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The Energy Security Board

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National Energy Guarantee - Submission to Consultation Paper

Energy Developments Pty Ltd (**EDL**) thanks the Energy Security Board (**ESB**) for the opportunity to make this submission in reply to the Consultation Paper dated 15 February 2018.

EDL supports the intent of the National Energy Guarantee (the **Guarantee**) to integrate energy and climate policy and acknowledges that the Consultation Paper is the first step in a series to design a workable and maintainable ongoing policy.

EDL's vision is to be a leading global producer of sustainable distributed energy. As such we would support policy which encourages investment in clean energy. As a company we look for a policy which would:

- Support the delivery of new investment into energy generation
- Support a strong and enduring abatement target
- Remove complexity to support the delivery of low emissions, lowest cost energy to consumers
- Support the transition from the current RET; and
- Promote competition in a mostly concentrated energy market

EDL notes that a significant portion of the Consultation Paper considers the effect of the Guarantee on retailers (and other market participants such as large energy users) in the National Electricity Market (NEM). EDL wishes to provide submissions from a clean, distributed, small scale generator's perspective.

About EDL

EDL owns and operates an international portfolio of over 980MW of power generation facilities in Australia, North America and Europe. In Australia, EDL's operations total approximately 703MW of generation capacity across five areas:

(a) **Landfill Gas:** EDL is the largest operator of landfill gas power generation in Australia, with 77MW of generation capacity across 21 power stations

(b) **Waste Coal Mine Gas:** EDL is the largest operator of waste coal mine gas power in Australia, with 288MW of generation capacity across 9 power stations

(c) **Wind:** EDL owns and operates the 30MW Cullerin Range Wind Farm in NSW and the 12MW Wonthaggi Wind Farm in Victoria

(d) **Remote Energy:** For over 20 years, EDL has operated electricity generation sites for remote towns and mine sites in Australia. EDL's current portfolio comprises over 291MW of generation capacity in 24 power stations; and

(e) **LNG/CNG:** EDL has developed innovative and economically effective methods of transporting natural gas through "virtual pipelines". The current portfolio comprises a 200 tonne per day nameplate LNG plant plus LNG and CNG transportation infrastructure.

EDL operates in every mainland state and territory of Australia and accordingly, participates in the NEM, the Wholesale Electricity Market and the Northern Territory electricity market.

We believe the emissions target should be ambitious

EDL supports Australia's commitment to reduce its emissions by 26 to 28 percent below 2005 levels by 2030. EDL believes that the electricity sector, which accounts for over one-third of Australia's total emissions, is capable of reducing its emissions by more than 26 to 28 percent and submits that the emissions target set as part of the Guarantee should be purposefully ambitious.

An ambitious emissions target would support continued investment in clean generation (such as combined renewable and energy storage facilities) which would, in turn, continue to lower the cost of low-emissions generation.

The guarantee could introduce unintended complexity into the contracting market

EDL submits that the proposed design of the Guarantee could introduce unintended complexity into the existing contracting market. The existing contracting market consists of a variety of contracts that essentially produce three outcomes:

a) an electricity spot price hedge (e.g. a swap, cap or floor), which are purely financial instruments and are highly fungible;

b) the sale and delivery of green products (e.g. large-scale generation certificates (LGCs) and GreenPower rights), which are also highly fungible because the instruments to which they relate (e.g. LGCs) are standardised; and

c) an electricity spot price hedge and the delivery of green products, which are typically used to underpin equity and debt investment in new renewable generators.

EDL expects that the Guarantee will lead retailers to require that generators meet specified emissions and reliability levels as a term of their contracts. This would introduce significant physical obligations into what are, currently, essentially financial arrangements. Retailers may also require cure and/or termination rights should the emissions and reliability levels not be achieved, or credit support for any liquidated damages payable for a failure to meet those levels. EDL anticipates that this would also lead retailers to:

(a) conduct a high level of technical due diligence on an underlying generator (and require specific emissions and reliability indemnities) before entering into those contracts; and

(b) require that generators provide a range of information to retailers on the performance of the underlying generator throughout the term of the contract which has not historically been provided (or perhaps even collected; the precise scope of this information is not currently known).

EDL submits that the inclusion of such obligations will ultimately lead to higher compliance costs on generators, and accordingly, higher wholesale electricity costs which retailers will pass on to consumers. EDL does not support requiring consumers to pay higher electricity prices.

EDL also submits that the introduction of the Guarantee will lead to a loss of contracting flexibility for generators. Currently, generators can contract part or all of their output, and part or all of the green products created by reference to that output, to separate retailers. However, after the introduction of the Guarantee, a retailer's appetite to contract with a generator may be influenced by its portfolio of contracted load and penalties associated with breaching each requirement.

For example, a retailer:

(a) which has met its emissions requirement but not its reliability requirement may be unwilling to contract with an existing intermittent generator because that contract would not assist with meeting the retailer's reliability requirement (requiring the generator to locate other retailers with which to contract, or to incur significant capital expenditure to install additional technology such as a battery to turn an intermittent generator into a reliable generator); and

(b) will preference meeting its reliability targets over its emissions targets if, as suggested in the Consultation Paper, the reliability requirement is enforced by way of a new and potentially higher-cost penalty regime (e.g. formulaic penalties or allocation of costs) while the emissions requirement is enforced by way of the existing compliance tools in the National Electricity Law.

EDL submits that:

(a) this would drive behaviour that would fundamentally change the nature of the contracting market;

(b) this will create restricted contracting opportunities for small scale, intermittent generation;

(c) this will create risk for new investment in clean energy projects, which could see those projects not developed. In the case of EDL's core business (waste goal mine gas to energy projects and landfill gas to energy projects) lack of investment in new projects will result in fugitive emissions not being captured and reduced through our generation activities; and

(d) the Board should give further consideration to the interaction between the emissions requirement and the reliability requirement, which will work concurrently to drive investment behaviour.

