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5 April 2023

To whom it may concern,

VNI West Consultation Report – Options Assessment

ENGIE Australia & New Zealand (ENGIE) appreciates the opportunity to respond to the Australian Energy Market Operator (Victorian Planning) and TransGrid (“the Proponents”) in response to the VNI West Consultation Report – Options Assessment (“the Report”).

The ENGIE Group is a global energy operator in the businesses of electricity, natural gas, and energy services. In Australia, ENGIE has interests in generation, renewable energy development, and energy services. ENGIE also owns Simply Energy which provides electricity and gas to household and commercial retail customer accounts across Victoria, South Australia, New South Wales, Queensland, and Western Australia.

Implications of the new multi-criteria analysis

ENGIE notes with interest the evolving approach to assessing transmission options, with the Report setting out the methodology and results of the multi-criteria analysis (MCA). This has resulted in the previous preferred option being displaced by the new option 5 via Bulgana.

A key driver of this change has been the MCA revealing the significant challenges in building new transmission along the Ballarat-Bendigo corridor. These challenges have been revealed by closer consideration of environmental impacts, cultural heritage impacts, social impacts from running lines closer to dwellings, competing land uses, and engineering complexities.

This is taking place in a broader context of transmission projects having to pay closer attention to social licence issues than in the past. Local concerns about a project have the potential to add significant delays and cost.

ENGIE considers that this represents a strong signal that transmission proponents will be highly constrained in their options for greenfield routes. Accordingly, projects to strengthen and expand the grid will increasingly need to utilise existing easements where non-economic criteria have already been considered and resolved. With this in mind, ENGIE considers there would be value in the proponents considering ways

to future proof their decision on VNI West by evaluating the net benefits of increasing the transfer capacity now, rather than waiting until a future decision point.

This is a critical consideration, as the scale of potential projects earmarked for Renewable Energy Zones (REZs) is higher than might have been previously anticipated, as evidenced by the success of New South Wales Expressions of Interest (EOI) processes. Furthermore, major coal closures in both New South Wales and Victoria are anticipated before 2030, and so the value of higher transfer capacities between new REZs and major load centres will be realised sooner rather than later.

For clarity and noting the Proponents' previous feedback that 500kv is the highest voltage under consideration, ENGIE recognises that additional capacity would entail multiple lines and/or augmentation of other parts of the network, such as the Western Renewables link.

The westward shift of VNI West and the opportunities arising from the NSW South West REZ

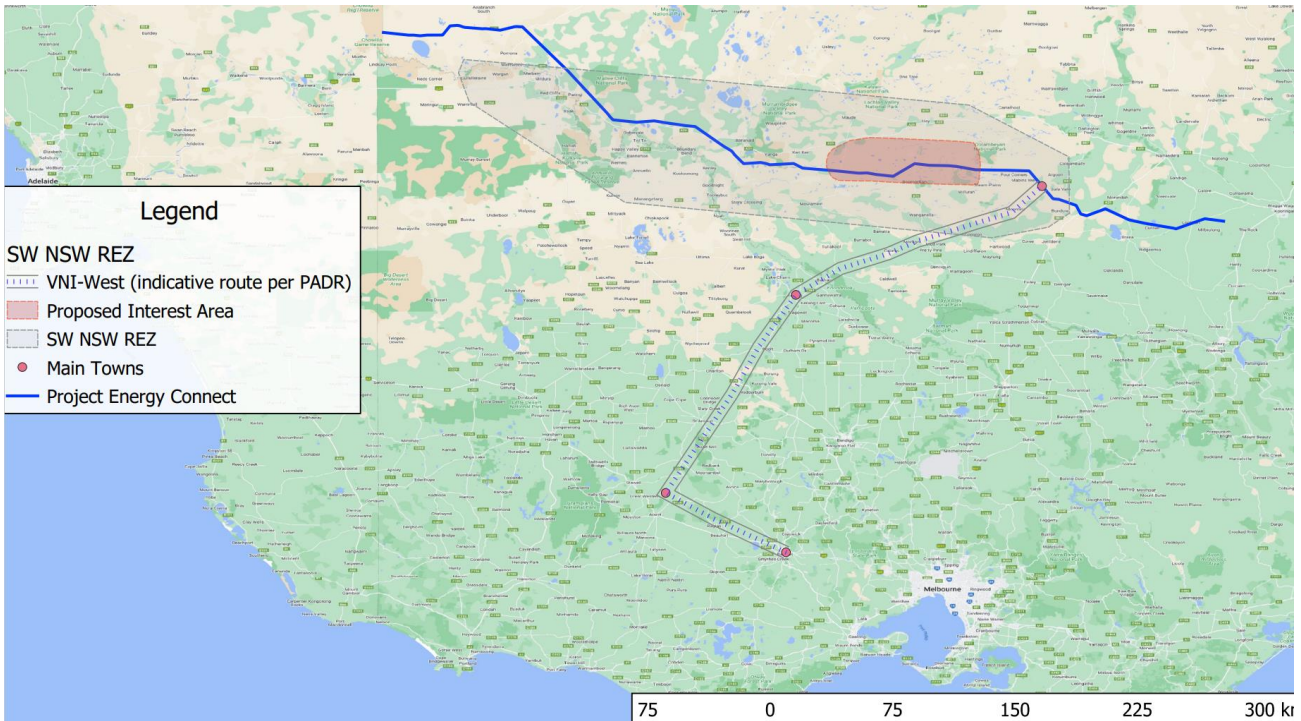
The new preferred option ("option 5") via Bulgana takes the project out further to the west than any previously considered option. For example, in the PSCR, none of the options under consideration went via Bulgana, and several of the alternatives that were subsequently discarded were significantly further east. The reasons for this evolution are apparent.

