TOTAL ENVIRONMENT CENTRE | ALTERNATIVE TECHNOLOGY ASSOCIATION | ETHNIC COMMUNITIES' COUNCIL OF NSW

SUBMISSION

Ministerial Council on Energy

Network Planning and Connection Arrangements – National Frameworks for Distribution Networks

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Network Planning and Connection Arrangements – National Frameworks for Distribution Networks

1. Introduction

1.1 Distribution Rules framework

Total Environment Centre (TEC), Alternative Technology Association (ATA) and the Ethnic Communities Council of NSW (ECC) welcome the opportunity for further input to the consultations on the design of a national framework for distribution networks. We refer also to our previous submission on this process to the Ministerial Council on Energy regarding the paper by NERA Economic Consulting titled *Network Incentives for Demand Side Response and Distributed Generation*. We also refer the MCE to a paper by the Climate Action Network of Australia (CANA), a coalition of organisations including TEC and the ATA, in response to the draft Code of Practice for Embedded Generation (COPEG[1]). We forwarded the CANA paper to the MCE with our last submission on network incentives.

We have restricted our comments to Recommendations 1 to 30 in the NERA/ACG paper *Network Planning and Connection Arrangements – National Frameworks for Distribution Networks* (referred to in this submission as "the paper"), dealt with in Section 2, and general comments on approaches to demand management (DM [2]) and distributed generation (DG) are contained in Section 1. We are presenting a submission on the NERA Case Studies document separately.

1.2 Definition

The term 'demand side response (DSR)' appears to be used in the paper to describe demand management activities. DSR is often used in other contexts within the NEM to refer to specific arrangements with large users to shift or curtail loads at particular times (usually when there are peak loads or other constraints). Thus NERA/ACG's usage is confusing, and leads to the suspicion that, although they are purporting to be discussing non-network solutions in general, they may have misunderstood the full range of activity that goes under the term "demand management" (DM). We understand demand management to include '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 baseload as a way of meeting capacity requirements. It includes a diverse array of activities that meet energy needs, including cogeneration, standby generation, power factor correction, fuel switching, interruptible customer contracts, and other load shifting mechanisms.

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[1] PB Associates, *Draft – A National Code of Practice for Embedded Generators* (for Renewable and Distributed Generation Working Group), February 2006

[2] DM in this submission can be read to include '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.

Although peak load and peak prices – that is, congestion and constraints – are regarded as the main drivers of investment, demand management solutions can be used to address reliability of supply and efficient usage in both baseload and peak situations. Reduction of baseload consumption is an issue that is seriously neglected across the NEM, and it needs to be incorporated in national approaches. Thus "DSR" is not just a problem of definition, but is founded on a false perception that it is only critical peaks that matter.

1.3 SCO Response to NERA recommendations regarding network incentive for DSR and DG.

We have some comments regarding the SCO response to the previous NERA paper on network incentives. Here we will only address those responses of concern where the SCO indicated that the NERA recommendations would be dealt with in separate workstreams.

Response 2.1 (on payments for network support to substitute for network augmentation) It is not clear to us exactly how the SCO is dealing with DM in the NEM overall. It has been a very piecemeal approach so far and there does not seem to have been a concerted effort to adequately provide for the promotion of DM solutions across the NEM. For instance, in this response about "grid support pass-throughs", it is stated that the AEMC will assess this as part of its work on DSR. There is no further explanation, however, which begs the question – what exactly is the AEMC doing? We have no knowledge of a public AEMC process on this matter.

Response 4 (form of price control) Similarly, this response indicates future work without being specific. It states that "the rules will include a new provision which will provide that the AER" will consider development of "incentives for DNSPs to undertake efficient non-network solutions". What intention does the SCO have regarding these incentives? What is the timeline for their development, and will there be public consultation? The current NERA/ACG paper emphasises that there are insufficient incentives built into the national regime to encourage DNSPs to adequately promote DSR and DG. It is critical that incentives are built into the regulatory environment in some way. We (that is, TEC, ATA and the ECC) emphasised the need for incentives in our joint submission of 30 May, 2007, on NERA's previous issues paper about network incentives. The issue of incentives has still not been adequately addressed, and is a major oversight in both papers (and see the section below on "Non-network solutions").

1.4 Overall intent

We support a number of goals that NERA/ACG profess. For instance, they note that one of their intentions was to increase, "the level of prescription and guidance in the Rules for distribution network planning …" (p. 11) This is critical in the move from jurisdictional to national regulation. Equally, we support the concepts that the arrangements should be relative to the small scale of the projects (compared to transmission); that it should be a national regime with limited derogation to the states; and that there should be consistency with transmission regulations (though noting that variation may be necessary where the smaller scale warrants it).

