1. Introduction

Sinclair Knight Merz (SKM) has been engaged by the Australian Competition and Consumer Commission (ACCC) to develop a set of service standards for Transmission Network Service Providers (TNSPs) operating in the Australian National Electricity Market (NEM).

The obligations of the ACCC, in respect of monitoring and regulating the TNSPs, are outlined in Clause 6.2 of the National Electricity Code (NEC). Further, the ACCC published on 27 May 1999, a draft "Statement of Principles for the Regulation of Transmission Revenues". This statement of principles document outlined in general terms the guidelines under which the ACCC proposed to "exercise its powers to regulate transmission revenues".

It should be noted that the various TNSPs have, or will come under the jurisdictional control of the ACCC according to the following timetable:

TNSP	Date
ElectraNet SA	01.01.2003
EnergyAustralia	01.07.1999
Powerlink	01.01.2002
SPI Powerlink	01.01.2003
Snowy Mountains Hydro Electricity Authority	01.07.1999
Transend Networks	Before Tasmania joins NEM
TransGrid	01.07.1999

Within the statement of principles document, specific reference was made to the issue of service standards for TNSPs. In particular, under section 7 of the summary, the ACCC noted that "The Commission believes that effective incentive-based regulation should include an explicit level of service, for which the TNSP has been provided by the regulators sufficient income to maintain the assets necessary to provide that level of service". The Commission further noted that "… the Commission required TNSPs to propose a single set of service standards, and proposed benchmarks for each standard, as part of their regulatory review application. The Commission will review the TNSP's application and establish a set of service standards with performance benchmarks, and a quality of service monitoring program for each TNSP under its jurisdiction."

Finally, the ACCC noted that "Penalties for non-performance of service standards will be developed and will be imposed during a regulatory review for a TNSP that does not, in the opinion of the Commission, maintain its service to customers at the benchmark level."

In fulfilment of this obligation under the NEC, and the draft Statement of Principles document, ACCC has proceeded to further develop the framework of service standards for TNSPs in accordance with the Terms of Reference document attached at Appendix A.

This is a Stage 1 – Discussion Paper, in response to the Terms of Reference.

2. Executive Summary

2.1 Background

The ACCC has engaged SKM to develop a set of service standards for TNSPs operating in the NEM. The TNSPs are those companies that own and operate transmission assets, and the companies concerned are:

- ElectraNet SA (South Australia)
- EnergyAustralia (NSW)
- Powerlink (Queensland)
- VENCorp / SPI Powernet (Victoria)
- Snowy Mountains Hydro Electricity Authority (SMHEA)
- Transend (Tasmania)
- Transgrid (NSW)

2.2 Performance Measure Characteristics

In developing the appropriate suite of performance measures for the ACCC's TNSP Performance Incentive Scheme, a number of criteria or principles were established at the outset. One of these criteria was that the performance measures should be relatively operational in nature. They should be measures which are not only within the control of the TNSP to influence, but the results of the TNSP's endeavours should be evident during the regulatory period during which the performance incentive scheme is operational.

By implication, performance measures which require substantial capital investments or longer term strategies to be implemented before any noticeable change to the performance indicator occurs are generally not considered appropriate for the ACCC TNSP Service Standards scheme.

It will be noted therefore that the performance measures proposed in this discussion paper tend to be short to medium term measures.

2.3 Inconsistency of Existing Performance Measures

Research to date has indicated that the TNSPs in Australia currently to do not report performance, either for internal management purposes, or to their respective jurisdictional regulator, to a consistent set of performance measures. Only one measure is used universally by TNSPs, namely "circuit availability". The definitions used, and data collected and reported against this measure, are also inconsistent from TNSP to TNSP.

SKM has concluded that the current set of performance measures, and data reported against those measures is <u>not</u> sufficiently robust, consistently defined, or reliable enough to use as the basis for a TNSP Service Standard Incentive Scheme.

