United Energy Distribution Pty Limited ABN 70 064 651 029



9 August 2012

Ms Anita Lai Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235 **United Energy**

43-45 Centreway Mt Waverley VIC 3149 PO Box 449 Mt Waverley VIC 3149 T 03 8846 9900 F 03 8846 9999

www.ue.com.au

Our Reference: RE.02.11.01.02.EG Connection

By Email: Anita.lai@aemc.gov.au Electronic lodgement: ERC0147

National Electricity Amendment (Connecting embedded generators) Rule 2012

Dear Anita

United Energy (UE) welcomes the opportunity to respond to the Australian Energy Market Commission (AEMC) Consultation Paper titled, National Electricity Amendment (Connecting embedded generators) Rule 2012.

The Consultation Paper notes that non-registered generators may use either Chapter 5 or Chapter 5A. Where generators are registered (above 30MW) they are only able to use Chapter 5. The objective of the proposed rule changes is to improve the connection process for non-registered generators. Many of the rule changes proposed are seeking to add conditions already available in the NER in Chapter 5A into Chapter 5. Given a connection applicant for a non-registered generator is able to use Chapter 5A once NECF is adopted in their jurisdiction there appears to be minimal benefit as most jurisdictions will have adopted NECF by the time this Rule change could commence. Further there may be detrimental impacts where these proposed arrangements have the potential to impact connections on the transmission system or complex, large registered generator connections. There appears to be little benefit between negotiating an access standard under Chapter 5 or Chapter 5A.

Implementation of Chapter 5A and the Distribution Planning and Expansion Framework should be allowed to progress before assessing the need for further rule changes in these areas.

UE has considered the regulatory arrangements in place both pre and post adoption of NECF in Victoria in its response.

UE's response to the Consultation Paper questions is in the Attachment, in summary;

 UE consider that the current good faith provisions in the regulatory framework are sufficient, additional good faith provisions will not aid the connection process;



- Whilst UE is reasonably supportive of improved communication and availability of information, UE considers that the proposed Rules 5.3.1A (a) (ii) and (iv) and 5.3.1A (b) are not required in view of the other major Rule changes/customer reforms in progress;
- UE support a Rule change in Chapter 5 to require itemised costs to include the relevant connection charges, meter type and cost, cost of system extensions, details of upstream augmentation to provide the connection and associated costs and any other incidental costs and the basis of their calculation;
- UE consider that the connection process as a matter of practicality is often an iterative process and hence the timeframe to require a distributor to make a connection offer can vary. Where all information is well collated and provided early in the process allowing a smooth run, the connection offer can be provided fairly quickly. UE has no objection to the Rule change proposed in 5.3.3. (b) (6) subject to being able to vary the preliminary program to ensure that a more appropriate, informed connection offer is able to be made;
- Noting the concerns above, UE suggest that the 65 business days be referenced back to the completeness of the application eg that all relevant information has been made available;
- UE consider that it is appropriate for terms and conditions to vary between distributors to reflect network differences and jurisdictional differences. UE is not opposed to the proposed amendment to 5.1.3 (b) that a connection offer must include the items as currently drafted in NER S5.6, although we don't perceive that this will add much value;
- Standards which are developed are more about the type of connection ie what voltage level the
 embedded generator connects to as opposed to standards established purely on an embedded
 generator size and estimates of export quantities. There is no one size fits all set of standards
 that could be adopted nationally. UE suggest that the rule change should not proceed due to the
 difficulties in developing a national automatic access standard first up;
- On balance UE considers that there is no need to include this optional fee in rule 5.3.3 (b) (7) given there is already a contestable market providing such services; and
- UE does not support the proposal to amend Rule 5.5 (f) (3) and limit any size embedded generator from paying its total costs of connection unless there is a significant change in policy position.

If you wish to discuss any matters relating to this response please do not hesitate to contact me on 03 8846 9856.