1.5 Interaction with COPEG

We note that there has been an effective attempt to align the connection and charging arrangements with those presented in the draft Code of Practice for Embedded Generation released in 2006. We refer the MCE to the submission by the Climate Action Network of Australia (CANA) to that draft Code, and note that many of our responses to the Recommendations below are based on the ideas contained in the CANA submission. We note also that CRA International in its response on submissions to the draft Code took account of CANA's comments.

1.6 AER statements of requirements

In a number of recommendations in the paper (such as 2, 5, 28 and 29), NERA/ACG have suggested that the AER should develop 'statements of requirements' or 'guidelines'. As a general principle, it is better for important considerations to be embedded in the Rules to ensure adherence and consistency. If this kind of recommendation has been made to save time and speed up the current process, then a principle with a general description of the required statement should be put in the Rules for the AEMC – not the AER, since the AEMC is the rule-design body – to develop final versions within a given timeframe, via public consultation. When the statement is finalised it should be inserted in the Rules. This would provide greater certainty and clarity for all stakeholders.

1.7 Provision of information

There is a distinct asymmetry between existing DNSPs and alternative proponents in terms of the scale of the business and consequently available resources. Therefore it is essential that sufficient information is provided – whether it be on constraints or possible solutions – by DNSPs. As noted in the paper, the aim is to, "impose low transaction costs on DSR/DG proponents" (p. 10), otherwise there is the risk that these proponents will be excluded from the market even if their solution would be a more efficient alternative to a network option. This information must be in a form that does not require interpretation by expert advisers.

1.8 Non-network solutions

Primary assessment of non-network solutions. NERA/ACG present various examples of DM and other non-network solutions that companies investigate as a standard part of their decision-making processes. What is not emphasised is the contribution that the regulatory environment makes to these business activities, for instance NSW and South Australia both have some kind of demand management code in place. While the businesses may have developed these processes independent of regulations in any case, what is certain is that the regulatory environment has promoted a culture of such investigation. While the NERA/ACG recommendations have included aspects of the codes/guidelines from those states, not all of their features have been incorporated.

As a result, the most glaring omission from the recommendations is the promotion of the assessment of non-network solutions as a primary option. As stated in the paper, "Both New South Wales and South Australia require a case-by-case assessment of all proposed augmentations to evaluate the possibility of non-network solutions. In each case this requires an initial 'reasonableness' test to filter situations where non-network options have a greater likelihood of being economic …" (p. 16). Under the NSW *Electricity Supply Act 1995* DNSPs must investigate – and publish information about their investigations – the cost effectiveness of implementing demand management strategies to avoid or postpone augmentation of a network. In Victoria, the Distribution System Planning Report requires an assessment of, "the availability of any contribution from each distributor available to embedded generators or customers to reduce demand and avoid/defer augmentation …" (p. 108) As a sample, Appendix H.2.1 describes Energy Australia's screening process for developing solutions to load constraints (amongst other details), which assesses the viability of DM and DG as solutions to that constraint. It is also noted that ETSA Utilities, for instance, now has a demand management unit.

This primary assessment by a DNSP of alternative solutions has been omitted as an option from the paper's recommendations. Neglect of demand management is a pervasive problem throughout the National Electricity Rules, despite professed intentions that demand side options should be given "due and reasonable consideration". Consideration of DM, in all its forms including DG, must be embedded in the Rules as a valid approach to increasing efficiency by avoiding unnecessary generation and network investments. In the interests of efficiency, DNSPs should be required to investigate non-network solutions before proceeding with supply-side solutions. We reiterate that this refers to both baseload and peak consumption.

Demand-side opportunities include load shifting, load curtailment and fuel switching and these can represent a low-cost alternative to new generation and transmission investments. As is recognised in the NERA/ACG paper (discussion on p. 9), DM provides the potential for networks to operate more efficiently by avoiding unnecessary or premature network augmentations, and thereby create savings for consumers. DM therefore meets the efficiency criteria of the NEM Objective, and by relieving constraints it can also bring reliability benefits in the long-term interests of consumers.

