Major Push for National Renewable Energy Storage Acceleration Scheme

The Smart Energy Council, Clean Energy Investor Group and Climate Action Network Australia have united to urge Federal and State Energy Ministers to establish a Renewable Energy Storage Acceleration Scheme to unleash investment in large-scale renewable energy storage.

“We can’t get to 82% renewables by 2030 unless we unleash renewable energy storage,” said John Grimes, Chief Executive of the Smart Energy Council.

“When it comes to renewable energy storage, we need everything, everywhere, all at once.”

“We need everything from batteries on wheels in electric vehicles to household battery systems to unlocking massive investment in large-scale energy storage projects through a Renewable Energy Storage Acceleration Scheme.”

Under a national Renewable Energy Storage Acceleration Scheme, the Australian Government, in partnership with State Governments, would undertake a series of tenders for large-scale renewable energy storage projects to meet forecast shortfalls in dispatchable generation and storage.

Proponents would bid a floor price for the project’s net revenue over a period of time, enabling them to obtain low-cost financing generally not available today due to currently missing and perceived uncertainty in storage revenue streams.

On most occasions, the storage project would have net revenue far above the floor resulting in no payments by Governments to the storage project.

The scheme would also contain claw back provisions whereby the storage projects would make return payments to government when their net revenues are high.

“The Renewable Energy Storage Acceleration Scheme delivers fast, proven and cost-effective renewable energy storage and provides exactly the right signals to investors,” said Simon Corbell, Chair of the Clean Energy Investor Group.

“The scheme also retains strong incentives for owners of storage assets to pursue other revenue streams, thereby reducing risk to consumers and taxpayers.” Mr Corbell said.

“Renewable energy storage is critical to climate action”, said Glen Klatovsky, CEO of Climate Action Network Australia.

"A Renewable Energy Storage Acceleration Scheme provides governments with a genuine way to make sure energy storage is operating and ready to go as our old, polluting coal-fired power stations retire."

"We urge Energy Ministers to put in place a Renewable Energy Storage Acceleration Scheme before the end of the year."

A briefing note on the Renewable Energy Storage Acceleration Scheme can be found at: https://smartenergy.org.au/wp-content/uploads/2022/10/Renewable-Energy-Storage-Acceleration-Scheme-Proposal-25th-October-2022.pdf

The Smart Energy Council is a peak independent body for Australia's renewable energy and renewable energy storage industry.

The Clean Energy Investor Group represents domestic and global renewable energy developers and investors with more than 11 gigawatts of installed renewables capacity across more than 70 power stations and a combined portfolio value of around $24 billion.

Climate Action Network Australia is a network of community organisations committed to action on climate change.

For more information and interviews, including with large-scale renewable energy storage companies, contact Connor Woulfe, Smart Energy Council, on 0499 408 291.

25 October 2022

Renewable Energy Storage Acceleration Scheme Proposal

A rapid, targeted and cost-effective firming mechanism to accelerate deployment of utility scale storage in the National Electricity Market

Summary of the Proposal

The Australian Government, in partnership with State Governments, would undertake a series of tenders for large-scale renewable energy storage projects to meet forecast shortfalls in dispatchable generation and storage. Proponents would bid a floor price for the project's net revenue over a defined life, enabling them to obtain low-cost financing generally not available today due to currently missing and perceived uncertainty in storage revenue streams.

On most occasions, the storage project would have net revenue above the floor, resulting in no payments by Governments to the storage project. The scheme would also contain claw back provisions whereby the storage projects would make return payments to government when their net revenues are high thereby reducing costs to the taxpayer.

Proponents will need to sign availability guarantees for projects.

This proposal delivers fast, proven and cost-effective renewable energy storage. Together with support for household, commercial and community renewable energy storage and a Renewable Energy Storage Target, the Renewable Energy Storage Acceleration Scheme provides a framework for delivering sufficient storage to accommodate 82% renewables by 2030.

