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SUBMISSION
to

AEMC
Review of national framework for electricity distribution network planning and expansion

Draft Report

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1. Introduction

Total Environment Centre (TEC) welcomes another opportunity for input to the AEMC's *Review of national framework for electricity distribution network planning and expansion.*

However, we believe that the recommendations of the *Draft report* do not ensure that distribution network service providers (DNSPs) conduct robust economic assessment of non-network[1] options or provide adequate transparency on investment decisions. The recommendations do not provide clearly defined planning processes, particularly in relation to non-network options. The minor improvements recommended, while welcome, do little to address the gaping underutilisation of demand management (DM) and distributed generation (DG) by DNSPs in the NEM. In attempting to achieve a balance between prescription and regulation versus flexibility and minimising compliance costs, the AEMC has largely tended to the latter, giving DNSPs the "benefit of the doubt". However, this level of discretion given to the DNSPs by the AEMC is inappropriate in light of the persistent underutilisation of non-network solutions – regulatory failure; inappropriate incentives; and the market bias against demand side participation has to date resulted in network augmentation being "preferred over potentially more efficient non-network solutions, including embedded generation and distributed generation and demand side alternatives."[2]

The Ministerial Council for Energy has, unfortunately, tended to limit the ability of regulators to ensure that non-network solutions are prioritised above expensive, inefficient network expansion investments. This is primarily due to the absence of an environmental or demand management objective in the National Electricity Law (NEL). It is no surprise, therefore, that the current recommendations by the AEMC fall well short of ensuring that an appropriate amount of DM and DG are absorbed into the NEM. If the recommendations are accepted as proposed, the NEM is likely to continue to lag behind other countries, such as the US, that spend proportionally over five times the amount on

[1] 'Non-network' is used synonymously throughout this review with the terms 'demand management' (DM) and 'distributed generation'. TEC defines DM as including 'demand response', 'demand side management', 'demand side response', 'energy efficiency' and 'non-network solutions'. In general, DM can include both the management of peak loads and energy efficiency as a way of meeting capacity requirements most cost effectively. It includes a diverse array of activities that meet energy needs, including cogeneration, standby generation, fuel switching, interruptible customer contracts, and other load shifting mechanisms.

[2] MMA. 2009. *Role of the NEM in responding to climate change policies*, p. 47. Source: http://www.tec.org.au/index.php?option=com_docman&task=doc_download&gid=345&Itemid=360, and attached.

non-network solutions as Australia[3]. This is an undesirable and avoidable failure to ensure maximum customer protection.

We disagree that the *Draft report's* recommendations have sufficient regard to the Review principal of 'Technology Neutrality'. The entire NEM framework favours expansion of network assets over energy efficiency and demand management, with a recent MMA report prepared for TEC suggesting that "in operation the NEM favours the incumbents and imposes barriers to new entrants using existing technologies, and has the potential to impose additional barriers to new entrants using new technologies. As a result, it favours the business-as-usual case."[4] Furthermore, it is inappropriate that, in a context of the global climate change emergency, energy efficiency and demand management are not favoured over carbon intensive options.

2. Annual planning process

2.1 Demand side engagement strategy (DSES)

The NEM has been characterised by a chronic lack of engagement with non-network proponents and under-utilisation of non-network solutions for many years. TEC supports the 'Public database of proposals/case studies' and 'Register of Interested Parties' components of the DSES and the broad intent of a 'Demand Side Engagement Facilitation Process Document.' The DSES however, as currently proposed, is unlikely to greatly improve the situation for non-network proponents.