Furthermore, if the national system is to be a replacement for that of the jurisdictions, then the very useful approaches developed so far may well be lost. It is not clear why NERA/ACG have fallen short of grappling with DM sufficiently, given the proactive environment already in place in so much of the NEM. A great deal of expertise has been developed in DM approaches and this could be wasted if the national system does not promote DM as a significant solution in its own right. Obviously the businesses may not move away from existing approaches, but it is important that they are encouraged to continue and that other companies are led in the same direction. It is therefore essential that DM is addressed properly on a national level.

The AER could assist with mitigating the cultural bias and risk aversion attitude of DNSPs by annual reviews; publication of case studies (as a starting point, a proper assessment of existing applications and failures); and assistance with methods of assessment of solutions.

Requests for Proposals. In addition, the paper recommends that an RFP is only mandatory for works of $2 million and over. 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. Below $2 million, the networks should still be required to seek a non-network solution first and they should be encouraged to issue RFPs or standard offers.

In the case of small works, an RFP 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.

In summary, there must be a mechanism to encourage DNSPs to seek non-network solutions for under $2m capital expenditure as well as above this threshold. It is the incremental nature of network development that is of concern here.

2. Response to Recommendations

Recommendation 1

The Rules should require DNSPs to undertake an annual planning process and publish an annual planning report that sets out the outcomes of that planning process.

We support all parts of this recommendation and consider it appropriate that DNSPs should undertake "an annual planning process" in the interests of economic efficiency and "publish an annual planning report" in the interests of transparency of decision making. However, we perceive a number of omissions from this recommendation.

Performance against the plan needs to be assessed so each planning report should also include reporting against the previous year's plan. This is to ensure it is a genuine planning document, not just a theoretical exercise. This assessment should refer to more than just the regulatory test, but rather report on all actions and, in particular (if the MCE is serious about promoting DM and DG), it should report on the extent of non-network solutions that have been taken up (for instance, as for the requirements contained in the NSW DM Code of Practice).

Recommendation 2

The AER should be required to produce a statement of specific requirements that is given effect by the Rules that sets out the standard format and required contents of the annual planning report. The Rules should set out the matters the AER's statement of specific requirements is permitted to address.

This is a sensible recommendation as a first step and we support the parts suggested. However, the requirements should be set out in the Rules to assist certainty and consistency and to make it more binding on the businesses. There is no good reason presented in the paper as to why the AER should be the final arbiter of the contents of these planning reports. If this subject is being left to the AER because of current time constraints, then there should be a direction inserted in the Rules at this stage directing the AEMC to develop details for a standard format and required contents – via public consultation – by a specific time. The final requirements should then be inserted in the Rules.

In addition, the standard format should be developed in reference to necessary contents, not just for applications of the regulatory test. The paper seems to consistently link recommendations to the regulatory test, but this is an uncertain factor. The test is currently under revision; it has rarely – if ever – been applied to DNSPs; and it does not cover all parts of DNSPs' considerations for decision making. In particular, as has been highlighted in other submissions to the MCE, it is very unclear how the test can be usefully applied to assess DM and DG benefits.

Recommendation 3

For any project to alleviate a network constraint for which the network solution would require an estimated capitalised expenditure of $2m or more, DNSPs should be required to perform an economic cost-benefit assessment of that project (see recommendation 6). As part of this assessment, the DNSP should be required to consult publicly and be required to issue an RFP from potential providers of non-network solutions to the network constraint. The DNSP should be required to report publicly the results of its assessment immediately after its assessment has been completed, and also to summarise the outcomes of the assessment in its annual planning report (see Recommendation 1).

In principle we support this recommendation but consider it fails to address the barriers and lack of incentives faced by DM and DG proponents. Firstly, "an economic cost-benefit assessment" is not an appropriate process. In the paper it is noted that a cost-benefit assessment should take society's interests into account: "The application of a cost-benefit test means that the DNSP is required to stand aside from what may be in its (private) commercial interest, and instead to assess the costs and benefits of particular options from society's point of view." (p. 31) An "economic" CBA does not do that – there are many ways of approaching a CBA and to describe such an assessment as an economic one leaves open the possibility that the full benefits of DM and DG will be omitted or undervalued. The terminology of "economic CBA" in this recommendation (and others through the paper) is far too vague, despite the paper's assertion that there must be, "robust economic assessment of alternatives" (p. 5) and "strong information transparency about the analysis performed and decision taken." (p. 5)