Yours sincerely

Verity Watson

Manager Regulatory Strategy



Attachment

United Energy response to the National Electricity Amendment (connecting embedded generators) Rule 2012

UE's response to the specific questions in the AEMC Consultation Paper are outlined below.

Question 1 Complying with Chapter 5

- (a) Currently any person can require a network service provider to comply with Chapter 5 or elect to use the connection procedure under Chapter 5. Are there any problems or barriers to how this is applied in practice?
- (b) If so, what are the problems and/or barriers? What are the costs and impacts on stakeholders?
- (c) How would the proposed amendment to specify that an embedded generator has the right to require a network service provider to comply with Chapter 5 resolve these problems and/or barriers?
- (d) Given that any person can elect to use the connection process under Chapter 5, when, and why, do non-registered embedded generators choose not to use this process?

UE recognise that NER Chapter 5 is a comprehensive, large chapter, however we note a number of issues that could be improved in the connection process:

- Chapter 5 provides the minimum access standards and automatic access standards at a fairly high level, they are often not sufficient to provide meaningful guidance to a connection applicant;
- The description of these access standards in the NER suit generators above 30 MW more so than those sub 30MW. Not all of the access standards are relevant for sub 30MW generators;
- Connection applicants (or their consultants) do not understand Chapter 5 and often don't understand the technical aspects of their design;
- Chapter 5 provides an opportunity for a connection applicant not to provide all data upfront, as such this leads to an iterative process which is less efficient; and
- The connection applicant needs to demonstrate how they comply with the access standards so that the distributor can assess and provide a connection offer. Often connection applicants are seeking a firm connection offer when they are still tendering for the equipment. UE recognise that this is a timing issue in matching the connection and building construction/embedded generation design issues which lends itself to a more iterative connection process and certainly may lead to considerable time between the connection applications being received and the connection offer being provided.

Rule 5.3.2 (d) allows the Connection Applicant to request that the distributor must process a connection enquiry and the distributor must meet this request. With the information exchanged between the two parties it is a matter for the Connection applicant to make the decision whether to proceed with the connection application.

The Rule Proponents suggest a new clause 5.1.2 (ba) to ensure that an embedded generator can require a distributor to comply with the NER. All registered participants, including distributors, need to comply with the NER, we do not envisage additional value will be gained by the proposed new clause 5.1.2(ba), although UE are not opposed to the addition.



Whilst any person can elect to use the process under Chapter 5, the Victorian regulatory instruments may provide better treatment in some respects or a connection applicant may choose not to connect to the grid.

Question 2 Good faith provisions

(a) The current NER sets out that network service providers and connection applicants must conduct negotiations in 'good faith'. Are there any problems associated with the application of this provision? (b) How would the proposed amendment for an additional 'good faith' impact stakeholders?

UE note that there are a number of good faith provisions which apply to network connections in the regulatory framework:

- The Victorian Electricity Distribution Code in clause 7.1.2 requires that where an embedded generation connection agreement is sought by an embedded generator, the distributor and embedded generator must negotiate in good faith. This clause is expected to be transferred to the Victorian Electricity Regulations once NECF commences in Victoria;
- The Victorian Electricity Guideline 15, clause 2.1, contains a similar good faith clause, although this guideline is expected to cease on the commencement of NECF;
- The NER, rule 5A.C.3 (a) specifies as part of the NECF connection negotiating framework that the parties must negotiate in good faith, this framework is likely to apply for non-micro embedded generation connection applications;
- The NER, clauses 5.3.6 (f), 5.3.7 (a) and 5.5 (f) also cover obligations on the parties to negotiate in good faith in the offer to connect stage, the finalisation of the connection agreement stage and the access arrangement to the distribution system.

UE considers that the current good faith provisions are sufficient and does not envisage any impact (or perceived improvement) by adding the additional principles to cover the following:

- that parties must act in good faith in relation to connection; and
- that each party must provide the other with information they reasonably require in order to facilitate connection.