The production of a strategy document by the very same network businesses that have demonstrated, over many years, great resistance to non-network solutions is unlikely to result in more non-network solutions being implemented. The DSES lacks in the following areas:

- Does not specifically outline the planning process for non-network solutions by DNSPs → with rising GHG emissions and prices
- No approval process by the AER of the DSES
- No requirement for the AER to check whether the DSES has been implemented

TEC wishes to reiterate that explicit protocols for the document are indeed absolutely required. The AEMC recognised in the preceding *Stakeholder workshop paper* that "In terms of ensuring DNSPs fairly and adequately consider non-network solutions and engage with non-network proponents, we query whether publishing information alone

[3] Institute for Sustainable Futures & Regulatory Assistance Project. 2008. *Win, win, win*: *Regulating electricity distribution networks for reliability, consumers and the environment – A review of the NSW D-Factor and alternative mechanisms to encourage demand management*. Produced for Total Environment Centre. Source: http://www.tec.org.au/index.php?option=com_docman&task=doc_download&gid=315&Itemid=360.
[4] MMA. 2009. op. cit. p. 53.

would achieve this objective."[5] TEC similarly questions whether simply producing a strategy document alone would achieve this objective, and we stress once again that the implementation and delivery of the strategy are what is required in order to address the distinct disadvantages that non-network proponents have faced previously.

Relying on DNSPs to develop their own document with no requirement for the approval of this document, and minimal obligation on the AER to ensure it is implemented, is likely to result in a continuation of past practice, that is; persistent under-utilisation of non-network solutions. Without benchmarks, standards and specific protocols set by the AEMC, then consistency, the quality of the facilitation process document, and subsequent performance are impossible to assess.

In light of this flawed approach, additional reporting requirements will be necessary (though still inadequate) to assist with the performance measurement process.

Demand side engagement facilitation process document (the facilitation process document)

TEC believes that the proposed content of the facilitation process document provides a useful starting point, in terms of information DNSPs need to disclose in order to encourage greater levels of non-network solutions. However, there are a number of additional information requirements that should be recommended in order to be of assistance and provide benefits to non-network proponents in the development of proposals, including:

- Protocols on internal cost-benefits analyses comparing non-network solutions with augmentation and replacement for projects prior to a formal RIT-D or that fall under the RIT-D threshold

- Expanding upon point vi., a specific formula could be provided for assessing what payments levels must be offered to non-network proponents, rather than simply "an outline of the principles" considered. This could reflect the value of demand management in terms of $/kVA and could be based on the value of deferred or avoided network augmentation or replacement.[6]

TEC supports the AEMC's assessment that points iv. to vii. are important components to non-network proponents in preparing proposals, and they should therefore remain as requirements of the facilitation process document. While the specific details may vary

[5] AEMC. 2009. *Review of national framework for electricity distribution network planning and expansion – Stakeholder workshop paper,* p. 8. Source: http://www.aemc.gov.au/Media/docs/003Workshop%20Paper-4b52de7a-1d03-4e34-8c11-a3e4ccb9cb29-0.pdf

[6] A precedent for such calculations can be found in, Department of Energy, Utilities and Sustainability. 2004. *Demand management for electricity distributors – NSW Code of practice*, p. 22-23. Source: http://www.deus.nsw.gov.au/publications/NSW%20Code%20of%20Practice%20Demand%20Management%20for%20Electricity%20Distributors%202004.pdf.

according to each proposal, it has only been suggested that outlines be provided in the document.

TEC wishes to reiterate that explicit protocols for the document are absolutely required. We suggest that, considering the facilitation process document is expected to experience ongoing development and refinement due to being in its early stages, annual review is more appropriate than once every three years. Levels of accountability should also be built into the DSES, including reviews by the AER, toward the possibility of Civil Penalty to apply if it is found that the DNSP has not followed its DSES and opted for augmentation over more efficient non-network solutions.

2.2 Joint planning requirements

Joint planning should not only identify the potential requirement for joint network investments, but should also be required to identify any joint non-network opportunities available, for example the potential for a joint network DM and EG approach to a system limitation.

3. Reporting requirements

The *Draft report* states that the DAPR should "provide sufficient information to allow non-network proponents to seek further information and develop alternatives to address potential system limitations." [p.27]. As such, the following should be incorporated into the DAPR requirements:

- A full list of requests for DM and DG issued by the DNSP
- A full list of the offers made by DM and DG proponents to the DNSP (unless the proponent has explicitly requested confidentiality)
    - Reporting on the number of non-network inquiries made to the DNSP (for example calls, letters, emails, submissions, proposals)
- Full reporting on the levels of DM and DG implemented
- Full reporting on expenditure on non-network solutions
- Reporting on the savings achieved by non-network solutions, including:
    - Avoided capital and operating costs avoided or deferred
    - Avoided peak demand in MW
    - Avoided total energy consumption in MWh per annum
- Reporting on the value of electricity sales foregone
- Reporting on the planned level of expenditure on non-network solutions for each of the next 5 years

- TEC believes that any significant investments or planned investments in smart metering by DNSPs should be captured within the DAPR

TEC believes that specific guidelines for the DAPR should be set, as with the Demand Side Engagement Strategy.