Secondly, an initial screening process could be productive. This is used already in some jurisdictions, and by some businesses, as is described in the Appendices. It is not clear why such a process has been omitted from these recommendations since there is clearly wide experience across the NEM of applying it. In essence, the first step is roughly a "Reasonableness Test" for non-network solutions after which the DNSP then goes on to consultation with potential proponents, the issuing of Requests for Proposal and a full cost-benefit analysis including all the options. The screening test is thus not just a cost-benefit analysis but involves active investigation of the potential for DM/DG strategies. A model screening procedure should be developed, with existing jurisdictional codes used as the starting points, and involving full public consultation. The requirement to undertake such a process should then be inserted in the Rules, with the additional requirements for reporting on such assessments as well as the processes of decision making. As an example, in the paper Energy Australia's screening process is described thus:

> The screening test is designed to identify the drivers behind the emerging constraint, the nature of the demand that is driving load growth and the potential of demand management as an option to alleviate it. It is then decided whether it is reasonable to expect DM to be a cost effective option to defer or avoid a supply side investment and whether further investigations should be conducted. This is done as early in the project as possible to allow sufficient time for investigation and development of an identified option and the outcome of the screening test published. (p. 151)

Finally, the NSW DM Code of Practice provides for the level of detail to be relative to the urgency of the constraint, that is, the more likely the constraint is to occur in the near future, the greater the level of detail required for reporting on both the constraint and the potential solutions. This is a useful technique for easing the reporting burden on the DNSPs as well as assisting with the provision of information for potential non-network proponents.

Recommendation 4

For any network constraints for which the network solution would require an estimated capitalised expenditure of $0.5-2m, DNSPs should be required to undertake an economic cost-benefit assessment of the project and publish the results in the annual planning report, without being required to issue an RFP or consult on the options. We observe that for network constraints for which the network solution would require an estimated capitalised expenditure of less than $0.5m, there would be no formal ex post reporting requirement: DNSPs would not be required to undertake an economic cost-benefit assessment of the project, to issue an RFP or to consult on the options. The ex ante requirement to identify emerging constraints in the annual planning report would, however, apply to projects of this magnitude.

As discussed in Recommendation 3, an "economic cost-benefit assessment" does not in itself necessarily adequately address the potential for DSR/DG; the assessment of non-network options must be mandatory. A screening process would be appropriate for smaller projects as well, as a first step. At the very least, any requirement in the Rules should be worded so that these solutions are considered in the cost-benefit assessment.

In addition, there is no scope here for RFPs or standard offers. The DNSPs should at least be directed to consider the possibility of developing these (such as "where reasonable", a standard direction in the Rules). As discussed in our introductory comments, standard offers for small projects can alleviate the burden on both the DNSP and alternative proponents in developing proposals. We are concerned that small network projects added together can have a large cumulative result. There has been insufficient exploration of options which can be applied to smaller schemes which, when multiplied, can have incremental impact.

Recommendation 5

The Rules should require the AER to issue a statement of specific requirements that sets out the contents of a Request for Proposals for non-network solutions to address an emerging network constraint and that sets out the process to be followed in issuing such requests.

Our response here is similar to that for Recommendation 2, that is, the AEMC should develop such a statement to be refined via public consultation and the final version included in the Rules. There are models existing already for the contents of RFPs which could be used to develop a draft. A similar provision could be made for standard offers.

There is one curious detail in the description of RFPs: that non-network solutions, "need to <u>better</u> in order to be selected" (our emphasis). There could be circumstances where matching the details – or even costing more on a pure dollar basis – may bring other benefits to the system overall. This description is too specific, and is also counter to the terminology currently in use in the jurisdictions (as described in the Appendices to the paper).

Also in current usage is the practice of sending RFPs to parties known to be potentially interested. This too could be suggested in the final version. It could be helpful for the AER (or possibly NEMMCO) to keep a register of potential non-network proponents.

Recommendation 6

DNSPs should be required to apply the standard regulatory test (rule 5.6.5A) when undertaking a cost-benefit assessment of alternative projects (requiring amendment to clause 5.6.2(g)) so long as it continues to provide the flexibility for the test to be applied in a manner that is proportionate to the size and scale of the project.

We support this recommendation on the basis that the regulatory test is being revised (and see our comments for Recommendation 2). In principle it should be applied to DNSPs as it is – potentially – to transmission businesses. It should be noted that the revision of the Regulatory Test needs to address the question of whether the contents apply appropriately to DNSPs, that is, it may need further revision as it is currently being considered only in relation to TNSPs. It is also unclear what the actual process for revising it will be – there was some coverage of the test in discussions about the establishment of a National Transmission Planner in a recent issues paper, but the situation is far from settled.

Recommendation 7

The DNSP's obligations to undertake the annual planning and reporting activities, and to undertake project evaluations, should be Rules obligations and able to be enforced through standard Rules-enforcement processes.