Additional good faith provisions will not necessarily facilitate the negotiation process where a connection applicant is seeking to connect on a minimum standard where the network is requiring a technical standard to be above the minimum standard to address the potential for increased risks to the network or to the embedded generator. Networks will adopt good industry practice and will not want to increase the risk to all customers or to compromise on safety.



Question 3 Publishing details of information requirements

- (a) What are the costs and benefits to distributors and embedded generators in requiring distributors to publish information on its connection process including an application form and information on application fees and calculation of connection costs?
- (b) How would the proposal to add a clause that each party 'must provide the other with information the other reasonably requires in order to facilitate connection to the network' address any problems? What are the details and examples of the current communication issues that stakeholders have experienced with the connection process?
- (c) Noting that there are currently provisions under the NER for the exchange of information, what are the deficiencies of the current arrangements?
- (d) Would the demand side engagement document under the distribution network planning and expansion framework rule change address these information requirements?
- (e) Should the proposed changes apply generally to all network service providers?

UE currently has micro embedded generation forms and a description of the connection process on its website. Further enhancements to the website are planned once NECF is introduced in Victoria.

The UE connection policy is also on the website and contains information on the connection process, tendering and charging etc. This policy will be updated in line with NECF connection arrangements once NECF is introduced in Victoria.

UE agree that improved communication leading to more efficient and effective connection processes should be the primary objective to improve the current arrangements. UE has developed improved automatic and minimum access standards for generator connections to its network. These access standards have not yet been made available publically but have been provided to generator connection applicants over the last few years.

UE is supportive of improved connection process information being available on websites and will be working towards this for NECF. However, UE does not envisage that there is a one size fits all approach given that the network standards are different in Victoria compared to other states and there may be different jurisdictional regulatory requirements.

Whilst UE is reasonably supportive of most of the drafting proposed in the new Rule 5.3.1A, UE do not consider that the connection fee is something that could go on the website as this may vary for different size generation units, different connection infrastructure requirements at the site, different access standards that are negotiated etc. In addition UE consider that the complexity of the embedded generation connection and work involved will also result in a range of application fees for assessing a connection application. Rules already exist to require a connection offer to make clear the basis for the distribution service charges and Rules also exist to enable a connection offer to provide different connection options/charges as part of the offer.

There is already an obligation on distributors to publish annual planning reports in the Victorian Electricity Distribution Code. Ours is located at the following link: http://www.ue.com.au/about-us/regulatory-framework/electricity-regulation/planning-reports.aspx

¹ Clause 3.5.2 of the Victorian Electricity Distribution Code ,the distributors have, for the past 10 years, published distribution system planning reports which must set out ,among other information:

⁽a) the historical and forecast demand from, and capacity of, each zone substation;



The Draft Rules currently under consultation for the Distribution Network Planning and Expansion Framework will establish a comprehensive set of requirements on distributor's annual planning processes.

These Draft Rules also include the requirement for a Demand Side Engagement Document to be developed and updated every three years. Proposed Schedule 5.9 outlines the information which must be included in the document, of relevance to this consultation are:

- The process used and requirements for setting charges and terms and conditions in a connection agreement; and
- The process for lodging a connection application for embedded generators and factors that the distribution takes into consideration when assess into a connection application.

Whilst UE is reasonably supportive of improved communication and availability of information, UE considers that the proposed Rules 5.3.1A (a) (ii) and (iv) and 5.3.1A (b) are not required in view of the other major Rule changes/customer reforms in progress.

Question 4 Response to connection enquiries

- (a) In stakeholders' experience, have the response that the network service providers provided in response to connection enquiries been clear and reasonable?
- (b) Have there been experiences where a connection applicant has been asked to provide information that it has already submitted and, if so, why?
- (c) Have there been experiences where a connection applicant has been asked to provide information that it did not consider was 'reasonable'? How was this situation resolved?
- (d) To what extent would the requirements for distributors to publish the demand side engagement document resolve any issues?

It is unlikely that UE would request data to be resubmitted unless the information provided by the connection applicant was not well collated and provided in one complete single package.

