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General Manager, Strategic Policy and Energy Systems Innovation
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001
(via online submission)

Ring-fencing Guideline (Electricity Transmission) - Draft guideline submission

The Clean Energy Finance Corporation (**CEFC**) welcomes the opportunity to make a submission to the Australian Energy Regulator's (**AER's**) Draft Ring-Fencing Guideline (Electricity Transmission). We very much value the opportunity to engage in this process.

The CEFC is responsible for investing $10 billion in clean energy projects on behalf of the Australian Government and was established to facilitate increased flows of finance into the clean energy sector. The CEFC now has the added objective to facilitate the achievement of Australia's greenhouse gas emissions reduction targets, with the current 2030 target of a reduction in emissions by 43% below 2005 levels by 2030, implemented as a point target and an emissions budget.

The CEFC supports the development of a secure, reliable and affordable electricity system whilst lowering emissions through its investment activities, including large-scale renewable energy, energy storage and other initiatives in accordance with the 'grid firming' focus of our Investment Mandate.

We also note that the Federal Budget has recently allocated an additional capital injection for the CEFC to fulfill our role as the agency responsible for the financing aspects of the Australian Government's $20 billion Rewiring the Nation (**RTN**) policy. The ambition of this policy is to expand and modernise Australia's electricity grids at lowest cost.

The RTN will focus on investment in transmission and distribution network assets, energy storage and renewable energy zones, which will all be critical in the transition of Australia's energy system. One focus of the CEFC in assisting the government to administer the RTN will be to understand and work with relevant stakeholders to facilitate opportunities for efficiencies in distribution, transmission and generation which will then lower costs for energy consumers. This relies on a well-functioning competitive market, which can be aided by the development of robust ring-fencing guidelines.

Given the CEFC's unique role in the Australian energy market, perhaps the most valuable perspective we can bring to policy makers is as an investor who invests in the public interest, with both commercial considerations in mind and a specific policy objective to facilitate a low-carbon transition. The views and approach of the financial investment community are critical to Australia's ability to cost-effectively fund our energy transition.

We estimate that for the NEM, in the order of $120 billion of capital expenditure will be needed to fund new solar, wind, transmission, storage and ancillary services over the coming

decade.[1] The cost of capital will be a key determinant of end-consumer charges, given the high fixed cost/low operating cost nature of the investments to be made.

The CEFC has a strong focus on investing in large scale solar, wind, battery and grid projects as part of Australia's important renewable energy transition. As at 30 June 2022, the CEFC had committed over $2.65 billion of financing to wind and solar projects, including 42 large-scale projects that generated c.3.6GW of new capacity, and has committed to several other major projects since then. Increasingly, we are also investing in grid-scale batteries, as demonstrated by our investments in the Hornsdale and Victorian big batteries ($210 million committed), noting that this market is in its early stages due to high capital costs and emergent acceptance of grid capabilities.

Our submission focuses on issues that are most relevant to our role and experience as a clean energy investor, and notably, our experience as an investor in large scale solar and wind projects, contestable and regulated grid projects as well as batteries.

Our response to the draft guideline focuses on two key areas – grid connections and battery services.

Grid connections

As an investor in large-scale renewables and grid infrastructure, our view is that it is important for connection costs, much like all project costs, to be priced efficiently to avoid unnecessarily impacting project economics, and the investment needed to deliver Australia's transition to net zero emissions in a manner that reduces costs to consumers. From the CEFC's experience:

- Very few renewable generation projects have opted to engage a competitor to the local incumbent transmission services provider to perform contestable grid services.
- Grid connection costs have increased in absolute terms in recent years, with grid annuities forming a significant part of the operating expenditure (and therefore the levelised cost of energy) of a generation project, with significant bank guarantees required to support these annuities. This combination of factors can lead to directly increased costs of renewable energy generation and may also reduce the capital efficiency of projects.

We note that the AER's ring-fencing powers do not extend to potential separation between negotiated transmission services and non-regulated (contestable) transmission services. From a generator's perspective, negotiated and contestable transmission services now often comprise a significant portion of the overall grid spend. The CEFC are supportive of the AER taking measures to enable transparency and competition in these services to create downward pressure on costs. This could include:

- enhancing the non-discrimination provisions in the ring-fencing guideline, such as by more closely defining what would and would not constitute 'like circumstances' in draft clause 4.1(c).
- seeking the annual compliance report to have a focus on connections and to be driven by data of TNSPs' connection timeframes and costs.
- increasing the transparency of information by requiring TNSPs to include the AER on its information registers. This would provide the AER with information on the effectiveness of the provisions driving transparency and inform future reviews of the guideline.

[1] Based on analysis of AEMO's 2022 Integrated System Plan.

- having the ability for the AER to conduct its own compliance audit (and specifying this in the guidelines) should it be made aware of concerns that would warrant further investigation.
- enabling data on the number of contestable services provided by non-incumbents in each respective jurisdiction be collated, reported and reviewed.

More generally we support the AER strengthening the ring-fencing guideline or enacting other measures if it in turn allows generator proponents to more easily consider multiple providers for contestable connection services and seeks to reduce costs via greater competition. To this end, we support the AER proposal that a change to the National Electricity Rules to expand ring-fencing powers should be considered.

It is important to increase transparency, confidence and predictability for stakeholders in order to efficiently facilitate the connection of the more than 33 GW of large-scale wind, solar and storage needed by 2030 under AEMO's 2022 Integrated System Plan. Transmission and connection costs will be an important part of the overall cost equation for consumers during the energy transition.

Treatment of batteries

The CEFC agrees batteries have the potential to provide a wide range of services for grid operators (e.g. synthetic inertia, voltage services) and given their time shifting capabilities, can provide an alternative solution to grid augmentation and expansion in certain circumstances. However, given the high capital costs of batteries and 'missing' revenue streams to remunerate batteries, the full benefits of batteries cannot currently be readily realised. Leveraging services to networks could assist with the business case for batteries to enable their deployment at scale to help deliver Australia's energy transition. The CEFC's view is that networks should not be discouraged from adopting batteries for prescribed network activities, and parties providing contestable services should be encouraged to work with networks to unlock value from batteries.

As noted above, grid-scale batteries (and other storage technologies) are still at a relatively early stage given their current high capital costs, limited scale of deployment and demonstration in the NEM of their full capabilities as well as their ability to earn revenues from those activities. We agree with the AER that there is a real tension to be managed between the efficient use and optimisation of batteries and the potential harms that might eventuate (e.g. if TNSPs are able to cross subsidise contestable services or favour their affiliate business).

However, the CEFC suggests there should be consideration given to enabling TNSPs to assess the investment case for efficiently scaled-up storage deployment that optimises their excess capacity beyond what might be needed at any particular geographical location in the network at that point in time. For example, a network storage project that is scaled-up may have a better economic outcome than multiple deployments which in aggregate deliver the same capacity. To the extent that value is created and passed back to the TNSP, the AER should consider how that value can be passed on to consumers or shared with end-users to offset the project's incremental cost of scaling-up. Such an approach that can deliver efficiencies may assist with accelerating the uptake of batteries and the cost of the energy transition overall.

We very much value the opportunity that the AER has provided to enable the CEFC to provide input into this process. We look forward to the opportunity to engage further with the AER. Should you wish to discuss this submission further, please contact Owen Pascoe (Director – Research).

Yours sincerely

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