We support this recommendation, as it is consistent with the intent of other recommendations.

Recommendation 8

A dispute resolution regime based on rules 5.6.6(j)-(n) should exist in relation to the DNSP's conduct of a cost-benefit assessment (and associated RFP for non-network options) for particular distribution projects.

We support the concept of a dispute resolution process consistent with what is already provided for in Rules. However, it should be developed bearing in mind the assertion in the paper that alternative proponents, "are likely to be less informed or able … to dispute an evaluation of a distribution project than would be the parties who may dispute a transmission project." (p. 7) It is important therefore that any dispute resolution process be accessible for small proponents.

Recommendation 9

The Rules should ensure that DSR/DG trials and risk sharing arrangements are encouraged in order to build trust and communication between DNSPs and proponents of non-network alternatives. In addition, the regulatory framework should be reviewed to determine whether insufficient incentives are provided to DNSPs to invest efficiently in research and development, warranting the development of a specific incentive mechanism in the Rules.

This is a very interesting idea, but is currently too vague to be helpful except in principle. There needs to be public consultation on the options available for "trials and risk sharing arrangements" as well as on "incentives … to invest efficiently in research and development". There also needs to be a proper assessment of known successes and failures in Australia to date. There is an assumption across the NEM that non-network solutions pose a greater risk but this is not based on any solid data. As we suggested in our introductory comments , it would be helpful for the AER to, initially, compile case studies of DSR/DG projects and then update these annually in the future. The DNSPs annual reports should provide the information to enable this.

Recommendation 10

Specify in the Rules the connection requirements that must be met by a user which include the requirement for users to:

- *pay the DNSP for the construction of any dedicated connection assets (where the construction of these assets is not contestable) and any extension works to the distribution system required to effect the connection; and*
- *comply with technical and safety requirements in relation to the customer's installation or equipment, ie, payment for extension assets, dedicated connection assets and compliance with technical and safety matters.*

Whilst accepting the need for DNSPs to recover dedicated connection costs for DG projects, we would stress the need for open and transparent provision by the DNSP of both the potential connection costs and the mechanisms used to calculate these costs. The absence of such a provision could lead to either the perception or even the reality of excessive charges beyond mere cost recovery being levied by the DNSPs, resulting from the market advantage afforded by their monopoly position.

Recommendation 11

Schedules to Chapter 5 of the NER should be amended to include a definition of the technical requirements for small load, large load, micro, small and medium DGs.

We acknowledge the comment by NERA/ACG that defining the classes and size of various potential DG categories is beyond the scope of the paper. However, we stress not only the importance of correctly defining these classes, but also the need to do this up-front in order to evaluate the other recommendations of the paper in light of these definitions. With micro DG classified as up to 2kW, as defined in Table 3.1 of the paper, and in the referenced CoPEG), there are a number of recommendations made throughout the paper for the lower end of the next category – 'small DG' – which we would strongly oppose.

It must be noted that various Australian Standards (AS3000, AS3100 and AS4777) govern all aspects of the connection of embedded generators to the grid for approved grid-connection inverters, providing adequate protection for the network, network service providers and other network customers from micro DG systems. As such, the process for connection of any DG system falling within the 'micro' category should be streamlined and facilitated in such a way as to recognise the lack of threat posed by these systems – indeed the potential network benefit stemming from their uptake – and to not present a barrier to the uptake of these technologies.

At present, the average size of a domestic grid-interactive solar electricity system is in the order of 1.6kW, with larger applications already reaching 2.5kW to 3kW in capacity. Further, with the advent of technological advances in domestic-scale renewable and low emission technology, including the potential advent of fuel cells, the 2kW limit on micro DG appears insufficient to capture the domestic market that this category is obviously designed to cater for. Additionally, with the peak electricity demand of a domestic dwelling being in the order of 5kW, and hence the physical infrastructure easily capable of transmitting these loads, we believe that increasing the limit of Micro DG to 5 kW would be appropriate.

Further, the classification band defined as Small DG (between 2kW and 1MW) is far too broad. Whist recognising DG applications at the upper end of this band have differing requirements to those classified as micro DG we believe that DG units at the lower end of this range are would be overly regulated by these categories.

Since most small businesses would have a maximum electricity consumption rating under 100kW, and the increase of applications such as micro-cogeneration units in the order of 30kW targeted at these businesses, it would seem sensible to have a fifth level of classification to cater for this market.

