



Neville Henderson
Chairman Reliability Panel
Level 6, 201 Elizabeth Street
Sydney NSW 2000
Lodged via www.aemc.gov.au

Friday, 28 October 2016

Dear Mr Henderson,

RE: Review of the System Restart Standard (ref REL0057)

ENGIE appreciates the opportunity to comment on the draft determination by the Reliability Panel on the power system restart standard (draft standard).

ENGIE is a global energy operator in the businesses of electricity, natural gas and energy services. ENGIE is the number one independent power producer in the world with 115.3 GW of installed power-production capacity, 19 GW of which is renewable. ENGIE employs 1,800 people in Australia and supplies 12 per cent of Australia's National Electricity Market, and has an installed generating capacity of more than 3,550 MW. ENGIE also owns Simply Energy which provides electricity and gas to more than 550,000 retail customer accounts across Victoria, South Australia, New South Wales and Queensland.

ENGIE is generally supportive of the approach that has been adopted by the Reliability Panel in its consideration of this important matter, and acknowledges the efforts that have been taken to establish a robust standard that achieves a practical basis for restarting the power system in a cost effective manner. ENGIE is concerned that the generation restoration curves that have been used to determine the draft standard are ambitious, and do not reflect reasonable estimates of the time required to reinstate generation capacity following a total loss of supply. This concern has been emphasised by the time taken to restore the South Australia network following the system black event in that region on 28 September 2016.

This submission includes specific comments on the key components of the draft standard.

Intermediate time requirement

ENGIE notes that the Reliability Panel are proposing to remove the current intermediate time requirement of having to procure sufficient System Restart Ancillary Service (SRAS) to re-supply and energise the auxiliaries of power stations within 1.5 hours of a major supply disruption occurring to provide sufficient capacity to meet 40 per cent of

Australia

Level 33, Rialto South Tower,
525 Collins Street Melbourne, Victoria 3000, Australia
Tel. +61 (0)3 9617 8400 Fax +61 (0)3 9617 8401 engie.com.au

INTERNATIONAL POWER (AUSTRALIA) PTY LTD ABN 59 092 560 793
is part of a joint venture between ENGIE S.A. and Mitsui & Co., Ltd.



demand. The draft standard specifies a level of supply of generation and transmission capability necessary to be able to supply the auxiliary loads and restart all the other generating units required to ultimately meet the load.

ENGIE acknowledges the argument in support of removing the current intermediate time requirement, being that it places an unnecessary restriction on AEMO in procuring system restart sources. Whilst removing the previous intermediate step eliminates a barrier to entry, it will be difficult for potential SRAS providers to ascertain the extent to which they contribute towards the draft standard, since it refers to a desired overall operating state, and not a specific obligation on the SRAS provider.

ENGIE notes that this difficulty can be addressed by AEMO under rule clause 3.11.7(d)(4), which requires AEMO to include in their SRAS Guideline, description of their process for determining the number and location of system restart ancillary services required to be procured for each electrical sub-network consistent with the system restart standard.

Time and level requirements

The Reliability Panel has specified the level in the draft standard as a percentage of average operational demand in that region, rather than the existing percentage of the peak demand. ENGIE agrees that since the operational demand is more stable over time than peak demand, operational demand provides a better means for expressing the standard.

The Reliability Panel have relied upon generation restoration curves for each electrical sub network in quantifying the time requirements. ENGIE is aware that the generation restoration curves have been challenged by some industry experts, who believe that they are overly ambitious. ENGIE has not carried out its own analysis of the voracity of the published generation restoration curves, but would nevertheless, urge the Reliability Panel to respond in a comprehensive manner to the concerns that have been raised, to ensure that all industry stakeholders have a level of confidence in the outcome.

No doubt the recent blackout event in South Australia on 28 September provides a timely case study for analysis. ENGIE notes that the draft deamination in figure 6.7 suggests that draft standard amount of generation restoration can be achieved in between 90 and 110 minutes assuming one of five system restart sources respectively. These times seem somewhat optimistic given the fact that the system restoration on 28 September took many hours.

In summary, ENGIE supports the approach that the Reliability Panel are adopting, with the proviso that the modelling and assumptions that have been used to establish the generation restoration curves for each region can be shown to be robust and defensible.



Aggregate reliability

The 2015 SRAS rule change removed the concept of primary and secondary restart services and introduced a requirement for the system restart standard to include an “aggregate reliability” for each electrical sub-network. The Reliability Panel have proposed an approach to achieve the aggregate reliability based on an assessment of the probability that the level and time components of the draft standard would be satisfied.

ENGIE is broadly supportive of this approach, noting that there will be many elements to consider in the assessment of the probability of the level and time components. For this reason, the requirement that AEMO provide detailed descriptions of the process to be used for the assessment of aggregate reliability is strongly supported.

ENGIE trusts that the comments provided in this response are of assistance to the Reliability Panel in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Chris Deague". The signature is fluid and cursive, with a prominent initial "C".

Chris Deague
Wholesale Regulations Manager