OVERVIEW

RETAILER RELIABILITY AND EMISSIONS GUARANTEE

The guarantee makes retailers provide reliable and lower emissions electricity to consumers. This means both energy reliability and emissions targets will be reflected in a single energy price - sending strong signals to investors on how much and what type of energy the market needs and when it is needed.

- **The Energy Security Board has proposed a reliability and emissions guarantee that requires retailers to meet both reliability and emissions targets.**
- **The guarantee will encourage much-needed investment in the electricity sector. More electricity supply will put downward pressure on prices, leading to a reduction in residential bills in the order of $100-115 per annum over the 2020-2030 period.**
- **The guarantee requires electricity retailers and some large customers to contract with or directly invest in energy resources to supply an amount of dispatchable energy in each region of the national electricity market while also meeting a specified emissions level for all the electricity they buy.**
- **Retailers will deliver the guarantee using a mix of technology, generation, storage and demand response so that reliability and emissions reduction outcomes can be achieved at the best price for consumers.**
- **Preliminary analysis suggests that the power mix would include around 28-36% renewables (including hydro and solar pv). Intermittent renewables may make up about 18-24% with dispatchable resources providing the remainder.**

Context

The national electricity market (NEM) no longer provides the necessary incentives to drive investment in the right combination of energy resources (generation, storage and demand response) to meet the needs of a reliable and lower emissions electricity system. We need a mechanism that allows market price signals to be an effective guide for investment again.

Investment in energy generation is guided by signals from the wholesale spot market, and contracts market. Spot prices are used to match supply and demand in real time. Contract prices drive investment in new energy resources (generation, storage, demand response) over the longer term by linking the physical needs of the system with the ability to finance them.

The guarantee will require retailers to contract with or directly invest in generation, storage or demand response so that:

- there is a minimum amount of dispatchable energy available to meet consumer and system needs (set by the Reliability Panel and AEMO) and
- the average emissions level of the electricity they sell to consumers is in line with Australia's international commitments (set by the Commonwealth Government).

This truly integrates energy and emissions policy – the value of both reliable electricity and emissions are reflected in a *single* energy price that guides much- needed investment in the electricity sector. This will include more flexible, dispatchable energy and demand response that can be turned off and on when needed. The guarantee values all technologies fairly based on its characteristics, delivering the right resources, in the right place at the right time to meet the reliability and emissions reduction outcomes consumers expect

The reliability part of the obligation would be implemented as soon as practical and no later than 2019 following detailed work and consultation with market participants. The emissions obligation would be implemented in 2020 to replace the Renewable Energy Target (RET) with details of the immediate target and initial trajectory worked out as soon as practical.

How does it work?

Reliability guarantee

- A reliability guarantee will be placed on retailers and large electricity users requiring them to hold forward contracts with or invest directly in dispatchable energy resources[1] that cover a predetermined percentage of their forecast peak load.
- The guarantee will be calculated based on the system wide Reliability Standard[2] translated into a minimum level and type (fast or slow starting) of dispatchable capacity for each region.
- If the retailer did not have sufficient dispatchable capacity available to meet the predetermined percentage of their peak load, they will face compliance action.
- Putting the responsibility for reliability on all retailers (rather than a subset of generators like a generator reliability obligation might do) means the reliability standard can be met by all available resources including existing resources which is a more efficient solution.

Emissions guarantee

- The emissions guarantee would place a requirement on retailers and large loads that purchase electricity from the wholesale market to meet a defined emissions level for that electricity. The guarantee will only take effect once new investment under the Renewable Energy Target Scheme finishes in 2020.
- The emissions reduction target would be set by the Commonwealth Government in line with Australia's international emissions reduction commitments and translated into a defined emissions level for each retailer based on the total amount of electricity used over a particular compliance period, possibly 12 months.
- To meet their defined emissions level retailers will enter into contracts with existing generators or by investing directly in new generation capacity. Contracts will specify an amount of energy over a particular time (the same way that they do now), and also specify an emissions level for the electricity that will be delivered.
- Generation purchased by the retailer from the spot market without a contract will be assigned with the average emissions level of the uncontracted generation capacity available to the market.
- Retailers will need to show the AER the mix of contracted and spot market purchases they have used to meet their emissions guarantee[3].
- Generators will be incentivised to meet their contracted emissions level however, if they fail to do so the retailer will be responsible under the compliance framework. Banking and borrowing across the compliance period would be allowed to a certain level to ensure the most efficient outcome.

Governance

Ideally, COAG/COAG Energy Council will agree to introduce a new law, implemented by South Australia and applied in each of the other jurisdictions, similar to the National Electricity Law.

There would be rules similar to the National Electricity Rules; the AEMC would be the rule-maker and the AER responsible for compliance for the scheme.

Using this approach, the Commonwealth Government will set the emissions reduction target for the NEM[4]. The rules framework would translate the target into the retailer requirement and establish the compliance framework.

Embedding the mechanism into the broader energy governance framework allows the scheme to be fully integrated with the broader energy rules and objectives. This will maximise consistency between the reliability and emissions guarantees, reducing complexity and compliance costs for market participants.

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1 Dispatchable energy resources would include any form of technology, generation, storage or demand that can respond to a request by AEMO to increase or decrease their output over a defined period.
2 Set by the AEMC's reliability Panel under existing process
3 ACCUs and international units could be permitted to meet a proportion of the guarantee
4 While there will need to be a national electricity sector emission reduction target, the proportion of emissions reductions to be delivered by the Energy Guarantee would be specific to the NEM. This would allow a different intensity target and a different mechanism to be established for Western Australia and the Northern Territory if required.

What does the guarantee achieve?

- **Incentivises the right investment in the right place at the right time** – to meet the guarantee, retailer contracts provide a steady revenue stream to generators that are valued for either their dispatchability, or their low emissions characteristics. This relatively stable cash flow enables the financing of new and existing investment where and when it is required.
- **Lowers wholesale price and reduces spot price volatility** – more investment and therefore more supply of electricity puts downward pressure on prices. Investment in contracts allows retailers and large customers to manage spot price risk.
- **Improves reliability** – links the physical needs of the system with the incentives on generators to be available therefore increasing investment in new and existing dispatchable supply.
- **Reduces emissions at lowest cost** – emissions targets can be met using a range of technology including existing resources.
- **Technology neutral** – values all technologies fairly based on their characteristics and the outcomes they can deliver.
- **Not a subsidy or a tax** – achieves the emissions and reliability outcomes without the need for a tax or subsidy.
- **Interacts with state-based schemes** – Projects financed under state-based schemes could simply go towards meeting the national emissions reductions target likely reducing the costs of those out-of-state retailers.
- **Improves contract market liquidity** – generators are incentivised to provide contracts giving retailers and large customers more and competitive ways of managing price risk.

Next steps

The ESB will work closely with state and territory governments and the Commonwealth to develop further details of the guarantee. It will also consult widely with energy market participants, consumers and other interested stakeholders.

DIFFERENT DEALS WITH DIFFERENT GENERATORS

Retailers choose the energy mix which is right for their region