



Attention: Rebecca Knights  
Director of Energy Policy and Projects  
South Australian Government  
DPC.ESTRegulations@sa.gov.au

25 May 2017

## **SOLARRESERVE'S RESPONSE TO SOUTH AUSTRALIAN GOVERNMENT'S ENERGY SECURITY TARGET STAKEHOLDER CONSULTATION PROCESS**

Dear Rebecca:

Thank you for the opportunity to provide feedback in response to the South Australian Government's (the State's) Energy Security Target Stakeholder Consultation process.

SolarReserve is a leading developer of concentrating solar power (CSP) and photovoltaic (PV) solutions, combining our proprietary molten salt power tower storage technology with project development, financing, and operating expertise. Our technology can provide firm, fully dispatchable, non-intermittent renewable energy, day and night. Its power generation capabilities are nearly identical to that which is found in a coal or natural gas-fired power station. SolarReserve is developing the 110MW Aurora CSP project at Port Augusta, which will utilise our world leading technology to provide fault current and real inertia into the South Australian electricity grid, enhancing energy security.

SolarReserve welcomes the State's increased focus on energy security and its energy storage target (EST) initiative to ensure that an increasing proportion of electricity used in the state is from local dispatchable sources. This initiative will support the development of new CSP facilities in the State, such as our Aurora project and additional projects proposed by SolarReserve beyond Aurora.

With respect to the specific questions raised by the State, SolarReserve is pleased to provide the following responses.

### **Do the proposed amendments provide the level of transparency which would support the long-term interests of South Australian electricity consumers?**

Yes. SolarReserve believes the proposed amendments provide the level of transparency which will support the long-term interest of South Australian electricity consumers.

### **Has the Essential Services Commission of South Australia been provided with sufficient powers to effectively administer the electricity security target?**

Yes. SolarReserve believes the proposed Regulations will provide sufficient powers to effectively administer the electricity security target.

### **Are there any changes to the draft Regulations you consider necessary to support the long-term interests of South Australian electricity consumers?**

Yes. SolarReserve would encourage the State to consider the following changes to the Regulations to ensure the interests of South Australian electricity consumers are most effectively met.

#### Section 44ED

The legislation as currently drafted does not distinguish the time of day or time of year that energy security certificates (ESCs) are created. Without such definition, the State risks a perverse situation whereby incumbent electricity “gentailers” could generate electricity at times of low demand to extinguish their EST obligations, but withhold generation at times of high demand and low wind production to maximise revenue from increases wholesale price periods. This bidding practice would undermine the value that such an EST could provide to the State.

SolarReserve advocates for the creation of ESCs to be aligned to annually published seasonally adjusted time of day periods, with generation outside of these periods ineligible for the creation of ESCs. Alternatively, the State could consider assigning a seasonally adjusted Time of Day multiplier to the creation of ESCs, with low demand periods assigned a multiplier of less than 1, and high demand periods a multiplier greater than 1. SolarReserve is familiar with Time of Day multipliers being used to drive generation behavior in electricity markets such as California.

#### Section 44EG

The legislation as currently drafted only allows for the transfer of ESCs to an NREL retailer. SolarReserve may contract the output of its CSP facilities to a variety of customers, including the State, mining companies or other large industrial customers. It would simplify the financing of these new CSP facilities if ESCs could be transferred to any contracted party, as is allowed for in Division 6 of the *Renewable Energy (Electricity) Act 2000* (Renewable Energy Target) legislation. Such an arrangement would enable SolarReserve to transfer all of the products created from these facilities to its customer, without requiring an intermediate party such as an NREL retailer.

#### Section 44EI

The legislation as currently drafted only facilitates the EST operating until 2029/30. It is likely that South Australia will have an increasing need for an EST with time as variable renewable energy penetration continues to increase. Terminating the EST abruptly in the timeframe outlined in the draft legislation may stifle long term investment in dispatchable electricity generation in South Australia, essential to support the energy security outcomes that the State seeks. It is recommended that the legislation be amended to retain the 2024/25 target until such time as the EST is modified or cancelled by the Commission, which should not occur without 2 years’ prior notice to market participants.

#### **What verifiable information could be submitted to evidence electricity security certificate creation and acquittal?**

SolarReserve would recommend that the creation and acquittal of ESCs is based on time and date stamped electricity meter readings from approved and calibrated electricity meters, provided electronically to the Commission for administration of the target.

We thank you for the opportunity to contribute to this Stakeholder Consultation process and we congratulate the State on moving to implement an EST in South Australia. Please feel free to contact me on 0428 928 894 should you wish to discuss any of the above further.

Yours sincerely,



**DANIEL THOMPSON  
DIRECTOR OF DEVELOPMENT  
SOLARRESERVE AUSTRALIA**