⁽b) a description of feasible options for meeting forecast demand including opportunities for embedded generation and demand management;

⁽c) where a preferred option for meeting forecast demand has been identified, a reasonably detailed description of that option, including estimated costs; and

⁽d) the availability of financial contributions from the distributor to embedded generators or customers to reduce forecast demand and defer or avoid augmentation of the distributor's distribution system.



Question 5 Information to be included in offers to connect

- (a) In practice to date, what information on connection costs are provided in offers to connect? How are the requirement of confirming to rule 5.5 being met? How are the current arrangements deficient?(b) How would the proposed rule to add an 'itemised statement of connection costs' improve the
- (b) How would the proposed rule to add an 'itemised statement of connection costs' improve the current arrangements? How would stakeholders be impacted if this requirement were to be introduced?
- (c) Should this requirement apply to all types of connections?

UE provides details of costs in its connection offers and may include different connection options with the different timeframes and costs for connection where there is more than one solution.

UE support a Rule change in Chapter 5 to require itemised costs to include as relevant connection charges, meter type and cost, cost of system extension, details of upstream augmentation to provide the connection and associated costs and any other incidental costs and the basis of their calculation. UE does have some reservations in using the wording "standard" connection charges in relation to connections that may be quite variable in the nature of the work required to meet the particular access requirements.

NECF Chapter 5A already has requirements to provide the basis of connection charges, this Rule change should only apply to connections under Chapter 5.

Question 6 Setting out the time to connect in the preliminary program

- (a) Under the current arrangements (either under the NER or jurisdictional arrangements), what are the typical timeframes within which offers to connect are made by distributors?
- (b) What are the factors that affect the timeframe for finalising an offer to connect?
- (c) Is it feasible or practical to include a specific timeframe to finalise an offer to connect at the time of preparing the preliminary program? What information is currently provided in preliminary programs?
- (d) If adopted, should this requirement apply to all connection enquiries?

In response to a connection enquiry a distributor must provide a preliminary program showing proposed milestones for connection and access activities. A variety of factors may affect this timeline:

- The quality and completeness of the information provided as part of the connection enquiry which
 is used to develop the preliminary program;
- The need to consult with other distributors or transmission businesses who may be impacted, and may need to assess the proposed connection impacts even if there is no work eventually required of them;
- The time required to reach agreement on the connection options proposed by the distributor and agreement to a negotiated access standard may take longer than anticipated for complex connections; and
- There may also be a need to consult with AEMO on connection standards adopted.

Whilst the quality and completeness of the initial information provided by the connection applicant will influence timeframes, the other parties who need to be consulted are not bound by the timeframes in the regulatory instruments and they are not directly answerable to the connection applicants on the timeliness of their responses.

UE consider that the connection process as a matter of practicality is often an iterative process and hence the timeframe to require a distributor to make a connection offer can vary. Where all information



is well collated and provided early in the process allowing a smooth run, the connection offer can be provided fairly quickly. UE has no objection to the Rule change proposed in 5.3.3. (b) (6) subject to being able to vary the preliminary program to ensure that a more appropriate, informed connection offer is able to be made.

Question 7 Providing an offer to connect within 65 business days

- (a) What are the factors that affect the timeframe within which offers to connect may be made? What are the factors that impact the process for negotiating negotiated access standards?
- (b) Have there been cases (particularly in Victoria) where 65 business days was not sufficient to finalise an offer to connect? What were the reasons for requiring more than 65 business days?
- (c) How would network service providers and connection applicants be affected by the proposed amendment?
- (d) Should this requirement apply to all network service providers for all connections?

The timeframe to make an offer to connect will be impacted by the following factors in addition to those outlined in our response to question 6:

- the level of engagement of the connection applicants consultant, their workload and their experience and knowledge of the connection processes and embedded generator design;
- the completeness and quality of the information provided in the connection application upfront;
 and
- the complexity of the connection which may result in the need to develop negotiated access standards where a connection applicant does not wish to accept the automatic access standards, there may also be a need to redesign the connection applicants embedded generator equipment to cover for example improved protection equipment.