As such, we propose the following definitions for ongoing discussions concerning DG systems, as was put forward in the CANA submission to the draft COPEG:

- Micro DG – up to 5kW. Applicable to predominantly domestic applications such as roof-top solar PV, and attracting standard grid-connection arrangements recognising the homogenous nature of these systems.
- Mini DG – between 5kW and 100kW. This would cater for embedded co-generation units in the commercial sector. Such systems would require little, if any, alteration to connection assets or additional network augmentation to facilitate their connection, would be readily available plug-and-play type systems, and would be typically owned and operated on the premises by the individual or business with the connection. These systems should be covered by a greater degree of standardised connection arrangements than the larger systems covered in the 'small DG' category.
- Small DG – between 100kW and 1MW. Typically, these larger systems would still be either larger commercial embedded co-generation or aggregated residential systems connected to the 11kV network. Their proponents could be expected to have a greater degree of understanding of the electricity market and as such would be subject to negotiated connection agreements. Limited impacts on the distribution network could be expected from these systems.
- Medium DG – between 1MW and 5MW. Such systems would be commercial ventures and would have a larger degree of impact on the distribution network, potentially requiring the negotiation of network augmentation to facilitate their connection.

We urge the EMRWG to consider defining the classifications of DG at an early stage of this process in order to ensure that all related recommendations are in the context of these clearly defined categories.

Recommendation 12

The NER should define the standard connection services to apply to micro DGs.

We fully support this recommendation, provided the category of micro DG is extended to include DG up to 5kW in capacity. However, without clear definition of DG categories it is difficult to support this and other recommendations, as discussed above.

Recommendation 13

The NER should set out the minimum content for standard applications in a schedule to Chapter 5.

We support this recommendation.

Recommendation 14

The NER should:

- *set out the minimum content for standard connection contracts in a schedule to Chapter 5 including a requirement for the DNSP to specify the number of days after the finalisation of the agreement that the standard connection will be effected;*
- *require the AER to approve the content of the standard application form and the terms and conditions specified in the standard contract and require the AER to apply the 'fair and reasonable' test when determining whether to approve the proposed standard contracts.*

We support this recommendation.

Recommendation 15

The NER should state that the negotiation framework developed in accordance with Draft Rule 6.7.5 and as modified should apply in the negotiated connection application process.

Rule 6.7.5(c) should be modified to include the following additional provisions which would require the DNSP to specify:

- *a requirement for the exchange of technical as well as commercial information between the two parties;*
- *a requirement that when considering a connection application the DNSP is to use its reasonable endeavours to provide the user with the service it requires in accordance with the reasonable requirements of the user, including without limitation, the location of the proposed connection point and the level and standard of power transfer capability that the network will provide (currently Rule 5.3.6(d));*
- *any offer pertaining to a negotiated distribution service to be fair and reasonable and consistent with the safe and reliable operation of the power system in accordance with the NER and consistent with the technical requirement schedules contained in Chapter 5 (as applicable) and must not impose conditions on the user that are more onerous than those contemplated in these technical schedules (currently Rule 5.3.6(c));*
- *the cooling off period that will apply to any contract negotiated with vulnerable users;*
- *a requirement that when considering a connection application the DNSP must consult with any affected Distribution Network Users and NEMMCO (where relevant) if the DNSP believes, in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected, in order to assess the application to connect and determine:*
  - *the technical requirements for the equipment to be connected;*
  - *the extent and cost of augmentations and changes to all affected networks;*
  - *any consequent change in network service charges; and*
  - *any possible material effect of this new connection on the network power transfer capability including that of other networks (currently Rule 5.3.5(d)); and*
- *the time periods for the commencement and finalisation of negotiations relating to negotiated connections once a completed application form is submitted to the DNSP for the alternative types of users and connection requirements.*

Whilst we support the general intention of this recommendation, there are aspects of it which have unclear and uncertain meanings. In particular, the second-last dot point which states: *"DNSP must consult with any affected Distribution Network Users and NEMMCO (where relevant) if the DNSP believes, in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected…"*

In this instance it is unclear exactly whose connection agreements it is referring to – is it the affected Distribution Network Users or the DG proponent? In fact, this entire dot point is unclear, and we would welcome clarification of the intention behind it.

Recommendation 16

Schedule 5.6 of the NER should be amended:

- *to ensure that it can be utilised in contracts negotiated with small users, large users, micro, small and medium DGs;*
- *to include a cooling off period for those contracts negotiated with small users; and*
- *to include provisions which enable the connection agreement to be modified over time where both parties agree to changes in non-price terms and conditions including technical conditions which may require NEMMCO involvement) and where those changes have no associated cost effects.*

We support this recommendation.

