

9th June 2017

Con Carellas  
Principal Advisor  
Essential Services Commission  
GPO Box 2605  
ADELAIDE SA 5001

Submitted electronically to [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au)

Dear Con,

**Subject: Inquiry into licensing arrangements for generators in South Australia**

Snowy Hydro appreciates the opportunity to provide a submission on the Inquiry into the licensing arrangements for generators in South Australia by the Essential Services Commission of South Australia (ESCOSA).

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5500 megawatts (MW) of generating capacity across New South Wales, Victoria and South Australia including the iconic 4100 MW Snowy Mountains Hydro-electric Scheme. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy. The submission will refer to all our entities as the Snowy Hydro Group.

The Snowy Hydro Group currently holds an Electricity Generation Licence for three diesel power stations in Lonsdale, Angaston, and Port Stanvac, that have come into operation variously since 2002 through to 2008. Snowy Hydro is looking to expand its generation capacity in South Australia with further synchronous peaking generation suited to supporting the intermittency and high penetration of renewables in the SA market, with a coordinated investment of around 200 GWh of solar energy. Additionally, the Snowy Hydro Group views the South Australian market as a prospective one from a retail perspective, with an increasing retail customer base in the order of 60,000 customers, and repeat Roy Morgan and Canstar awards demonstrating that the Group's 'Lumo' retail brand is respected in SA, including Canstar Blue's Most Satisfied Customers Award South Australia in the electricity category. To date the Group has viewed this position as a platform for growth in South Australia.

The Snowy Hydro Group would like to encourage the Commission to consider all submissions made to the Inquiry in light of the Commission's broad statutory objectives, that do not relate only to generation system security, but which range through each aspect of the

electricity sector from electricity generation, transmission, distribution, to the protection of the interests of consumers of electricity. In an analogous way, as energy companies are increasingly vertically integrated they may be expected to respond to findings in one part of the electricity sector with actions that reach into various components of the electricity sector.

As the Commission is aware, the Snowy Hydro Group currently has an application with the regulators for new-entrant generation, and is addressing associated concerns with the Inquiry's envisaged technical standards for generator performance directly with the Commission, AEMO, and the Network Service Providers. In that light, this submission addresses the adverse issue of potential retrospective application of the Inquiry's envisaged technical standards.

### **Scope and application of the Inquiry**

The Inquiry when commenced addressed inverter-connected generators, and was in fact titled "Inquiry into licensing arrangements for inverter-connected generators". The scope of the Inquiry since broadened to the "Inquiry into licensing arrangements for generators in South Australia".

AEMO's advice of the 24th February raised the possibility that, "obligations should be uniform across all generation technologies" and consequently a technology neutral approach would be adopted. It is clear that while the scope of the Inquiry expanded, the application of requirements during the interim period while the Inquiry is underway has not been technology neutral.

This is disconcerting, and indicates the technical standards being advocated are not objectively targeting system security in a technology neutral manner, and have not been considered for each of the circumstances to which they are being applied. The effect is that generation technologies and capacity that would otherwise enter South Australia, and support the South Australian segment of the NEM, may not be established.

### **Preference for market based solutions**

Our firm view is that the market and market based mechanisms are best placed to deliver optimum outcomes in the security of the system and the long term interests of consumers. Stability in the area of generator technical requirements is key to this outcome, allowing generators to procure and operate long-life plant with investment certainty.

When additional services for system security such as system strength, inertia, and fast frequency response, or those derived from the proposed generator technical requirements (such as interconnector support) are required, they should be procured through a market based mechanism, allowing cost recovery through competitive supply.

Simply imposing increased mandatory technical requirements across all generators in South Australia is inefficient, resulting in over supply of the technical requirement and increased costs and risks on existing and new market participants which would need to be recovered by all generators through existing markets, whether the service is used or not.

### **Adverse consequences with retrospective application of revised performance standards**

Once plant is operational the cost of making changes becomes more significant compared to new entrant plant, with post-commissioning changes potentially voiding manufacturer's or installer's warranties or forcing owners to operate plant in higher risk modes with reductions in reliability and/or plant life. The mandating of retrospective requirements for existing generation plant therefore exposes owners to disproportionately higher compliance costs and risks compared to new-entrants and in some cases (where compliance cannot be economically or technically achieved) may necessitate immediate retirement of generation plant.

While potentially feasible, the technical solutions required to address the proposed generator performance standards have not been developed on commercial applications for all types of generators currently operating in South Australia. If the standards are retrospectively applied, this would trigger a costly development process to determine a feasible upgrade and consideration of the cost benefit of withdrawing the affected generation capacity from South Australia.

Power stations are a long term commercial investment, with business cases developed based on 20 plus year time frames. Retrospective application and consequent retrofitting of capital to power generation plant can invalidate a business case which may have been conducted recently or more distantly. Retirement of generation plant would involve the associated impacts, such as a reduction in competitively priced electricity, higher system security and reliability risks, loss of employment opportunities, and a reduction in financial investment into South Australia due to sovereign risk.

### **Ongoing review of technical requirements**

The possibility of continuous and ongoing mandatory changes to technical requirements for a generator simply compounds the impact of retrospective requirements becoming an open-ended investment risk for all existing and future generation plant owners. However, if market based mechanisms are used to define future service requirements the decision to invest in plant modifications rests with the plant owner and will favour those with plant most suited to deliver the service, resulting in an efficient market based outcome.

## **Recommendation**

For the reasons outlined in this submission the Snowy Hydro Group strongly recommends the Commission remove draft recommendations to mandate retrospective generator licensing requirements for existing generation plant.

Snowy Hydro appreciates the Commission's invitation of submissions and consideration of the issues affecting energy companies. Please contact Brian Williams on [brian.williams@snowyhydro.com.au](mailto:brian.williams@snowyhydro.com.au) for further information regarding this submission.

Yours sincerely

A handwritten signature in black ink, appearing to read 'K Ly', with a horizontal line underneath.

Kevin Ly  
Head of Wholesale Regulation