Where equipment is still being tendered and has not yet been selected by the connection applicant or where there is a need to redesign some of the connection applicants equipment, there is a need to review the updated reports to ensure that the connection offer is appropriate for the final design and negotiated access standards.

UE is well placed to meet the 65 business day requirement to provide an offer to connect subject to the issues outlined above which often result in an iterative process. UE suggest that the 65 business days be referenced back to the completeness of the application eg that all relevant information has been made available.

The proposed amendment is consistent with existing obligations on Victorian distributors and consistent with Chapter 5A, however the proposal should not apply to registered, large generators or to generators connected on the transmission system due to the complexity of these connections.



Question 8 Terms and conditions of connection

- (a) How are the current provisions under clause 5.3.6(b)(2) being applied? That is, are the terms and conditions for connection of the kind as set out in schedule 5.6?
- (b) In what ways are varying terms and conditions between distributors a problem? Is it appropriate for distributors to have different terms and conditions? Does this reflect relevant differences in network requirements?

The UE terms and conditions are of the kind as set out in schedule 5.6 including the meter costs, application fee, connection charges and agreed access standards. Schedule 5.6 also provides that connection agreements may include technical, commercial and legal conditions governing the works. UE consider that these commercial terms will vary across the distributors in relation to their commercial and governance risk profile.

There is no one size fits all, boiler plate approach to terms and conditions which is suitable for all embedded generation connections, the terms and conditions will vary for a range of reasons, including:

- where automatic access standards are adopted vs where negotiated or minimum access standards apply;
- based on the embedded generator size, and its connection to the network eg voltage level of the connection, other customers on the same feeder etc;
- based on the fault headroom on the network which will influence the protection equipment requirements on the connection applicant; and
- where any augmentation work is required.

UE consider that it is appropriate for terms and conditions to vary between distributors to reflect network differences and jurisdictional differences.

UE is not opposed to the proposed amendment to 5.1.3 (b) that a connection offer must include the items as currently drafted in NER S5.6, although we don't perceive that this will add much value.

Question 9 Technical standards for embedded generators

- (a) Without technical standards currently being in place for embedded generators, how well has the connection process under Chapter 5 worked in practice? How urgently are standards needed?
- (b) Would standards for different types/classes of embedded generators be required?
- (c) What factors should be taken into consideration in developing such standards? Are there any specific jurisdictional or local requirements?
- (d) What should be the scope of such standards? Can all relevant technical requirements be 'standardised'?

UE recognise that connection processes for micro generation where there is an Australian Standard for inverter connection to the electricity distribution system allows a far smoother connection process. If the industry is able to develop a standard that could apply for small and medium embedded generators then this would contribute to a smoother connection process. UE consider that the industry is years away from being able to develop such a standard.



In the absence of such an Australian Standard for these non-micro, non-registered embedded generators, UE has developed a set of embedded generator access standards for its network. These new standards have been adopted and used in connection application over the last few years and represent a practical move forward to improve the transparency of requirements. Whilst UE has developed technical standards to cover the non-micro and non-registered embedded generators it needs to be recognised that each connection has to be assessed based on the location of the connection on the distribution system. Not all areas of the network are the same. As the network has evolved over time, different equipment has been used in the protection systems, hence the connection requirements will need to reflect slight differences for the relevant local condition.

Standards which are developed are more about the type of connection ie what voltage level the embedded generator connects to as opposed to standards established purely on an embedded generator size and estimates of export quantities. There is no one size fits all set of standards that could be adopted nationally in the short term. There may be an opportunity to develop over time a set of standards that could be adopted within a jurisdiction. This would be similar to the Service and Installation Rules which have been developed for Victoria, they are largely consistent but they do also specify the specific differences where required between the Victorian networks. UE consider that the Victorian networks can assess the feasibility and if practical will move there over time.

UE suggest that the proposed rule change should not proceed due to the difficulties in developing a national automatic access standard first up.

