Final decision

Early application of the market impact component of the service target performance incentive scheme for SP AusNet

Performance Target

July 2011

Inquiries about the currency of these guidelines should be addressed to:

Contents

Shortened forms

AER	Australian Energy Regulator
AEMO	Australian Energy Market Operator
MAR	Maximum Allowed Revenue
DI	Dispatch Interval
STPIS	Service Target Performance Incentive Scheme
TNSP	Transmission Network Service Provider
MIP	Market impact parameter
MMS	Market management system

1   Background

On 31 August 2007, the AER published its service target performance incentive scheme (STPIS) in accordance with clause 6A.7.4 of the National Electricity Rules (Electricity Rules). The original STPIS focused on network availability and reliability by providing incentives for transmission network service providers (TNSPs) to improve their performance against these parameters by providing rewards for improvements in performance standards and penalties for declining standards.

On 7 March 2008, the AER amended the STPIS to incorporate a market impact component, which is called the market impact parameter (MIP), and supplements the original STPIS by targeting transmission network outages that have an adverse impact on dispatch outcomes.

The amended STPIS provides financial rewards to a TNSP for improvements in its performance measure against a performance target. This complements the financial rewards and penalties of the service target framework outlined in the original STPIS. The MIP enables a TNSP to earn an additional revenue increment of up to 2 per cent of its maximum allowed revenue (MAR) for the relevant calendar year.

On 11 March 2010, the Australian Energy Market Commission approved the addition of clause 11.32 of the Electricity Rules which enabled the early application of an MIP. On 30 March 2011, SP AusNet applied to the AER for the early application of the MIP. On 6 April 2011, SP AusNet submitted an amendment to its application. On 31 March 2011, the AER published a further amended version of the STPIS. Since SP AusNet applied for early application of the MIP prior to this amendment, the application was assessed under the March 2008 version of the scheme.

2   Summary of AER decision

A summary of the AER's final decision on the values proposed by SP AusNet in its application is as follows:

- accept SP AusNet's proposed start date of 1 August 2011;
- replace SP AusNet's proposed performance target of 1433 dispatch intervals with 2072 dispatch intervals; and
- accept SP AusNet's proposed performance cap of zero dispatch intervals.

3   SP AusNet's application

In its application (including the amendment), SP AusNet proposed a:

- start date of 1 August 2011
- performance target of 1433 dispatch intervals per annum; and
- performance cap of zero dispatch intervals.

4   Consultation

Clause 11.32.3(i) of the Electricity Rules require the AER to publish SP AusNet's proposal for public consultation. On 13 April 2011, the AER published SP AusNet's proposal and invited written submissions from interested parties by 3 May 2011.

No submissions were received.

5   AER Analysis

The AER uses the same resources and undertakes the same analysis in assessing a TNSP's performance target as it does when assessing a TNSP's performance measure.

5.1   Resources

To calculate both a TNSP's performance measure and performance target, the AER allocates each network outage constraint to the TNSP responsible for the constraint using:

1.   the Market Information on Planned Network Outages, which is published every month by AEMO based on information provided by the TNSPs as required under clause 3.7A of the NER; or

2.   the Network Outage Schedule, which is published by AEMO on its website based on information provided by the TNSPs; or

3.   the description of the constraint ID published by AEMO; or

4.   where it is not clear from (1), (2) or (3), the published market management system data or other information provided by AEMO.

Where the information described in (1), (2), (3) or (4) indicates that more than one TNSP is responsible for a single network outage constraint (for example an outage affecting an interconnector), the number of dispatch intervals is apportioned equally between the TNSPs.

5.2   MMS Data

According to the definition of the MIP, the marginal value of a constraint is an indication of the change, at the margin, in the cost of producing electricity sufficient to meet demand brought about by a particular network outage constraint. Constraints with a marginal value less than $-10/MWh also produce a cost to the market.

When the STPIS was first introduced, the Australian Energy Market Operator (AEMO) published the marginal value of constraints within the market management system (MMS) database table DISPATCHCONSTRAINT. This table displays all marginal values as absolute values (i.e. no negative values appear).

