

Mr. Sebastian Roberts
General Manager
Australian Energy Regulator

contingentprojects@aer.gov.au

Re: Project EnergyConnect

Dear Mr. Roberts,

I welcome the opportunity to make a submission to the AER regarding the contingent project application submitted by TransGrid on 30th September 2020 in relation to Project EnergyConnect.

My principal concern is that the contingent project application submitted by TransGrid is not in accordance with **preferred option C3** (as was identified in the RIT-T submitted by ElectraNet to the AER in April 2019), and in fact varies significantly from what was proposed. Project EnergyConnect's RIT-T was developed and published by the AER on January 24, 2020 based on **preferred option C3** not TransGrid's latest proposal. Consequently the necessary conditions of a 'trigger event' have not been met and therefore contingent project approval should not be granted.

A comparison of the features of **preferred option C3** (which can be found on page 72 of the ElectraNet **PACR** dated 13 February 2019) and the features contained in TransGrid's **new** option (as identified on page 8 of their contingent project application) serves to highlight the significant differences. It should be noted that this **new** option was not one of the credible options considered during the RIT-T phase of Project EnergyConnect.

The differences between **preferred option C3** as originally approved and the **new** option are important for the following reasons.

1. A distinct feature of the **new** option is that a 'greenfield' substation 'Dinawan' is to be constructed, in a flood prone area. This is certainly not without serious environmental risks as well as potential costs which will no doubt be passed through to consumers. It is worth remembering that the ultimate goal of renewable energy transition is to better the environment. We must be careful not to take one step forward and two steps back in this regard.
2. **Preferred option C3** was to connect to the substation at Darlington Point. The primary benefit of that route was to provide grid access and ultimately connection to a number of large operational and soon to be constructed solar farms comprising some 1200 - 1600 MW of generating capacity. This was identified as a benefit in the **PACR** (page 4 and 5) and no doubt influenced the AER's determination. It is a disappointing outcome that a project named "EnergyConnect" should now have its route changed to no longer provide immediate access to significant sources of renewable energy.
3. Further, and as highlighted on page 37 of the **PACR** a benefit of **preferred option C3's** connection to Darlington Point was that the implementation of TransGrid's western grid stability project would no longer be required. The avoidance of future capital expenditure was counted as a benefit in the RIT-T. This is significant as TransGrid has nonetheless proceeded to propose this very project that was to be avoided ('Improving Stability in South Western NSW') in July of this year. Estimated costs for this new project are likely to be in the neighbourhood of \$200 million. This sum almost entirely negates the total assessed net

market benefits of \$264 million that the AER determined **preferred option C3** would provide.

Had the **new** option been submitted to the AER for RIT-T determination one suspects it would likely have not passed muster.

It is difficult to understand how deviating from **preferred option C3** would deliver greater net market benefit **as preferred option C3** does everything and more than is proposed in the **new** option and with less environmental impact. The **new** option has drawbacks too, some that need careful consideration.

TransGrid suggests one of the reasons for discarding the **preferred option C3** and it's specified connection to Darlington Point was because the **new** option 'lowers the risk to timely project delivery in negotiating suitable easements and access rights through the intensive irrigation zones around Darlington Point township'. It is curious that they don't see the same risk or problem in a residential setting such as the town of Lockhart (through which Project EnergyConnect is now proposed to run) where hundreds of people will be negatively affected. This risk aversion is also not in evidence with respect to possible environmental planning delays associated with a new substation ('Dinawan').

It is odd that TransGrid made no attempt to negotiate easements for **preferred option C3**, nor did TransGrid seek to assert their compulsory acquisition right for land proximate to Darlington Point. With this precedent in place, and the extreme risk delivery that TransGrid suggest exists in delivering transmission lines in irrigation zones an urgent redrafting of AEMO's Integrated System Plan (ISP) is required. Implementation of VNI West will now be almost impossible owing to the fact that any path would encounter significant areas of intensive irrigation either side of the Murray River to a far greater degree than is currently present at Darlington Point.

Additionally, TransGrid has promoted a benefit of the **new** option as being a 16km shorter route than **preferred option C3**. TransGrid would have had to conclude by no later than June 2020 that the new route was shorter. Community consultation for the new route did not begin until 1st June 2020. A collaborative route refinement process having been completed in a few days seems highly improbable. For TransGrid, on 26th June 2020 to so precisely identify the quantum of difference between the two options being a mere 16 km on a 900 km project would tend to suggest that the new route was well and truly fixed before the public knew of the **new** option, or any "consultation" was undertaken.

It is very likely TransGrid failed to undertake a timely, open and legitimate community consultation with respect to the **new** route. It would be reasonable to anticipate many will seek to challenge this deficient route selection process. Significant delays and additional costs in securing the necessary easements and/or land acquisition may be incurred. This would seem to outweigh the concerns with respect to easement acquisition at Darlington Point and thereby create an even greater delivery risk for Project EnergyConnect in it's current form. The route identified in March 2019 [The Interconnector route selection process](#), consistent with **preferred option C3**, would now present as the one most likely to proceed the project to a timely completion.