Question 10 Embedded generators having an automatic right to export to the grid

- (a) Under what circumstances have embedded generators not been allowed to export electricity to the network?
- (b) What are the impacts on embedded generators and other participants when exporting is not allowed?
- (c) Are there circumstances where the ability of embedded generators to export electricity to the network should be limited? What conditions could be reasonably imposed to limit exporting?
- (d) What are the costs and benefits of allowing, and not allowing, embedded generators to export electricity to the network?
- (e) Is there any basis for embedded generators to be treated differently to load or other generators? For what reasons?

UE has never not allowed a generator to export electricity onto the distribution system.

Chapter 5 recognises that there may be a range of options to augment the network which are provided as part of a connection offer. There may be a trade-off between generator size and export quantities vs upstream work required to remove constraints. The connection applicant makes the value determination of export price vs initial connection costs and ongoing costs.

Depending on conditions on the local area of the network, there may be a need to limit export as it may impact the voltage level on other customers and could breach the regulated voltage level requirements.

There are safety issues with generation which are different to load only customers. When the network has no supply because protection equipment is tripped, eg a car has hit a pole and wires are down, there is a safety expectation that electricity will stop flowing and embedded generators do not continue to operate and export to the distribution system ceases. This includes exporting to a smaller set of



customers to ensure that community and employee safety is maintained. The no guarantee of export is recognised for all embedded generators connected on the distribution network in the Victorian Electricity Distribution Code, clause 7.1.4, where a distributor is not liable for any loss to an embedded generator for being unable to receive supply because of any supply interruption.

Question 11 Allowing distributors to charge an optional fee for service

- (a) What are the barriers that prevent network service providers from charging a 'fee for service' under the current arrangements?
- (b) Is the proposed rule sufficient in identifying what services would be provided for the 'fee for service'? If not, how should the relevant service be specified?
- (c) What factors should be considered on how such a service should be classified? That is should it be a direct control service or negotiated service? Should the service be on a cost recovery basis only?
- (d) Should the NER provide any guidelines on how such a fee should be determined or should it be negotiated between a distributor and embedded generator? Should the fee be approved by the AER and, if so, on what basis?

In the current Victorian regulatory framework, under Guideline 15, clause 2.3, the distributors can charge an application fee which is payable on lodgement of the connection offer. This application fee covers investigation work once the distributor has received an application and includes any investigation work and preparation of an offer.

Guideline 15, clause 2.2 prevents a distributor from charging for any information that the distributor provides during the enquiry stage, prior to the lodging of the connection application.

With the commencement of NECF, this Guideline 15 is expected to fall away. NER rule 5.3.3 (c) (5) provides a similar coverage of an application fee to include the costs of investigating a connection application and preparing an offer and to cover reasonable costs where AEMO or other networks need to participate in the assessment of an application.

Similar arrangements are provided for in NER under Rules 5A.C.4, the reasonable costs in assessing an application and making an offer and Rule 5A.D.4 allows for the reasonable expenses where a site visit is required.

The Rule Proponents suggest that distributors do not have an incentive to collaborate in the connection enquiry phase or in the development of the connection application. The Rule Proponents suggest that an additional fee prior to the connection application being lodged may facilitate a smoother process and have suggested a new rule 5.3.3 (b) (7).

The proposal seems to contemplate a fast track or favoured service for more involvement by the network during the inquiry, design, review of scope of works, development of the connection application phase. Once Guideline 15 is repealed nothing prevents a distributor from facilitating such a process or undertaking feasibility studies for the connection applicant where the network has the capability to facilitate such design activities and wishes to pursue unregulated revenue. It should be noted that embedded generator design, development of scopes of work, tendering etc are competitive activities, there is already a market out there providing such services.



Distributors are required to deal with a connection application and make a connection offer to the network as they are the only party who can generate the connection offer. Distributors should be free to decide whether they wish to provide this additional service in the pre connection application phase as there are a number of consultants already providing such services. If a distributor was to provide such services it should be unclassified services.