In   May 2009,   AEMO   began   publishing   the   MMS   database   table MCC_CONSTRAINTSOLUTION. The outputs of this table are produced by re-running the dispatch engine to relax violated constraints that appear in the DISPATCHCONSTRAINT   table.   The   marginal   values   produced   by   the

MCC_CONSTRAINTSOLUTION table are considered to be a better reflection of the true marginal value of the constraints. The MCC_CONSTRAINTSOLUTION table contains both positive and negative marginal values.

The AER has advised all TNSPs subject to the MIP that MCC_CONSTRAINTSOLUTION data should be used whenever available for the purposes of calculating the performance target and performance measure. For this reason, marginal values less than $-10/MWh are included when assessing the MIP.

5.3   Exclusions

Eight exclusion categories are applicable to the MIP. For example, constraints used to manage the reclassification of non-credible contingency events to credible contingency events or any outage shown to be caused by a fault or other event on a 'third party system' are excluded. The complete list of exclusions provided under the scheme is available at Appendix B.

6   AER decision

Under clause 11.32.3(n) of the Electricity Rules, when assessing a TNSP's proposal for the early application of the market impact component of the STPIS, the AER must make a decision on:

- the start date; and
- whether it approves or refuses to approve the proposed values for a performance target or a cap for the MIP,

setting out reasons for the decision.

Under clause 11.32(r) of the Electricity Rules, if the AER's final decision is to refuse to approve the proposed value for a performance target, the AER must include in its final decision a substitute value which it reasonably considers will comply with the relevant requirements of the MIP.

6.1   Start date

As required by clause 11.32.3(e) of the Electricity Rules, the proposed start date of 1 August 2011 is more than 80 business days from the date of its application.

The performance target included within the AER's decision will therefore remain in place until the commencement of SP AusNet's next regulatory control period on 1 April 2014.

6.2   Proposed values for the MIP

The MIP is the number of dispatch intervals where an outage on a TNSP's network results in a network outage constraint with a marginal value greater than $10/MWh (or less than $-10/MWh). Note where there is more than one network outage constraint with a marginal value greater than $10/MWh in one dispatch interval, the market impact parameter counts the dispatch interval for each network outage constraint (that is, the same dispatch interval may be counted more than once).

The AER's analysis of SP AusNet's proposed values for the MIP is set out below.

6.2.1 Performance target

The STPIS provides that the performance target must be equal to the TNSP's average performance history over the most recent five years unless the AER approves a different period that is consistent with the objectives of the scheme. SP AusNet's proposed performance target is the annual average, over the five year period from 2006 to 2010, of the number of dispatch intervals in which a network outage constraint attributable to SP AusNet bound with a marginal value greater than $10/MWh (or less than $-10/MWh).

Table 1 provides a summary of SP AusNet's proposed annual performance history which was used to calculate its proposed performance target.

Table 1: SP AusNet's proposed annual performance 2006-2010 (dispatch intervals)

Year	2006	2007	2008	2009	2010	Average
Binding intervals	2046	3925	3984	2674	3177	3161.2
Exclusions	1162	2772	1604	1599	1523	1732
Contribution to the performance target	884	1173	2380	1075	1654	**1433***

*The average is 1433.2, however SP AusNet proposed 1433 dispatch intervals.

The AER does not approve SP AusNet's proposed performance target for the market impact component of the STPIS. Instead, the AER's decision is to substitute the proposed value of 1433 dispatch intervals with 2072 dispatch intervals. The performance target of 2072 dispatch intervals will remain in place until the commencement of SP AusNet's next regulatory control period on 1 April 2014.

MIP incentive payments are calculated based on the percentage reduction below the performance target in dispatch intervals related to outages having a market impact multiplied by 2 per cent of the calendar year adjusted MAR. Putting SP AusNet's performance target of 2072 dispatch intervals in context with the future calculation of its performance incentive payment for the period 1 August – 31 December 2011, for every dispatch interval reduction below the target SP AusNet will receive approximately $4500.

The reasons for the adjustments to the proposed performance target are summarised below. Details of each adjustment are provided in Appendix A.