Recommendation 17

The NER should require a DNSP, within five business days of receiving a user's initial enquiry:

- *to advise the user whether there is a standard connection service that would encompass its connection requirements and if so:*
- *supply the user with the relevant standard contract and application form; and*
- *inform the user that they have the option of using either the standard connection service or negotiating an alternative connection service.*
- *to provide the user with a copy of the negotiation framework it has developed in accordance with Rule 6.7.5 and that has been approved by the AER which will come into operation if the connection service is to be negotiated;*
- *to inform the user of whether any aspects of the connection service are contestable;*
- *to inform the user of any additional information required which is of the kind specified in Schedules 5.4; and*
- *to inform the user of the indicative value of the loss factor applying in the area within which the user is seeking connection*

We support this recommendation.

Recommendation 18

The NER should require a user in the connection enquiry phase to advise the DNSP whether it will be seeking connection via the standard connection service route or the negotiated connection service route.

We support this recommendation.

Recommendation 19

The NER should state that where a user selects the standard connection application route the DNSP must:

- *advise the user as soon as practicable, and no later than five business days after receiving advice from the user that it will be seeking the standard connection service route, if the application should be processed by another DNSP; and*
- *within five business days provide the user with any technical information necessary to process the application in accordance with the technical schedules in Chapter 5 to the extent that it holds such information.*

We support this recommendation.

Recommendation 20

The NER should require the DNSP to issue a connection offer and a standard connection agreement within twenty business days of receiving a completed standard application form.

We support this recommendation.

Recommendation 21

The NER should allow a user (utilising the standard connection application route) two months to accept the offer otherwise the offer should be deemed to have lapsed unless the DNSP agrees to extend the offer.

We support recommendations 19, 20 and 21, dealing with the requirements and timeframes applicable to standard connection agreements, applicable to micro DG, and mirroring the timeframes proposed in the Utility Regulators' Forum's draft CoPEG.

However, we believe there should be a timeframe governing the finalisation phase of connection, limiting the time taken to a maximum of 5 days for a DNSP to arrange for connection following acceptance by the user of the connection offer.

Recommendation 22

The NER should state that where an application is for a negotiated connection service the DNSP must within ten days:

- *advise the user if the application should be processed by another DNSP; and*
- *provide the user with any technical information necessary to process the application in accordance with the technical schedules in Chapter 5 to the extent that it holds such information.*

We support this recommendation.

Recommendation 23

The NER should:

- *combine the technical, price and non-price negotiation phases currently set out in the application for connection and offer to connect phases;*
- *remove any provisions which will be captured in the negotiation framework specified in Rule 6.7.5;*

- *require the DNSP to commence negotiations with the user as soon as it submits a completed application form; and*
- *require both the DNSP and user to negotiate in good faith*
- *state that any negotiation relating to access standards must:*
  - *be no less onerous than the minimum access standard contained in the relevant schedules in Chapter 5;*
  - *not adversely affect power system security;*
  - *not adversely affect the quality of supply for other users; and*
  - *involve NEMMCO in an advisory capacity and accord NEMMCO twenty business days to inform the parties in writing of any advisory matters arising as a result of the proposed negotiated access standard.*
- *require the DNSP to develop an offer to connect which contains the information specified in Schedule 5.6 and specifies the outcome of any negotiation relating to access standards, connection charges, prudential requirements and any other terms and conditions within the time specified in the preliminary program or later if the access standards have been negotiated.*

We support this recommendation.

Recommendation 24
The NER should allow the user (utilising the negotiated connection application route) two months to accept the offer otherwise the offer should be deemed to have lapsed unless the DNSP agrees to extend the offer.

We support this recommendation.

Recommendation 25
The NER should allow, subject to a decision by the AER as to the form of regulation to apply to the provision of connection assets, a DNSP to recover from connecting users the cost of dedicated connection assets as well as extension assets for the sole use of a new connection that, but for the new connection, would not have been incurred – a connection asset charge.

This appears to be a replication of a Recommendation 10 and accords with previous discussions about costs in terms of this being a "shallow" connection cost. We emphasise that these costs are only reasonable for sole use and not shared use. Whilst we accept the recommendation, we would again stress the need for open and transparent provision by the DNSP of both the potential connection costs and the mechanisms used to calculate these costs. The absence of such a provision could lead to either the perception or even the reality of excessive charges beyond mere cost recovery being levied by the DNSPs, resulting from the market advantage afforded by their monopoly position.