On balance UE considers that there is no need to include this optional fee in rule 5.3.3 (b) (7) given there is already a contestable market providing such services.

Question 12 Shared network augmentation costs

- (a) Is the current approach to attributing connection costs, particularly in relation to shared network augmentation costs, inefficient, inequitable and not cost-reflective? For what reasons?
- (b) Should embedded generators (noting that embedded generating installations can encompass a broad range of installations) be exempt from paying shared network augmentation costs? Why or why not?
- (c) If embedded generators are exempt from shared network augmentation costs, how should these costs be allocated?

Victorian Guideline 15 restricts the connection charges to shallow connection costs, for a generator connected on the low voltage network this would be up to and including the distribution transformer. UE understand that the Victorian Government policy decision is that this Guideline falls away on the commencement of NECF, connection charges can then include an appropriate allocation of shared network or common costs resulting from the connection.

The AER Final Decision on the Connection Charge Guideline has considered these issues over a lengthy consultation process and requires the embedded generator to pay for the total cost of its connection;

'The key difference between embedded generators and load customers, which requires different treatment with respect to connection charges, is that embedded generators do not contribute to the cost of the shared network through DUoS charges.

The AER considers that (consistent with transmission connected generators), non-registered embedded generators will not generally be required to make a contribution towards the historical costs of the shared network, which are funded through DUoS charges to network users. This is appropriate because embedded generators have no firm right of access to the shared network and are subject to network constraints for exporting electricity. As such, the cost-revenue-test under section 5 of the connection charge guideline will only include connection services which relate to customer specific incremental costs.

However, if a non-registered embedded generator is connecting (or already connected) to the network and seeks to remove constraints in the upstream shared network, the non-registered embedded generator should meet the cost of removing these constraints. This is appropriate because the constraint would be removed for the benefit of the embedded generator only and the AER considers that if equipment is added for generators, which no other customers require, then the embedded generators should meet the cost. Otherwise all existing electricity users would fund the requirements, which is not consistent with user pays principles and may also create cross subsidies between classes of users. ²

² AER, Final Decision, Connection charge guideline: under chapter 5A of the National Electricity Rules, For retail customers accessing the electricity distribution network, 20 June 2012



Whether the customer is a load or generation customer requiring connection, UE should have certainty for recovery of all connection costs and remain whole. It is not appropriate that distributors should wear the risk for significant upstream expenditure to remove constraints and then not be able to obtain cost recovery via a customer contribution with the remainder being in the RAB.

A connection applicant seeking to build an embedded generator and connect to the network is making a commercial cost/benefit decision. The Rule Proponents consider that it is inappropriate for embedded generators to be paying their full connection costs including those on the shared network as this is inefficient, inequitable and not cost reflective. Rather the proposal is that all customers on the network should pay for the removal of the constraint on the network for the benefit of the embedded generator applicant. In light of the media attention to increasing energy costs and the issues surrounding fuel poverty, this issue is a matter for policy makers whether small customers should bear additional costs for the benefit of embedded generators.

The Rule Proponent notes that there are no shared network costs allowed in the connection charges in Chapter 5A for a basic connection service where the connection is not for a non-registered embedded generator. It should be noted that this is appropriate as a basic connection service is defined as a service for a significant class of customers (including micro embedded generators) and the connection service involves minimal or no augmentation of the distribution network. If the connection service requires minimal or no augmentation it reasonably follows that there should be no shared cost in the connection charges.

Chapter 5A does therefore require a non-registered embedded generator where there is augmentation and extension costs to pay for relevant costs on the shared network. The AER has considered these matters in detail and after lengthy consultation made a Final Decision on the Connection Charging Guideline and so has the Victorian Government NECF policy decisions. UE consider that the policy decisions already made in relation to NECF should be implemented first without further change, as such UE does not support the proposal to amend Rule 5.5 (f) (3) and limit any size embedded generator from paying its total costs of connection unless there is a significant change in policy position.