- SP AusNet's proposed performance target did not include several dispatch intervals associated with constraint sets that were invoked to manage outages in Victoria. For example, constraints H^^V_MSDD1_R and H^^V_EPMB increased the final performance target approved by the AER.

- Market notices published by AEMO identified that certain dispatch intervals included in SP AusNet's proposed performance target were affected by manifestly incorrect inputs. These dispatch intervals fall within exclusion clause 8(a) of the MIP. Accordingly, all dispatch intervals associated with

constraints V>>V_SMTS_TX_H1_3B_R and H>>V_SMTXH1 were excluded.

- Market notices published by AEMO identified that constraint V>>SML_DDGN bound on 9 and 10 February 2010 to manage the reclassification of a non-credible contingency event to a credible contingency event due to lightning. According to exclusion clause 2 of the MIP, constraints that are used to manage the reclassification of lines are excluded from the MIP.

- SP AusNet's proposed performance target did not capture FCAS constraints that were invoked to manage network outages. For example, dispatch intervals associated with constraint F_S++HYSE_L5 significantly increased the final performance target.

- SP AusNet's proposed performance target did not include several binding interconnector constraints which were invoked to manage outages in Victoria. For example, dispatch intervals associated with constraints SVML_000 and VS_250 increased the final performance target.

- SP AusNet's proposed performance target did not include some discretionary constraints that were invoked to manage outages in Victoria. For example, dispatch intervals such as @V_LV_BL_4100 increased the final performance target.

- SP AusNet's proposed performance target captured all but two dispatch intervals for binding constraint N>>V_BUSS_1.

- SP AusNet's proposed performance target did not include dispatch intervals associated with automated constraint CA_SPS_38B0D2AB_01.

SP AusNet has agreed to all of these adjustments. Overall, the performance measure has increased by 3193 dispatch intervals. This increases SP AusNet's annual performance target by 638.6 dispatch intervals. The AER decision is to substitute the proposed performance target with 2072 dispatch intervals.

6.2.2 Performance cap

Under the STPIS, the proposed cap must equal zero dispatch intervals. In its proposal SP AusNet submitted a proposed cap of zero dispatch intervals and therefore the AER approves SP AusNet's proposed performance cap. This means that the maximum incentive payment is made when SP AusNet achieves a performance measure of zero dispatch intervals.

Appendix A: AER adjustments to SP AusNet's proposed performance target

Constraint ID	SP AusNet's proposed DI count	AER Adjustment to DI count	Reason for adjustment	Exclusion clause	Date binding
@V>V-500XLV	0	10	Outage in Victoria – see market notice 18461	N/A	05/09/2007
@V_LV_BL_4100	0	6	Outage in Victoria – see market notice 18461	N/A	05/09/2007
@V_LV_BL_4300	0	4	Outage in Victoria – see market notice 18461	N/A	05/09/2007
@V_LV_BL_4500	0	16	Outage in Victoria – see market notice 18461	N/A	05/09/2007
@V_LV_BL_4700	0	1	Outage in Victoria – see market notice 18461	N/A	05/09/2007
CA_SPS_38B0D2AB_01	0	78	Outage in Victoria – see market notice 25149	N/A	22/02/2009 23/02/2009
H>>V_SMTXH1	1	-1	Manifestly incorrect input – see market notice 18622	8(a)	20/09/2007
H>>H-BURC_2S	0	1	Outage in Vic	N/A	15/1/2007
H>>H-DDWO_A	0	67	Outage in Vic	N/A	07/06/2007 08/06/2007
H>>H-DDWO_C	0	1	Outage in Vic	N/A	28/02/2007
H>>H-JNWO_C	0	3	Outage in Vic	N/A	28/05/2007
HV_V1DDMS	0	12	Outage in Vic	N/A	21/10/2006 22/10/2006 15/05/2007
H^^V_JNWO	0	33	Outage in Vic – see market notice 21350 and 21361	N/A	01/05/2008 02/05/2008

