

EnergyAustralia's Submission to

Australian Competition and Consumer Commission

2005 Transmission Service Standards – Report

17 February 2006



1 Executive Summary

This report establishes EnergyAustralia's service performance for the 2005 calendar year against the measures set out in the ACCC's NSW and ACT Transmission Network Revenue Cap Decision – EnergyAustralia 2004-05 to 2008-09 (the Decision), and the S-factor adjustment to the Maximum Allowable Revenues (MAR) for the 2006/07 financial year as calculated by EnergyAustralia.

The Decision sets out those performance measures against which EnergyAustralia is required to report. Specifically:

- 1. Transmission circuit (feeder) availability;
- 2. Transmission transformer availability;
- 3. Transmission reactive availability;
- 4. MVA days of feeder availability;
- 5. MVA days of 'transmission bulk supply' transformers non-availability;
- 6. MVAr days of reactive plant non-availability;
- 7. Loss of Supply event frequency index
- 8. Hours that planned outage plans were in place

Of these measures only the transmission circuit availability is included in the calculation of the S-factor as defined in Table 7.4 of the Decision. The remaining measures include those proposed by EnergyAustralia to overcome the limitations of simply applying the circuit availability measure. The additional measures are to be tracked and measured by EnergyAustralia over the 2005-09 regulatory period, with the intention of providing a performance history that will facilitate the inclusion of some or all of these measures in the calculation of the S-factor during the next regulatory period. Therefore for the current regulatory period, these measures represent non-incentive performance measures.

The Decision set out the target transmission circuit availability performance for each year of the regulatory period at 96.96%. EnergyAustralia's actual performance against this measure for the 2005 calendar year was 98.30%, exceeding the target by 1.34%.

EnergyAustralia's annual performance against the transmission circuit availability, based on the expanded transmission network regulated under the Determination, is set out in Table 1 below.

 Table 1 – Annual Transmission Circuit Availability

Year	2004*	2005
Performance	98.57%	98.30%

***Note:** 2004 was based on the final 6 months of the year due to the increased number of assets covered by the definition of transmission assets.



At the time that the previous Service Standards report was submitted to the ACCC, the Decision was still in draft form, and therefore was still subject to ongoing consultation. With the finalisation of the Decision in April 2005, EnergyAustralia's reporting obligations were expanded to include several measures proposed by EnergyAustralia to mitigate concerns of inappropriate incentives. Further, the ACCC has required EnergyAustralia to report on some measures advocated by the ACCC in the Statement of Regulatory Principles, but to which EnergyAustralia did not previously possess adequate historical data.

The performance against the non-incentive measures will be provided to the AER in a sperate report. This report will set out EnergyAustralia's performance against the non-incentive measures, and will discuss the complications arising from the definitions for these measures and proposed solutions or clarifications of the definitions.

In accordance with the Decision, EnergyAustralia submits that an adjustment of \$637,577 be made to the 2006/07 MAR to reflect EnergyAustralia's service standards outcomes for the 2005 calendar year.



2 Financial Incentive Performance Measures

Performance Measure Targets

Transmission circuit availability is the sole performance measure defined by the ACCC for the calculation of the S-factor in the Decision. Section 7.7 of the Decision states that: "One measure, feeder reliability, should be reported for the purpose of determining an annual financial incentive."¹

The details of the performance measure target set by the ACCC and the incentive bounds within which the service incentive mechanism will operate over the course of the regulatory period are contained in Table 7.3 of the Decision, as set out below.

Performance measure	Unit of measure	Revenue at risk	Collar	Target	Сар
Transmission circuit availability (capped at 14 days)	%	1%	94.46%	96.96%	98.96%

Table 3 – Performance incentive target and incentive range

Definition of the service incentive performance measure

Appendix D of the Decision provides some inconsistency with respect to the definition of the performance measure to be used for the purposes of calculating the S-factor.

Appendix D of the Decision defines transmission circuit availability to include the performance of the feeder, transformer and reactive network elements that constitute the transmission network.

However, EnergyAustralia has interpreted the definition to be limited to the transmission feeder availability sub-measure, based on critical analysis and comparison of the text of the Decision itself in section 7.7 (as noted above), and the full listing of measures to be reported as contained in Table 7.3 of the Decision.

We believe that the terminology in the Decision would have been more readily understandable if it had reflected this use of the transmission circuit availability submeasure as the sole basis for setting the S-factor.

The ambiguity of the definition of the performance measure or sub-measure that is to be reported and used for the purposes of setting the S-factor is unfortunate, but EnergyAustralia seeks as part of the ACCC's approval of the S-factor adjustment submitted by EnergyAustralia that it confirm EnergyAustralia's interpretation of the service incentive measure definition.

¹ ACCC, NSW and ACT Transmission Network Revenue Cap Decision – EnergyAustralia 2004-05 to 2008-09, 27 April 2005, Page 139



Therefore as the ACCC has defined the service incentive measure to be reported as transmission circuit availability, wherever EnergyAustralia has used that term throughout the performance incentive aspects of this report (Sections 1 to 3) it should be read to mean transmission feeder availability.

