

23 November 2020

Graham Mills
Australian Energy Market Commission
Sydney South NSW 1235
Submitted online to: <a href="https://aemc.gov.au">https://aemc.gov.au</a>

Dear Graham,

## RE: Reliability Panel - Review of the system restart standard 2020 (Ref: REL0077)

Thank you for the opportunity to submit a response to the Review of the Determination System Restart Standard 2020.

## Queensland as a single sub-region

Powerlink provided commentary on this proposed change in September 2020 to AEMO when they were preparing revisions to the SRAS Guideline. The main concerns raised at this time were that the combination of regions may lead to all SRAS being procured in what is currently the southern subnetwork and that electrical limitations would make the restoration of the central and northern Queensland regions challenging, if not impossible.

Section 5.9.6 "Obligations to reconnect" in the National Electricity Rules (NER) state:

b) In carrying out its obligations under clause 5.9.6(a), AEMO must, to the extent practicable, arrange for the implementation of an equitable sharing of the reconnection of facilities across interconnected regions up to the power transfer capability of the network and, in performing these obligations within a region, both AEMO and the relevant Network Service Provider must, to the extent practicable, give priority to reconnection of a region's sensitive loads.

	A 'recommendation' to consider at
least one SRAS generator north of Bundaberg is not specific enoug	h to alleviate Powerlink's concerns
on this matter. For example, a generator located in Townsville wor	uld not be suitable

Powerlink is also disappointed that these changes were discussed as being part of a 'Guideline', but now are being recommended to form a 'Standard' without any consultation. The feedback given to previous documents was aimed at the lower authority document level, not that of a standard.

33 Harold Street, Virginia
PO Box 1193, Virginia, Queensland 4014, Australia
Telephone: (07) 3860 2111 Facsimile: (07) 3860 2100
www.powerlink.com.au

## Non-traditional technologies for system restart

While Powerlink supports renewable forms of generation, it does not believe inverter based technologies are currently capable of playing a part in a system restart.

Section 2.1.1 of the AEMC determination is titled "What are SRAS states."

"In addition to traditional SRAS providers, a number of non-traditional providers of "black start" capability are emerging. These include technologies such as batteries combined with grid forming inverters. SRAS may also be provided by facilities which have the capability to assist the re-energisation process. The Commission's SRAS rule included changes to allow for restoration support services and non-traditional technologies capable of providing black start services to be captured by the SRAS frameworks"

Powerlink believes this section of the standard should be re-written to state only reactive power support can be provided by inverter based technologies. While grid forming inverters can operate islanded, they are unlikely to help with the restart process. It is also important to note that most inverter based technologies are not currently able to be used in early stages of a restart due to low fault levels, for example, Powerlink's Static VAr Compensators (SVCs). These concerns have previously been raised with AEMO

Kınd Regards,

Gary Edwards

Executive General Manager

Can Edward

Operations and Service Delivery