SKM's experience in the development of performance measures, and performance benchmarking is that definitional difference and data inconsistencies often make inter-company comparisons and international comparisons difficult, if not impossible. Any performance data published in this discussion paper potentially suffers from the same definitional and data inconsistency shortcomings.

SKM positively discourages any inter-company comparisons in deriving conclusions about TNSP performance based on figures published in this discussion paper.

2.4 Market Based Performance Measures

ACCC and SKM have consulted widely with various industry stakeholders, including the TNSPs themselves, State based regulators, market participants, NECA and NEMMCO, in formulating this discussion paper on TNSP Service Standard Measures.

During these meetings and discussions several organisations and individuals expressed the view that TNSP service measures should focus on "market impact or outcomes", rather than internal technical or system focussed performance measures. SKM has researched the availability, relevance and applicability of such measures, and has concluded that measures that directly link TNSP performance with market outcomes should be "phased in" over the first 5 years of the Service Standards Incentive Scheme. Two service standard measures have been included in the initial set which are designed to capture, to an extent, the impact of transmission constraints on the operation of the market. These are:

- Hours of intra-regional transmission constraints pa.
- Hours of inter-regional transmission constraints pa.

These measures, while being indicative of the impact that constraints have on the operation of the market, do not directly link TNSP performance with the market impacts of each individual constraint or event.

2.5 International Survey

SKM has researched the range of performance measures used to measure the performance of transmission companies in various countries with advanced implementation of competitive energy market systems. These countries include the UK, New Zealand, and a selection of companies in the US.

This research indicates that similar measures to those proposed by SKM are either in use, or being considered for these transmission companies, but that the measures were often tailored differently or given different emphasis, depending on the market structure, and the functions and responsibilities of the transmission companies within that market structure. Of the 8 companies surveyed, only 3 (National Grid, San Diego Gas & Electric, Southern California Edison) are subject to any form of financial incentive scheme, as proposed by the ACCC.

2.6 Proposed Initial Performance Measures

The full range of performance measures proposed for the initial TNSP Service Standards Incentive Scheme are:

1) Circuit Availability (% pa)
2) Minutes off Supply (minutes pa)
3) Average Restoration Period (minutes per event)
4) Hours Constrained (Intra-regional)
5) Hours Constrained (Inter-regional)

In addition to the above measures, the Service Standards implementation plan makes provision for the inclusion of other "market oriented" performance measures that have yet to be fully scoped, defined and measured. Such "market oriented" measures can be implemented by ACCC during the 5 year regulatory reset period, within the framework of the incentive scheme developed by SKM.

Of necessity, the TNSP Service Standards scheme needs to be sufficiently flexible that it can be applied to TNSPs who have already undergone a revenue reset, and to TNSPs who have yet to have such a reset. SKM will design the scheme such that it can be implemented at the start of a reset, or during the period between resets. The scheme will also be designed to accommodate the development of new performance measures (such as market impact measures), together with the "ramping up" of some measures and the "ramping down" of other measures.

A fundamental premise of the flexibility designed into the scheme by SKM is that any changes to the scheme during its operation will be agreed to by the ACCC and the relevant TNSP.

2.7 Next Steps

As previously stated, the existing performance measures monitored and reported by TNSPs are not considered suitable for implementation of the Service Standards Incentive Scheme. As a next stage in the exercise therefore, SKM plans to collect 3-5 years of performance data against a consistent set of definitions and data requirements for the five (5) measures shown above.

This data will then be used to establish performance objectives for the 5 year period 2002 to 2006, or such other period that is appropriate to each TNSP. These performance objectives will in turn be used to establish the financial bonus/penalty regime to be recommended to the ACCC.

The anticipated sequence of future activities in the ACCC TNSP Service Standards Incentive Scheme is:

- Finalisation of this draft discussion paper, including detailed definition of performance measures.
- Data collection from TNSPs of historical performance results against the agreed definitions.
- Establishment of performance objectives for the appropriate period for each TNSP.
- Determination of the design of the financial bonus / penalty regime to apply to each TNSP.
- Implementation of the Service Standards Incentive Scheme for each TNSP, on a date / dates to be determined.