Extended availability events capped to 14 days

The Decision has provided for extended availability events to be capped at 14 days. This was based on recommendations provided to the ACCC by its consultants SKM, who stated that such a cap would be consistent with the calculation of performance for the other TNSPs.

This cap has been applied by EnergyAustralia in calculating its performance for the 2005 calendar year, and the following 11 events were identified and capped as per the Determination.

Feeder Name	Availability Event Date	Duration (Days)	Cause of outage
202	5/4/2005	87.6	Refurbishing earthing grid at Rozelle STS
203	23/1/2005	30.9	Cable Repairs
900	11/7/2005	42.1	Refurbishing earthing grid at Rozelle STS
908/909	27/3/2005	96.2	Cable Repairs
90W	1/2/2005	181	Reconnecting feeder at Pyrmont Sub-transmission Sub
91L	24/7/2005	37.1	Cable Repairs
92F	3/1/2005	129.2	Cable Repairs
92F	31/10/2005	61.6	Link Box Repairs
9SE	15/6/2005	149.2	Connection of Green Square Zone Sub
95Z	17/4/2005	23.0	Pole Replacements
9SA	25/2/2005	102.7	Decommissioning feeder and reconnecting to Campbell St

 Table 4 – Capped availability events



These events have been considered and capped as appropriate to all reported availability measures.

Exclusions

The Decision and the Statement of principles for the regulation of transmission revenues – Service standards guidelines 12 Nov 2003, states that exclusions may be applied with respect to three categories of information.

- Availability data of unregulated transmission assets;
- Impacts on the availability statistics of events occurring within third party systems; and
- Impacts on the availability statistics of force majure events.

The following exclusions have been applied by EnergyAustralia in calculating the transmission circuit availability statistics for the 2005 calendar year.

- 1. Unregulated transmission assets.
 - No exclusions have been applied.

2. Third party system events resulting in transmission outages

• No exclusions have been applied.

3. Force Majure events

• No exclusions have been applied. All events that are of a force majure nature do not meet EnergyAustralia's understanding of the materiality threshold to be classified as an Excluded Force Majure event, as defined in section D.1 of Appendix of the Decision..

Appendix D of the Decision provides for inclusions and exclusions relating to all assets captured within the larger definition of transmission circuit availability. However as discussed above, the definition for the purposes of EnergyAustralia's reporting and the calculation of the S-factor within the current regulatory period relates solely to the availability of transmission feeder elements. Therefore the following "transmission circuit" elements that are part of the inclusions in the broader definition in Appendix D have been excluded from the calculation of this measure, but are nonetheless included in the calculation of subsequent non-incentive measures in section 4 of this report, consistent with the ACCC Decision.

- 1. Power transformers;
- 2. phase shifting transformers;
- 3. static var compensators;
- 4. capacitor banks; and
- 5. any other transmission transformer or transmission reactive assets within EnergyAustralia's transmission network.



Inclusions

The performance of all transmission network assets set out in Appendix D of the Decision, with the exception of those specifically excluded above, has been included in the calculation of the transmission circuit availability performance measure and is therefore consistent with EnergyAustralia's understanding of the requirements of the Decision.



3 2005 S-Factor Calculation

As noted previously, section 7.7 of the Decision states that; "One measure, feeder reliability, should be reported for the purpose of determining an annual financial incentive."²

The details of the measure and the incentive bounds are contained in Table 7.3 of the Decision as set out below.

Performance measure	Unit of measure	Revenue at risk	Collar	Target	Сар
Transmission circuit availability (caped at 14 days)	%	1%	94.46%	96.96%	98.96%

Table 5 – Performance incentive target and incentive range

This information has been expressed mathematically by the ACCC in Table 7.4 of the Decision to allow the S-factor to be easily calculated as replicated in the Table below.

Table 6 – Formulas to be used to calculate the S-factor

				Where:				
S	=	-0.01				Availability	<	94.46%
S	=	0.40	x Availability + -0.387827	94.46%	\leq	Availability	\leq	96.96%
S	=	0.50	x Availability + -0.484783	96.96%	\leq	Availability	\leq	98.96%
S	=	0.01	-	98.96%	<	Availability		

As reported in section 2, the transmission circuit availability for EnergyAustralia for the 2005 calendar year was **98.51%**. Therefore the applicable formula that EnergyAustralia is to apply to calculate the S-factor is set out in Box 1 below.

Box 1 – Calculation of the S-factor

S = 0.50 x 0.9830 - 0.484783 S = 0.007767 S = 0.6717%

Therefore EnergyAustralia is to apply the S-factor adjustment calculated above of 0.6717%, to the average 2005 financial year AR of $94.92m^3$.

EnergyAustralia's MAR for 2006/07 is to therefore include an adjustment of **\$637,577** to account for the 2005 financial year S-factor performance outcomes.

² ACCC, NSW and ACT Transmission Network Revenue Cap Decision – EnergyAustralia 2004-05 to 2008-09, 27 April 2005, 139

³ Using the actual CPI of 2.4% to calculate the 2005/06 revenues the average 2005 financial year AR is calculated as being \$94.92m.