3.1 Identifying system limitations

Forecasting

Regarding point iii.4., we would urge that both controlled (contracted) and uncontrolled (operating on pool price) embedded generation be reported on. Furthermore, a fifth point should be added requiring reporting on the forecast level of DM, similarly based on the levels of inquiries and proposals.

Reporting on system limitations

TEC supports the inclusion of information on transfer capability of the shared network within the DAPR. As recognised in the Review, this would "assist potential investors to determine their ability to connect to the distribution network and to understand the feasibility of non-network solutions." [p.32] Non-network proponents would benefit from this information early in their discussions with DNSPs (i.e. included in the DAPR), and it is clear that the information would be based on assumptions and forecasts, and therefore subject to change – more up-to-date information could be obtained once engagement with the DNSP is underway.

TEC supports a requirement for DNSPs to develop regional development plans, particularly detailing predicted system limitations by area. These plans would assist non-network providers to propose solutions to the system limitations.

3.2 Other reporting

Performance standards and compliance

TEC believes that historical data should be included on network performance, including the additional reporting requirements outlined above. Historical performance reporting serves as a key accountability measure – without benchmarking and review against historical data, performance and forecast accuracy cannot be effectively tracked.

If historical data is excluded from the DAPR, then the AER's Regulatory Information Order should be made publicly available, as the only annual reporting on historical data with quantitative analysis.

4. Regulatory investment test for distribution (RIT-D)

4.1 Amalgamation of reliability and market benefits limbs

Assessment of market benefits

TEC supports a full cost benefit approach, where DNSPs would be required to consider and quantify all applicable market benefits and costs. This is expanded upon in section 4.6 below.

4.2 Scope of investments subject to the RIT-D

RIT-D cost threshold

TEC recommends that the cost threshold for the RIT-D be set at $1 million. While it may indeed be the case that real increases in the input costs of distribution assets has increased since the Regulatory Test threshold was established in 2001, it is unlikely that these costs have *doubled.* The AEMC does not explain which input costs have increased. We support the AEMC's assessment that it would not be appropriate to align the threshold for the RIT-D with that of the RIT-T, though we feel that the AEMC's reasoning, "this would exempt a sizable proportion of distribution augmentations from the project assessment process", equally applies to a threshold of $2 million. Investments below the $2 million threshold would constitute a very significant proportion of all DNSP investments, perhaps up to 40% - to have these escape the scrutiny of the RIT-D is unacceptable to consumers.

TEC would also like to once again make the case for a mechanism to encourage DNSPs to seek non-network solutions where augmentation or replacement is estimated under $1 million also (for projects exempt from the RIT-D or for which the RIT-D does not apply). Specifically, DNSPs should publish standard offers for the procurement of non-network solutions for capital expenditure in excess of $200,000. To reiterate from our joint submission with the Alternative Technology Association and the Ethnic Communities' Council to the MCE consultation on *Network planning and connection arrangements:*

> Distribution constraints often operate on a small scale, but incrementally solutions can have significant impact. If each constraint is dealt with separately then resolution of each can lead to the continuation of network solutions being dominant overall.
>
> …In the case of small works, a [request for proposal] can place too great a cost burden on small businesses that are forced to develop a tender and a standard offer could be more appropriate, that is, the transaction costs may be too great in relation to the scale of the business, particularly in contrast to DNSPs which are essentially large, geographic monopolies. It would be appropriate for the AEMC to develop, via public consultation, examples of standard offers and mandate a calculation procedure. Standard offers may not be appropriate for more complex situations as they may limit the available range of approaches, but they can be useful for smaller projects.[7]

[7] TEC, ATA & Ethnic Communities' Council of NSW. 2007. *Submission to MCE Review of network planning and connection arrangements – national frameworks for distribution networks.* p. 11. Source: http://www.tec.org.au/images/11.distribution_planning_tec_ata_ecc051007.pdf

As the AEMC noted, submissions from non-network proponents considered that the threshold for the RIT-D were typically much lower than those proposed by the DNSPs. The $200,000 threshold we propose for standard offers aligns with the thresholds of the non-network proponents, and is indicative of a threshold at which non-network solutions can compete with network approaches.