H^^V_DDMS	0	5	Outage in Vic	N/A	15/05/2007
H^^V_DDSM1_R	0	19	Outage in Vic	N/A	29/03/2008 31/03/2008
H^^V_DDWO	0	13	Outage in Vic	N/A	28/02/2007 10/08/2007 19/05/2008 20/05/2008
H^^V_EPMB	0	57	Outage in Vic	N/A	11/07/2007 01/05/2008
H^^V_EPTT	0	1	Outage in Vic	N/A	25/03/2008
H^^V_MSDD1_R	0	195	Outage in Vic	N/A	27/04/2008 03/05/2008 17/05/2008 18/05/2008 01/06/2008 07/06/2008
H^^V_MSDD2	0	56	Outage in Vic	N/A	26/04/2008 17/05/2008 18/05/2008 01/06/2008
H^^V_X_EPMB_1	0	2	Outage in Vic	N/A	17/11/2007
N:H_DDSM	0	1	Outage in Vic	N/A	12/09/2006
N:H_HORC	0	41	Outage in Vic	N/A	11/07/2007 12/07/2007
N^^V_DDMB_2	0	1	Outage in Vic	N/A	14/05/2010
N^^V_DDMB_R	0	45	Outage in Vic	N/A	13/11/2008
N^^V_DDSM2_A	0	5	Outage in Vic	N/A	13/02/2009 13/04/2010 14/04/2010
N^^V_DDSM2_B	0	57	Outage in Vic	N/A	13/04/2010 14/04/2010 15/04/2010 20/04/2010
N^^V_MSDD1_R	0	26	Outage in Vic – see market notice 22211 and 22307	N/A	20/07/2008 27/07/2008
N>>V-JNWO_A	4	-4	Third party outage	3	24/10/2008
N>>V_DBUSS_1	123	2	Two dispatch intervals missing in SP AusNet data	N/A	02/06/2010
F_I+TL_L5_0600	0	1	Outage in Vic. See NOS	N/A	14/05/2006
F_MAIN++TL_L5_0600	0	11	Outage in Vic. See NOS		14/05/2006 20/06/2008
F_MAIN+TL_L5_0600	0	1	Outage in Vic	N/A	14/05/2006

F_QNHV++HYML_L5	0	9	Outage in Vic. See NOS – see market notice 14591 for 12/05/2006	N/A	08/05/2006 11/05/2006 12/05/2006 15/05/2006	
F_QNHV+HYML_L5	0	59	Outage in Vic. See NOS	N/A	19/01/2006 20/01/2006 03/04/2006 12/05/2006 04/10/2006	
F_QNV++HYML_L60	0	1	Outage in Vic. See NOS	N/A	27/11/2010	
F_S++HYML_L5	0	238	Outage in Vic. See NOS Unplanned outage on 15/04/2009 – see market notice 25821	N/A	09/05/2006 09/08/2006 03/10/2006 04/10/2006 04/03/2007 17/03/2007 03/10/2007 20/12/2007 05/06/2008	06/06/2008 15/04/2009 07/09/2009 09/11/2009 21/04/2010 22/04/2010 28/11/2010
F_S++HYSE_L5	0	776	Outage in Vic. See NOS	N/A	10/10/2006 13/10/2006 14/10/2006 14/05/2007 21/05/2007 22/05/2007 23/05/2007 24/05/2007 18/07/2007 05/09/2007 06/09/2007 07/09/2007 15/11/2007 03/06/2008 05/08/2008 02/09/2008	03/09/2008 04/09/2008 06/09/2008 04/10/2008 05/10/2008 18/10/2008 21/10/2008 22/10/2008 06/11/2008 20/04/2009 21/04/2009 22/04/2009 12/01/2010 18/05/2010 04/10/2010
F_S++HYML_L6	0	74	Outage in Vic. See NOS Unplanned outage on 15/04/2009 – see market notice 25821	N/A	15/04/2009 09/11/2009 21/04/2009 22/04/2010 23/04/2010 12/11/2010	
F_S++HYML_L60	0	238	Outage in Vic. Unplanned outage on 15/04/2009 – see market notice 25821	N/A	15/04/2009 30/07/2009 07/09/2009 12/10/2009 13/10/2009 14/10/2009 09/11/2009 25/03/2010	20/04/2010 21/04/2010 22/04/2010 11/11/2010 12/11/2010 27/11/2010 28/11/2010 30/11/2010