Notwithstanding the regulatory anomalies that exist with respect to the project, I would like to express additional and general concerns relating to a large scale interconnector in the anticipation that a new RIT-T is forthcoming, should it be required.

As outlined in Electranet's **PACR**, a majority of the benefits of Project EnergyConnect accrue to South Australia. However, given that the majority of the length of the proposed line lies in NSW, a disproportionate share of the costs will ultimately be borne by the NSW consumer.

This needs special attention. It is entirely likely that with advancements in Distributed Energy Resources (DER) more and more households will be able to 'cut the cord' so to speak and remove themselves substantially if not entirely from the grid, relying solely on home solar and battery storage. This ability to go off grid will not be shared by all. Small homes, apartment owners, and those perhaps unable to afford such options will be forced to source their electricity from the grid. This will lead to a reduced electricity customer pool in NSW that will bear the burden of regulated transmission revenue recovery. Given the tremendous cost of this project, should near term improvements in home solar/battery technology allow a significant number of households to go off grid, energy intensive industries (often large employers) and households without the means to power their own home or apartment will see significant increases to their electricity bill. It is highly likely that such a scenario would negatively and unfairly affect those who can afford it least.

South Australia's problems vis a vis grid stability are real and consideration should be given as to the wisdom of a project that will allow some of these very problems to manifest themselves in the eastern states of the NEM. When NSW reaches similar levels of saturation of behind the meter solar as currently exists in South Australia, what then? As AEMO has itself noted, a future energy market dominated by renewable generation will demand storage. South Australia's teething problems owing to high penetration of renewable generation require an immediate solution. Project EnergyConnect, if approved, would not provide grid stability relief until 2024-25 at the earliest. In coming years, advancements in storage/grid stabilising technology in all likelihood could render most of the purported benefits of project EnergyConnect obsolete. Why not be forward looking and implement a non-network solution today in the form of increased energy storage? Why doesn't Australia seek to become a world leader in battery technology? Necessity is the mother of invention after all.

There was and still is considerable logic in locating power generation close to major load centres. Transmission losses are substantial over long distances and the provision of thermal firming capacity to South Australia from NSW, a state which itself imports a sizeable amount of power to meet its evening power needs, looks unrealistic. Much of South Australia's firming power requirements will ultimately be met by thermal generation in Queensland. On that basis Project EnergyConnect appears to provide a solution to a set of problems that is neither technologically elegant nor efficient.

If Project EnergyConnect is to develop consistent with the **new** option, as presented by TransGrid, then it must be subject to the rigorous analysis as required by the RIT-T and in accordance with rule 5.16A.3 of the NER (as is now applicable to the project). Then and only then should a contingent project application be made with respect to the **new** option. TransGrid's contingent project application consisting of a **new**, previously unidentified option, presented post AER determination of **Electranet's** RIT-T should not be considered until the necessary conditions of a 'Trigger Event' have been met.

Alternatively, TransGrid and Electranet could re-submit their contingent project applications in accordance with **preferred option C3** as determined by the AER and look to faithfully develop Project EnergyConnect in strict accordance with the parameters of that option. I think it is clear that in terms of net market benefits, **preferred option C3** is still the best option.

I would therefore hope that the AER gives careful consideration to TransGrid's and ElectraNet's contingent project applications, as this is a project that to date has been plagued with wildly inaccurate estimates and questionable modelling. It is of paramount importance that the rules as set forth in the NER are properly applied.

An effective regulatory framework with appropriate and robust regulatory oversight are vital to ensuring Australia's transition to a renewable future is also a low cost future. The pernicious effects of regulatory capture cannot be underestimated and it is imperative that the AER's decisions remain immune to influence whether from industry or political spheres. The perverse economic incentives inherent to privatised transmission monopolies must be acknowledged. A difficult precedent would be set should the AER approve TransGrid's contingent project application in its current form.

Given the matters I have identified above, the AER must:

1. Conclude that the relevant 'trigger event' for Project EnergyConnect has not occurred, given the **new** option was not identified and developed during the RIT-T process, nor was it published by the AER in its RIT-T determination in January 2020;
2. Direct TransGrid and/or ElectraNet to re-submit the **new** option to a fresh RIT-T process (if TransGrid insist on adopting this route); or
3. Alternatively, should TransGrid, having concerns about timely completion of Project EnergyConnect, not wish to re-submit the **new** option to a fresh RIT-T process, the AER should direct TransGrid to re-submit a contingent project application that is consistent with **preferred option C3**.

A failure to undertake the above will mean that any decision by the AER regarding TransGrid's contingent project application will be improperly made, and therefore open and amenable to challenge.

Sincerely,

Sam Trinca

Cc Hon Angus Taylor MP