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Clean Energy Council

16 March 2011

Ms Natalie Bakas
Project Manager
AEMO
Level 22, 530 Collins Street
Melbourne VIC 3000

By email: planning@aemo.com.au

Dear Natalie

Re: National Transmission Network Development Plan Consultation Paper 2011

The Clean Energy Council (CEC) is the peak body representing Australia's clean energy and energy efficiency industries.

Its priorities are to:

- create the optimal conditions in Australia to stimulate investment in the development and deployment of world's best clean energy technologies;
- develop effective legislation and regulation to reduce energy demand and improve its efficient use; and
- work to reduce costs and remove all other barriers to accessing clean energy.

The CEC works with members and the government to identify and address the barriers to efficient industry development in the stationary energy sector.

The clean energy industry and its members contribute to the generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector including solar hot water and cogeneration.

The CEC is pleased to comment on the National Transmission Network Development Plan Consultation Paper 2011 (the NTNDP Consultative Paper 2011) to assist in identifying and exploring sources of benefits and to quantify economic impacts for new investments.

It is pleasing to see AEMO initiating this discussion and working with stakeholders for this consultation process.

General Comments

The Clean Energy Council supports the National Transmission Development Plan annual consultation process. The major transmission option (NEMlink) is supported as the 'backbone' to a fully linked NEM and is important going forward for nationally focussed long-term strategic projects that would otherwise not occur.

Additionally the AEMC and AER should nominate AEMO as the planner for interconnectors able to perform the RIT-T with NSP and/or have the authority to finalise the approval for an interconnector upgrade of national significance like NEMlink.

As well, existing lines being duplicated to expand capacity could add to the potential risk that extreme weather events, such as bushfires, cause. This would result in more disruptions to the network. There is a need to consider alternative corridors to mitigate this likely increased level of risk.

2011 scenarios

The Clean Energy Council's key objective is to accelerate the development and deployment of renewable energy and energy efficiency technology (clean energy) and to ensure at least 20 percent of Australia's electricity is generated by renewable energy by 2020. The connection of distributed renewable energy generation will be required to achieve the Renewable Energy Target (RET) however the existing electricity grid may not be sufficient to include this additional load and thus presents a real impediment to meeting the RET. Further, the Clean Energy Council does not want to see inefficient investment in renewable energy generation which may result in sub optimal outcomes and overall higher costs to society. It is therefore important that any proposal to reform the planning for electricity transmission or network extension must accurately cater for these broader carbon and renewable energy objectives.

The Clean Energy Council welcomes the NTNDP concept as a means to streamline and improve the overall transparency for such investments and believes the scenarios outlined in these documents are progressing well. However, the Clean Energy Council would want to see the scenarios provide a greater emphasis on achieving a low carbon economy for Australia.

Least-cost expansion modelling

The Clean Energy Council notes that the least-cost expansion modelling will undergo a specific methodology change to use PLEXOS in place of MARKAL as per the 2010 NTNDP least-cost expansion modelling. The Clean Energy Council would like to make the observation that in terms of the input data used for this modelling in terms of renewable energy technologies, the industry needs to be consulted to ensure parity across the NTNDP documents.

Additionally, AEMO commissioned Worley Parsons to review the ACIL costs provided for the NTNDP. It was noted by industry that although the ACIL costs consultation did include a process to consult with industry, the Worley Parsons report did not. It is important to recognise that the Worley Parsons report does not identify why there are cost differences between the two results.

Further, the Clean Energy Council notes that wind modelling will be improved in the 2011 NTNDP and it is possible improvements could be made with capturing wind in the

methodology used within the PLEXOS model which could be drawn on from the AEMO South Australian Interconnector Feasibility Study.

Generation clusters

The Clean Energy Council believes that generation clusters are valuable to make best use of available renewable energy resources. This would include the co-location of competing renewable generation facilities, fuel supply and transportation infrastructure (as in the case of biomass), industry and commercial demand for generation, heat and cooling. Such mechanisms would provide lower economic project costs making them more viable and attractive to developers.

Other market benefit assessments

The Clean Energy Council commends AEMO's proposal to perform some high-level analysis into the potential value of addressing network congestion in order to provide an indication of the relative priority of investigating various areas of the NEM ahead of committing significant resources for a more detailed investigation. The areas of interest for the Clean Energy Council are:

- Review the system security issue that surrounds renewable energy generators constrained off at times of congestion even though they are more flexible in their ability to be dispatched.
- AEMO to provide information about the "additional carbon" that is emitted when renewables are constrained-off due to network congestion. This would include extra information on carbon emitted as a result of constraining the low emission generation. This information could then be used to estimate the carbon penalty caused by allowing the network constraint to remain.

Sensitivities

As AEMO plans to include some sensitivities to the five base scenarios to test the impact on the scenario outcomes of changing key inputs, the Clean Energy Council recommends that this include:

- Quantum development leap for renewable energy technologies such as bioenergy solar, solar thermal and wind reducing its effective cost by 20 percent.
- Planning restrictions implemented by state and local governments that have the impact of constraining (reducing) the amount of renewables to be developed (for example the 2km set back proposed by the Victorian government as a planning criteria).

We look forward to continuing to work with AEMO on developing the NTNDP and the benefits that will arise from this consultation process.

Yours sincerely

[*Original Signed*]

Russell Marsh

Policy Director

[*Original Signed*]

Nicole Nsair

Policy Analyst