Nevertheless, the Report maintains the fixed assumption that the northern part of VNI West should link Kerang to Dinawan, while only considering alternative routes for the southern part. It is ENGIE's view that should this opportunity be taken to optimise the location of the southern corridor; a similar exercise should occur for the northern corridor.

In the light of this, ENGIE suggests it is worth considering, at the very least, an optimisation of the northern route so that it partly shares its corridor with Project EnergyConnect. However, given the broader opportunity, ENGIE suggests it is more worthwhile to consider an alternative connection to EnergyConnect at a point further west than Dinawan, or consider constructing an additional line which connects in further west than Dinawan (e.g. akin to the additional Kerang-Red Cliffs line labelled "Expansion A" in the PSCR, but perhaps connecting at a point between Buronga and Dinawan), so that:

- (1) any alternative northern pathway of VNI West could be significantly shortened due to a more direct connection to EnergyConnect to the north-west of Kerang;
- (2) any alternative northern pathway of VNI West could partly share its corridor with EnergyConnect or any additional line could partly share its corridor with the northern part of the VNI-West route;
- (3) the clustering of potential projects in and around the vicinity of the Dinawan end of the South West REZ could utilise a more feasible connection alternative to EnergyConnect;
- (4) the capacity of the 330kV EnergyConnect line between Buronga and Dinawan does not (absent of further augmentation) form a hard constraint on nearby project development, likely in the order of 800MW, even if a future upgrade of Humelink or Dinawan to Wagga was later progressed; and
- (5) there is a limited need to undertake further upgrades or augmentation of REZ capacity now, or in the near future, to account for the failure to capture additional transmission capacity west of Dinawan.

The proposed area of interest for the connection of the alternative or additional northern pathway is shown on the map below.



As noted in our submission to the PADR, the South West REZ in New South Wales represents an area of high quality solar and wind resource that has the potential to serve either of the largest load centres in the National Electricity Market – Sydney and Melbourne.

Unlike some of the other potential REZ areas that lie broadly between these two load centres, the South West REZ has been declared by the NSW Government and the EOI has substantiated the high volume of projects under development. In its EOI round in late 2021, the NSW Government received 49 registrations of interest, representing 34 gigawatts, from potential generation and storage projects. ENGIE is among the proponents that participated in this process.

As the new Dinawan terminal station will be at the far east of the South West REZ, generation from the REZ will have to flow through Dinawan in order to serve either Melbourne or Sydney based on the current preferred VNI West route. It will additionally be competing with any surplus energy from South Australia via Energy Connect too. These conditions appear sub-optimal.

The benefit of renewables flowing towards South Australia along Energy Connect is unlikely to be significant – the premise of EnergyConnect is that its savings primarily arise from reduced gas generation in South Australia, indicating that eastward flows are likely to be in periods of low renewables output, and be sourced from NSW coal or hydro. It is not clear this known condition has been fully taken into account.

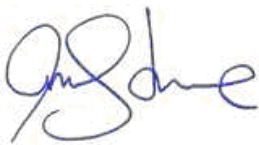
With this in mind, ENGIE considers there would be value in the proponents considering alternative connection points into NSW further west than Dinawan, which would increase the opportunity for the South West REZ to supply both Melbourne and Sydney.

ENGIE acknowledges that there will be a trade-off between changes to line routes, but to likely a shorter pathway, and the potential need for an additional substation. However, should the proponents be reluctant to entertain this more preferable route at this stage in the process, then it will still be necessary to separately and additionally consider Expansion A as an expedited augmentation to the project in light of the issues raised in this submission.

ENGIE thanks the proponents for their detailed work to date, and notes that much has changed since the project was first canvassed in 2019, specifically the development of the South West REZ, and that one further step to fully optimise the northern pathway is likely to reap long term benefits to consumers and the grid.

Should you have any queries in relation to this submission please do not hesitate to contact me on, telephone, 0477 299 827.

Yours sincerely,



Jamie Lowe

Head of Regulation,
Compliance, and Sustainability