4.3 Exemptions from the RIT-D

The exemption for replacement assets should be dropped. Non-network solutions can provide an alternative to replacement, just as they can for augmentation projects and, as such, should be able to benefit from a transparent RIT-D process.

TEC agrees with the view put forward by non-network proponents, including the Alternative Energy Association and the Consumer Utilities Advocacy Centre, that exempting "urgent and unforeseen" investments from the RIT-D poses potential problems. We remain unconvinced that this exemption can be suitably defined, and that the risk for its exploitation is low. Contrary to the AEMC's suggestion, reputational costs would have little bearing, given the monopoly market context.

4.4 Specification threshold test (STT)

To reiterate, TEC does not support the STT, as it places an inappropriate level of discretion with the DNSPs. As stated in our previous submission:

> This proposed Test introduces a non-transparent process that will further exclude non-network solutions by allowing the current bias on DNSPs against non-network solutions to dominate. As such, allowing DNSPs to assess the material potential for non-network options works against the MCE's terms of reference which require the AEMC to ensure proper recognition of non-network options. The chronic under-utilisation of non-network solutions by DNSPs illustrates that they are in no position to objectively determine whether or not there is 'no material potential for non-network options'. Indeed, the incentives for DNSPs to maintain and expand their asset bases are also incentives for the exclusion of non-network solutions at this early stage of planning.
>
> There appears to be no oversight regarding the DNSPs' assessment of the indicative costs of non-network solutions or the assumptions used to make these assessments. The ability to avoid the [project specification stage of the] RIT-D through the demonstration of there being 'no material potential' for non-network solutions should therefore be rejected and the reduced consultation time-frames should be dropped.[8]

4.5 Project specification stage

[8] TEC. 2009. *Submission to AEMC Review of national framework for electricity distribution network planning and expansion – Stakeholder workshop and paper,* p. 6. Source: http://www.aemc.gov.au/Media/docs/Total%20Environment%20Centre-22a87ffe-8e26-4d56-88c7-8c31a8bf68b3-0.pdf

Accelerated consultation on project specification report

TEC does not support the process of accelerated consultation on the project specification report. Grid Australia correctly identifies that terms such as "constructively engage" are ambiguous – but this phrasing is likely to in fact invite biased interpretation by DNSPs. The accelerated consultation process fails to recognise the huge resource and information asymmetries that disadvantage non-network providers compared to DNSPs, and is unlikely to "encourage ongoing engagement between DNSPs and non-network proponents, and the consideration of non-network alternatives as part of DNSPs' day to day planning activities"[9] as the AEMC hopes.

Onus should not be placed on non-network proponents having to approach monopoly, supply-focused networks on an ongoing basis, with no guarantee that their proposals will be seriously considered or even considered at all. This is an inappropriate burden on DM providers, in a developing sector trying to compete against an overwhelming majority of incentives for networks to expand their asset bases.

If the AEMC insists on recommending an accelerated consultation process, then TEC believes that prescription is required in the Rules on what actions must be undertaken to qualify for accelerated consultation. The design of these protocols should be open to consultation.

4.6 Project assessment process – Consideration of market benefits and costs

TEC supports a full cost benefit approach, where DNSPs would be required to consider and quantify all applicable market benefits and costs. This should include a 'proxy value' of market benefits for non-network alternatives, as suggested previously in the Review by non-network advocates.

It is not appropriate that the RIT-D's cost benefit approach be more limited than that for the RIT-T. While it may be argued that distribution investments typically have more limited market benefits than transmission investments, non-network opportunities are typically greater within distribution networks, and it is therefore critical that potential non-network market benefits be quantified and reported on.