We are concerned, however, that recovery of the costs of extensions could be prohibitive for the smaller end of DG. The terminology for the size of DG (see Recommendation12) should be adopted here, that is, because of the wider market and reliability benefits of expanded DG, micro DG should be exempt from paying extension costs. The DNSP should then be able to pass through these costs to customers. This also seems to accord with Recommendation 28, which proposes that there be no connection asset charge for "small customer connections".

The reason for the mention of the AER here is not clear and requires explanation.

Section 4.2.2.1 Australian Capital Territory

It appears there is an error on page 76 of the paper, where it is quoted that, in the ACT, "there have been no connections associated with generation". We would like to direct NERA/ACG to the Australian Greenhouse Office's (AGO) statistics for installations of solar photovoltaic systems under the Photovoltaic Rebate Programme (PVRP). According to the AGO's latest statistics, there have been 44 grid-connected solar PV systems installed in the Australian Capital Territory over the past seven years of the PVRP[3]. In addition, there could be expected to have been a number of systems installed either prior to the PVRP or without receiving rebates.

We can only imagine that what is being referred to here is that there have been no connections associated with generation *requiring the provision of extension assets*. We would encourage NERA/ACG to review this section and provide clarity on this point.

Recommendation 26
The NER should adopt the terminology in Box 4.1 for the purposes of calculating a connection asset charge.
The terminology in Box 4.1 is quite clear and we would support its adoption, subject to the proviso that it does not directly conflict with terminology within the Rules themselves. We also accept the distinction between dedicated and shared assets.

Recommendation 27
A compulsory connection asset charge should not include the cost of any shared network augmentation that may be required to service the load/generation output arising from a new connection. However, a connection applicant may also choose to fund shared network augmentation by negotiation between the DNSP and the connection applicant.
We strongly support this recommendation, particularly in the light of our previous submissions. As NERA/ACG point out (pp. 81 and 84), this is exactly the point that CANA argued in the submission to the draft COPEG. This accords with the principle of paying only shallow connection costs where any augmentation to service a load is absorbed by the DNSP, as is now the case for transmission, and has always been the principle presented as desirable within the NEM which infers. The allowance for voluntary payments where upstream extensions will increase the capabilities of the DG installation is reasonable.

Recommendation 28
The NER should require the AER to develop a Guideline for the determination of connection asset charges. The Rules should provide that the Guideline include:

- *a definition of a standard small customer connection asset that may vary for each DNSP, for which no connection asset charge may be levied; and*
- *a definition of the relevant connection point.*

The terminology in this Recommendation is unclear. We would support the concept of "no connection asset charge" for small customers" (if this means small load customers) and such a standard should also apply to micro DG proponents. This is consistent with our response to Recommendation 25.

[3] Australian Greenhouse Office *Watts by Month – PVRP Statistics* AGO, June 2007 [From: http://www.greenhouse.gov.au/renewable/pv/index.html]

We would suggest that the definitions should be developed by the AEMC and then included in the Rules. The paper does not present sufficient argument for not including such definitions in the Rules nor for variation across DNSPs; and the Rules give a central reference point for definitions across the NEM. This is consistent with our position that the Rules are designed for the purpose – amongst other principles – of providing consistency and clarity.

Recommendation 29

The NER should require the AER to develop a Guideline that provides a methodology for the partial repayment of connection asset charges when a new customer connects to an extension asset within 7 years. The Rules should provide that the Guideline include:

- *an obligation for a DNSP to provide a repayment to a connection customer in the event a new connection utilises part of the previously dedicated assets;*
- *dispute resolution procedures;*
- *the basis for calculating the repayment; and*
- *a requirement that the asset becomes treated as a shared network asset at the expiry of the seven year period.*

Once again, we would argue that the AEMC could develop the guideline through public consultation that is then inserted in the Rules. The partial repayment of charges is a fair and equitable mechanism, and 7 years an acceptable length of time since it is the maximum allowed across the jurisdiction. There are other legal principles which rely on a seven-year liability period with which this recommendation is consistent.

There seems to be no reason to introduce a new dispute resolution procedure for this particular situation. Any dispute resolution procedure developed should be designed to incorporate a range of likely scenarios.

Recommendation 30

Provisions within the NER that currently refer to the recovery of network augmentation costs through a connection charge should be removed (ie, Rule 5.5(f)(3)(i) and Draft Rule 6.22(1)(b)).

This seems reasonable, as long as the other recommendations are met.