

POWERLINK QUEENSLAND

RESPONSE TO: RELIABILITY PANEL ISSUES PAPER

Comprehensive Reliability Review

11 August 2006

Introduction

Powerlink welcomes the opportunity to comment on the Reliability Panel's Issues Paper as part of their comprehensive review of reliability.

Powerlink supports the TransGrid submission in respect of transmission network reliability standards and measures. In particular, Powerlink endorses the view that the unsupplied energy measure is an appropriate reliability standard for regional generation and interconnector capacity and enables the National Electricity Market Management Company to determine an intervention trigger for the reliability safety net. It is not an appropriate reliability standard for transmission planning and for monitoring the reliability of the transmission network. National and international practice almost universally uses deterministic transmission reliability standards that are clear to all concerned, e.g. those developed by the North American Electric Reliability Council (NERC) which we describe below.

It is imperative that any action proposed by the Reliability Panel does not detract from a Transmission Network Service Provider's ability to deliver mandated reliability standards and indeed the high level of reliability witnessed, and expected, by customers to date.

International Best Practice

Powerlink would urge the Reliability Panel to carefully consider international best practice and, specifically, the outcome of reviews in countries which have experienced major blackouts in recent years. In particular, the major blackout in northeast USA and Canada in August 2003, which resulted in the initial loss of over 50 million customers and 60GW of load, has resulted in significant changes to relevant reliability standards for all North American transmission entities.

Following the major blackout, a joint review by the US and Canadian Governments drew on international experts and culminated in the US Government passing the *Energy Policy Act of 2005*, which focussed on transmission grid reliability and security. A core element of the Act was to make reliability and security standards mandatory and enforceable (rather than voluntary), giving NERC the task of developing those mandatory standards.

The NERC reliability standards for transmission are, in line with international best practice, deterministic minimum standards that must be met by all States. However, individual States and Provinces may impose higher standards where these are perceived to be appropriate due to social or economic reasons.

The North American experience was mirrored on a smaller scale in Queensland following reliability failures in the electricity distribution networks in recent years. The

Queensland Government instigated a review, involving industry experts, which compared the reliability standards of the Queensland electricity distributors with national and international standards. This highlighted material gaps and resulted in a move to mandatory and enforceable reliability standards, again deterministic in nature.

Powerlink believes it would be prudent for the Reliability Panel to be mindful of the North American experience and to adopt an approach that recognises the importance of aligning reliability standards with international best practice. Any standards established by the Reliability Panel will inevitably be subjected to scrutiny by international experts in the event of a blackout event. Therefore, those standards must be able to withstand comparison to international best practice.

Given the severity of the event and thoroughness of the consequential review of practices, Powerlink anticipates that the North American approach will be identified as the "benchmark" for international best practice. As in the USA and Canada, the imposition of minimum reliability standards for all participants in the National Electricity Market (NEM) would ensure a consistent national approach, whilst allowing individual States to impose higher standards where the national standards are not considered adequate.

However, Powerlink considers it appropriate that any minimum deterministic standard recognise the risks and consequences of any loss of supply. Powerlink recognises that this may lead to different deterministic standards to suit different situations. Consequently, Powerlink considers that the minimum deterministic standard for the main transmission flow paths (the "back-bone grid") should be to avoid involuntary load shedding for credible single contingencies, and that it may be justifiable to set a higher standard to avoid cascading collapse of the interconnected network for certain plausible multiple contingencies, as NERC has done.

In summary, Powerlink would urge the Reliability Panel to consider the prudence of adopting a nationwide minimum reliability standard, along the lines of the NERC benchmark, which would align the NEM with international best practice.

