

25 May 2017

Government of South Australia  
Department of the Premier & Cabinet

Submission by email to: [DPC.ESTRegulations@sa.gov.au](mailto:DPC.ESTRegulations@sa.gov.au)

## **Energy Security Target**

Snowy Hydro Limited welcomes the opportunity to comment on the South Australia Energy Security Target (EST).

Snowy Hydro Limited is a generator 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 MWs of peaking generating capacity including the iconic 4100MW 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 Energy Security Target Does Not Meet Policy Objectives**

One of the objective of introducing the energy security target was to improve competition. We have concerns that placing an additional obligation on second tier Retailers to purchase Energy Security Target (EST) credits would place them at a competitive disadvantage to large Retailers. This is because large Retailers in South Australia are vertically integrated with generation that would be eligible to create EST credits. This means these large Retailers are in a better position to pass on any costs associated with the new regulatory obligation.

Second tier Retailers are unlikely to have generation assets which meets the criteria for EST credit eligibility and would need to source their EST from the market. This would potentially make them uncompetitive with large Retailers. Our concern is that there will be a deterioration in retail competition which will inevitably lead to a deterioration in wholesale Spot market competition.

The third objective "policy certainty" is debatable. Our preference is for the formation of markets due to an identified need. In this case, the South Australian Government has identified synchronous and scheduled generation which can provide local fault current and inertia services. An alternative to imposing the EST would have been additional market ancillary services of inertia and fault current.

## Eligibility of Fuels Should be Expanded to Include Diesel and Biodiesel

Eligibility to create EST is restricted to gas and renewable energy sources. Snowy Hydro believes both diesel and biodiesel fuelled generators should be eligible to create EST.

Different fuels emit different amounts of carbon dioxide (CO<sub>2</sub>) in relation to the energy they produce when burned. The table<sup>1</sup> below compares the amount of CO<sub>2</sub> emitted per unit of energy output or heat content. Diesel compares very favourable to any coal fuel generator.

Various Fuels	Pounds of CO <sub>2</sub> emitted per million British thermal units (Btu) of energy
Coal (anthracite)	228.6
Coal (bituminous)	205.7
Coal (lignite)	215.4
Coal (subbituminous)	214.3
<b>Diesel fuel &amp; heating oil</b>	<b>161.3</b>
Natural gas	117.0

Table1: CO<sub>2</sub> emitted from various fuel sources

Biodiesel<sup>2</sup> also has significant greenhouse gas benefits with 100% blended biodiesel using waste cooking oil offering up to 90% reductions in greenhouse gas emissions when compared to petroleum derived diesel.

Snowy Hydro appreciates the opportunity to participate in this consultation process. For any enquiries on our submission, I can be contacted on [kevin.ly@snowyhydro.com.au](mailto:kevin.ly@snowyhydro.com.au).

Yours sincerely



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<sup>1</sup> Source: American Geosciences Institute (AGI), <https://www.americangeosciences.org/critical-issues/faq/how-much-carbon-dioxide-produced-when-different-fuels-are-burned>

<sup>2</sup> Australian Institute of Petroleum, Biofuels factsheet.