The Guarantee may lead to an increase in market concentration

EDL submits that the Board should give further consideration to whether the Guarantee, if implemented as designed, will concentrate the existing market power of the largest three integrated generation/retail businesses ("gentailers").

EDL submits that, in the early years of the Guarantee, gentailers may be willing to contract with other generators such as EDL to meet their emissions and reliability requirements (in the short term). However, given the need for retailers to ensure that generators meet physical emissions and reliability requirements (as set out above), EDL expects that gentailers will quickly move to develop new low-emissions and reliable generators themselves, particularly if there are perceived risks of relying on third party generation due to strict emissions or reliability parameters.

In addition, strict technical specifications will increase costs for generators, particularly smaller generators, potentially making them less competitive.

These factors will reduce the demand for stand-alone generators, reducing the level of investment in stand-alone generation, and potentially reducing the amount of stand-alone generation offered in the future. EDL submits that diversity and competition from stand-alone generation is an important factor in the electricity market, which may be diminished in favour of further vertical integration.

EDL submits that the Board should consider whether the need for retailers to ensure that a generator meets certain physical parameters (i.e. emissions and reliability parameters) will mean that the generation and retail arms of gentailers will increasingly only contract with themselves in order to retain control over the generator internally and reduce the exposure of their retail arm to downside risk of failing to meet specified emissions and reliability levels. This has the potential to reduce the participation of smaller generators in the market.

Reduction of opportunities from centrally driven investment model

EDL notes that the electricity spot price currently provides generators and other market participants with price signals as to where new investment is required across the NEM. However, a desire to avoid incurring penalties if a reliability gap occurs may result in unintended consequences arising from the resulting investment in new generation or demand response made by retailers.

EDL submits that if a reliability gap were forecast or the reliability requirement were triggered, the retail arm of a gentailer may respond by investing in new or expanded generation through its generation arm, rather than buying from third party generators (particularly smaller generators). This may lead to larger more centralised generation.

EDL submits that this model may provide fewer opportunities for other generators to secure offtake arrangements with the retail arm of a gentailer. It may also mean that fewer generators are constructed in remote parts of the NEM, leading to fewer job opportunities in regional communities to construct, operate and maintain a generator.

Further consideration may be required regarding the interaction between the Guarantee, Renewable Energy Target and Safeguard Mechanism

EDL notes that the Consultation Paper only briefly discusses the operation of the Renewable Energy Target (RET) and usually by way of comparison with the proposed design of the Guarantee. EDL submits that the Board should give further consideration to the interaction between the RET scheme and the Guarantee, in particular:

a) whether a contract written by a generator that is accredited under the RET scheme and creating LGCs would also be counted towards meeting a contracting retailer's emissions requirement; and

b) any transitional arrangements.

EDL also notes that the Consultation Paper did not consider the interaction between the Emissions Reduction Fund Safeguard Mechanism and the Guarantee. EDL submits that further consideration needs to be given to the interaction between the Safeguard Mechanism (which applies nationally given it is part of Commonwealth legislation) and the Guarantee (which is only proposed to apply to generators in the NEM).

If the Safeguard Mechanism will continue to apply in Western Australia and the Northern Territory after implementation of the Guarantee in the NEM, EDL submits that the information that is required to be collected and reported under each scheme should be aligned, otherwise the additional compliance costs will likely be passed through to retailers (and ultimately consumers).

The board could further consider the position of Western Australian, Northern Territorian and remote generators

EDL operates a significant number of generating units in Western Australia, the Northern Territory, and remote (non-NEM connected) locations, which will not be covered by the Guarantee regime.

EDL submits that the Board could give further consideration to the arrangements that are intended to apply to non-NEM generators after the introduction of the Guarantee (e.g. whether the Safeguard Mechanism will be abolished with respect to NEM generators but retained with respect to non-NEM generators). EDL submits that there are a number of non-NEM generators that are both low-emissions and reliable generators and which could benefit from a nationally consistent scheme, or clarification of the intended arrangements.
For example, EDL currently owns and operates the Coober Pedy Renewable Hybrid Power Project, which combines 4MW of wind power, 1MW of solar power and a 1MW/500kWhr battery. It has also been integrated with EDL's existing 3.9MW diesel power station which provides power when renewable energy sources are not available. It could, therefore, assist with satisfying both the emissions and reliability requirements of a truly national emissions and reliability scheme.

Carry over or deferral of compliance

We would support the ability to carry forward overachievement and are of the view that a reasonable limit should be set on the carry-over. We would suggest that the carry-over be proportional to load.

We also suggest that retailers not be the only parties able to carry-forward compliance.

A deferral of compliance would not be supported. The ability to carry-forward non-compliance would in our opinion have a negative effect on investment in low emission, low cost energy generation, which in a flow on effect to consumers, would not result in lower cost of electricity. Additionally, given the Clean Energy Regulator expects the 2020 RET to be met, we would not expect retailers to have difficulty in obtaining a mix of portfolio to meet the objectives of the Guarantee.

Use of Offsets

EDL would not support the use of overseas offsets. Investment confidence in the energy sector needs to be maintained. The inclusion of international carbon credits in the Guarantee could disrupt investment signals and confidence, resulting in reduced new investment that would ultimately detract from the reliability of the system and see higher power prices because of reduced supply of generation.

EDL would welcome the opportunity to discuss these submissions further with the Board. Please contact Fiona Daly, Global Regulatory Affairs Manager on (07) 3275 5504 or Fiona.Daly@edl.com.au if the Board would like to discuss any aspect of these submissions.

Yours sincerely

James Harman
Chief Executive Officer
Energy Developments Pty Ltd