F_S++HYSE_L6	0	15	Outage in Vic. See NOS	N/A	03/09/2008 12/01/2010 19/05/2010 04/10/2010	
F_S++HYSE_L60	0	250	Outage in Vic. See NOS	N/A	01/09/2008 02/09/2008 03/09/2008 04/09/2008 05/09/2008 06/09/2008 08/09/2008 09/09/2008 06/11/2008 04/04/2009 08/04/2009 20/04/2009	21/04/2009 22/04/2009 21/07/2009 22/07/2009 02/09/2009 12/01/2010 25/03/2010 18/05/2010 19/05/2010 20/05/2010 04/10/2010 06/10/2010
SVML_000	0	429	Outage in Vic. See NOS	N/A	10/08/2006 03/10/2006 30/01/2007 31/01/2007 02/02/2007 03/02/2007 04/02/2007 05/02/2007 06/02/2007 09/02/2007	16/03/2007 17/04/2007 07/08/2007 08/08/2007 09/08/2007 03/06/2008 17/09/2008 18/09/2008 06/10/2009
VSML_000	0	198	Outage in Vic. See NOS	N/A	10/08/2006 29/01/2007 30/01/2007 01/02/2007 02/02/2007 03/02/2007 04/02/2007 05/02/2007 18/08/2007 19/08/2007 03/09/2007	
VS_250	0	197	Outage in Vic. See NOS. For 17/03/2010, see market notice 30906. For 18/05/2006, see market notice 14622.	N/A	19/01/2006 20/01/2006 27/03/2006 28/03/2006 03/04/2006 08/05/2006 11/05/2006 18/05/2006 03/07/2006	10/08/2006 24/08/2006 07/10/2006 12/10/2006 17/03/2010 27/11/2010 28/11/2010
V>>V_SMSY_KTSM	0	1	Outage in Vic – see market notice 26364	N/A	28/05/2009	
VH:DDMS	0	5	Outage in Vic	N/A	03/10/2007 29/06/2008	
VH>V1KTTX	0	2	Outage in Vic	N/A	02/02/2006	
V>>SML_DDGN	53	-51	Reclassification – see market notice 30240 & 30276	2	09/02/2010 10/02/2010	

V>SML_VFRB_3	12	-1	Market notice 14022 indicates constraint invoked on 20/01/2006 for testing	N/A	20/01/2006
V>>V_SMTS_TX_H1_3 B_R	4	-4	Manifestly incorrect input by AEMO – see market notice 18625	8(a)	20/09/2007
V>>V_X_DDTX1_DBU SS_A	17	-9	Outage related to unregulated assets	4	02/02/2007
Total	214	3193			
Average		638.6			

Appendix B: Exclusions

1. *force majeure events*
2. network constraints that are invoked to manage the reclassification of *non-credible contingency events* to *credible contingency events* as per clause 4.2.3(f) of the NER
3. any outages shown to be caused by a fault or other event on a 'third party system'—e.g. intertrip signal, generator outage, customer installation
4. outages on assets that are not providing *prescribed transmission services*
5. outages for personal safety that are not related to the activity of owning or operating a *transmission network*
6. outages that are only for the purpose of assisting with operational security, for example where a lower voltage parallel circuit is taken out of service to assist with transfers across an interconnector
7. network constraints related to network support services in accordance with clause 5.6.2 of the NER
8. *dispatch intervals* (for a *network outage constraint*) that are affected by:

    a. a manifestly incorrect input to the *dispatch algorithm* (as determined by *AEMO* under clause 3.9.2B of the NER)

    b. a constraint applied by *AEMO* that does not accurately reflect or is otherwise inconsistent with the network capability that the TNSP advised *AEMO*

    c. a scheduling error

    d. *mandatory restrictions* under clause 3.12A of the NER

    e. *AEMO* declaring the *spot market* suspended under clause 3.14.3 of the NER, or

    f. an *administered price cap* under clause 3.14.2 of the NER