Advantages of the Scheme

Building on the best features of successful State Government electricity market tendering processes, the Renewable Energy Storage Acceleration Scheme has the following advantages:

- **Fast, proven and targeted** - A simple auction scheme can be implemented much faster than other schemes. There are already valuable learnings, infrastructure and governance arrangements that can be leveraged to fast-track implementation of the scheme. Winners of the tenders will be able to quickly obtain project financing leading to rapid Final Investment Decisions (FID).

- **Improved Energy Security** - The scheme will accelerate more storage into the National Electricity Market (NEM), reducing the chances of market disruptions or supply shortages enabling more variable renewable energy to be installed while maintaining sufficient electricity supply. New battery storage systems could be installed and operating as soon as 18 months after awarding of the tender for well advanced projects.

- **Cost Effective -** Transparent electricity market tendering processes have historically been very competitive, resulting in excellent value for money and selection of the most efficient and well managed projects. There would be no payments from Governments to projects in average or good revenue years and reimbursement payments to Governments in very good years.

- **Low Risk** - While the net revenue floor will be high enough to enable rapid project financing, it will not be high enough to provide adequate returns to project owners. This will encourage project owners to manage the projects to maximise revenues well above the revenue floor. When projects earn revenues above a net revenue ceiling bid in the tender, reimbursement payments would be made to the Governments.

- **Market Benefits** - Each new storage system installed in a State will facilitate higher renewables installation and also reduce wholesale price volatility as batteries charge during periods of low pool prices and discharge during periods of high wholesale energy prices. Reducing wholesale price volatility will exert downward pressure on wholesale, and thereby retail electricity prices.

- **Adaptable** - Running a series of auctions over time creates an opportunity to adjust the scope to address emerging needs of the NEM within the required timeframes of those needs.

Proposed Design Features of the Renewable Energy Storage Acceleration Scheme

1. State Governments, in collaboration with AEMO and the Federal Government, would set a Large-scale Renewable Energy Storage Target in gigawatts for each State and Territory, which would add up to a National Large-scale Renewable Energy Storage Target (LREST).
    - AEMO would publish the level of operating, committed and likely storage projects which would be compared to the LREST for each State.
    - If a shortfall was forecast within the next 3-4 years, a tendering process for additional storage would commence.
    - It is suggested that State and Federal Governments share the cost of any payments, possibly 50/50%.

2. An entity would be designated to run the tendering process; this could be the Clean Energy Regulator, the Clean Energy Finance Corporation, AEMO Services or another entity.
    - The principal variable in the tendering process would be a Net Revenue Floor (such as $40/kW/year-$60/kW/year).

- Proponents would also bid a Net Revenue Ceiling above which 50% of the revenue would be returned to Governments to reimburse them for previous under floor payments thereby reducing the cost of the scheme.
- Proponents could make separate bids for different duration versions of the same project.
    i. For example, a proponent could bid one Net Revenue Floor for a 2 hour battery and a higher Net Revenue Floor for a 4 hour version of the same battery project and Governments could decide which offer they preferred.
- The projects would need to provide quick start, fast ramp rates and be zero-emissions.

3. The scheme would operate with quarterly settlements by comparing the Net Revenue the project received to the Net Revenue Floor.
    - Net Revenue = FCAS revenue + Sale of Energy Exported – Cost of Energy for Charging.
    - If the contracted floor price was, for example, $10/kW/quarter and the project earns, for example, $9/kW for that quarter, it would be topped-up by $1/kW for that quarter.
    - If in the following quarter, the project earned $15/kW, no payments would be due.
    - If in the following quarter, the project earned $40/kW, compared to a contracted ceiling of $30/kW, the project would reimburse the Government 50% x ($40 - $30/kW) = $5/kW (assuming the project had received under floor payments of at least this amount).

To discuss this further, please contact Wayne Smith, External Affairs Manager Smart Energy Council, at wayne@smartenergy.org.au

25 October 2022