TEC made the case in its previous submission for the inclusion of environmental costs and benefits:

> Environmental costs and benefits should be calculated by forecasting the expected carbon costs over the life of the project in [net present value (NPV)] terms...
>
> A related issue is the avoidance of greenhouse gas emissions. A major environmental benefit is the selection of the least emission intensive option, and this should be assessed in terms of the expected carbon costs over the life of the project in NPV terms.

[9] AEMC. 2009. *Review of national framework for electricity distribution network planning and expansion – Draft report,* p. 53. Source: http://www.aemc.gov.au/Media/docs/EPR0015%20-%20Draft%20Report-8959583c-f010-408b-9a52-89dac517020a-0.pdf

> It is critical that DNSPs accurately assess all investment decisions in terms of carbon costs since accumulated small investments can lead to incremental increases in emissions. In particular, we are concerned that many DM alternatives to smaller augmentation and replacement decisions will continue to be overlooked without the explicit requirement to include the benefits of avoided carbon costs and greenhouse gas emissions in the RIT-D.[10]

We also support the items proposed for inclusion in cost benefit analyses by the Alternative Technology Association and CUAC in their previous submissions to this Review[11]:

- the social costs of greenhouse gas emissions, as opposed to the cost of emission abatement;
- other emissions that impact on health (e.g. nitrous oxides, sulphur oxides);
- the value of energy reliability, energy security and fuel use efficiency;
- the cost of technology lock in
- sensitivity analysis which incorporates future uncertainty of fuel costs; and
- the part to whom cost and benefits accrue – specifically, investment should be undertaken that minimises costs and maximises benefits to customers, and that costs be borne by customers in proportion to how it benefits them.

4.7 RIT-D and the AER determination process

There seems to be some misalignment between the RIT-D and the AER's revenue determinations – the AEMC is recommending that the AER consider the RIT-D, yet RIT-Ds may be done after the revenue determination, and so this process would not alone be sufficient to keep DNSPs to account via the AER.

Finally, TEC wishes to question the likely efficacy of the RIT-D, given that it does not appear to mandate that the DNSP implement the most efficient investment as revealed by the RIT-D process, or prescribe that the investment be consistent with the estimated costs used in the RIT-D.

5. Dispute resolution process

It is critical that any electricity consumer is able to contest network investment decisions through the dispute resolution process. It is electricity consumers who are paying for these investments and they should therefore be able to contest these decisions. The current filters that could be applied to exclude 'trouble-making' complaints would be sufficient to ensure that unnecessary resources are not spent defending otherwise legitimate decisions.

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[10] TEC. 2009. op. cit. p. 6

[11] ATA. 2009. *Submission to AEMC Review of national framework for electricity distribution network planning and expansion – Scoping and issues paper.* Source: http://www.aemc.gov.au/Media/docs/Alternative%20Technology%20Association-a0920b1b-fe6f-4326-925c-d19e47b37fbe-0.pdf. CUAC. 2009. *Submission to AEMC Review of national framework for electricity distribution network planning and expansion – Scoping and issues paper.* Source: http://www.aemc.gov.au/Media/docs/Consumer%20Utilities%20Advocacy%20Centre-2635e45b-773f-4ca0-8c5d-97e5b31b1a41-0.pdf

As raised by TEC and others previously, we would encourage that the dispute resolution process be developed bearing in the mind that non-network proponents are likely to be less informed or able to dispute a network project. It is essential that the dispute resolution process be accessible for small proponents.

There should be the capacity for dispute resolution *concerning non-network solutions* to be available for all investment decisions over $200,000. This is the level at which many non-network solutions are carried out. It is inappropriate to shut out challenges to DNSP investment decisions under $2 million merely because this is the proposed new RIT-D threshold. The RIT-D threshold is set to find a balance between transparency and costs. We understand that it has not been set with non-network solutions in mind. Therefore, while a general RIT-D threshold for disputes could apply, there should be an exemption for non-network solution proponents for decisions above $200,000.

As the question of whether DAPRs should include reporting on historical data and performance is still undergoing consultation as part of this Review (discussed under section 3.3 above), it is not appropriate to rule out subjecting DAPRs from the dispute resolution process.