the STPIS to Directlink’s recent historical performance may distort the quality and reliability incentives for Directlink for the next regulatory control period.

We considered an amendment of the STPIS was appropriate before the commencement of the next regulatory control period in order to ensure that the National Electricity Objective is promoted by the application of the scheme. The proposed amendment was specific to Directlink’s circumstances. Clause 6A.7.4(c) of the Electricity Rules also provides that the parameters may be different between TNSPs and over time.

Relevantly, the AER extended the definition of MIC at section 4.2 in the scheme, with the addition of clauses 4.2 (e)–(i) which served to:

- Exclude Directlink’s performance against the market impact parameter for the period of time from the beginning of the day of the fire at Directlink’s Mullumbimby site on 12 August 2012 to the date when Directlink ‘returned to normal service’ (the **Directlink fire excluded period**). The date that Directlink ‘returned to normal service’ is the date that we consider Directlink is reasonably capable of sustaining reliability performance similar to or better than the reliability performance exhibited prior to the fire. This will be no later than 31 December 2015.
- Specify no financial incentive will apply to Directlink during the Directlink fire excluded period.

We also inserted a worked example of how performance would be calculated for a calendar year in Appendix F.

### Issues raised in submissions

Directlink did not raise any objections in its submission, stating that:

*Directlink accepts that these proposed revisions to the STPIS reasonably accommodate the abnormal operating conditions resulting from the Mullumbimby fire.*

The AER did not receive any other submissions.

### AER considerations and final decision

The AER has decided to implement the changes to the MIC definition as outlined in its draft decision.

## 2.3 Network capability component

The scheme also includes a network capability component (NCC) which is designed to encourage TNSPs to take steps to operate, maintain and improve their network in a manner that delivers an appropriate level of network capability for least sustainable cost.

Directlink is not eligible for this component; accordingly no amendments were made to this section of the scheme.

## Glossary

This explanatory statement uses the following definitions.

cap	the level of performance that results in a TNSP receiving the maximum financial reward attributed to a <i>parameter</i> .
collar	the level of performance that results in a TNSP receiving the maximum financial penalty attributed to a <i>parameter</i> .
financial incentive	the dollar value of the revenue increment or decrement that the <i>maximum allowed revenue</i> is adjusted by in each <i>regulatory year</i> based on a TNSP's performance in the preceding <i>calendar year</i> .
force majeure event	has the meaning set out in Chapter 5 of the STPIS.
market systems	<i>AEMO's</i> systems for operating the <i>national electricity market</i> , and for recording and publishing data relating to the operation of the <i>national electricity market</i> .
parameters	the <i>performance incentive scheme parameters</i> and includes the sub-parameters, where applicable.
performance target	the level of performance that results in a TNSP neither receiving a financial penalty nor financial reward in the <i>regulatory year</i> .
s-factor or service standards factor	the percentage revenue increment or decrement that the <i>maximum allowed revenue</i> is adjusted by in each <i>regulatory year</i> based on a TNSP's performance in the previous <i>calendar year</i> .
weightings	the proportion of the <i>financial incentive</i> under the <i>service component</i> allocated to each of <i>parameters</i> applying to the TNSP under the <i>service component</i> .