Exempt Distribution Networks

Submission by:

Retirement Villages Association

Submission to:

NEMMCO

October 2004

Foreword

The RVA (Victoria and Tasmania Region) has recognised that many retirement village residents currently and potentially benefit from their village becoming an embedded network and that if those residents were to have input into the successful development of the embedded networks process then the RVA would be best placed to co-ordinate their representation.

On behalf of its members, and the many thousands of retirement village residents, the RVA determined that they should provide input to the NEMMCO Code Consultation and the associated paper *Exempt Distribution Networks* and commissioned energy consultants Trans Tasman Energy Group (TTEG) and Marden Energy Pty Ltd to assist with representation.

The potential benefits that have been, and can be, achieved through the cost-effective implementation of embedded networks has proven to be one of the best demonstrations of the success of reform in the electricity industry.

The RVA supports choice of electricity retailer for consumers including the right to choose an exempt retailer in cases where the consumer's village has become an embedded network.

The Retirement Villages Association (RVA)

The Retirement Village Association Ltd is the peak industry body for the retirement village industry.

A key achievement of the RVA is the establishment of an accreditation scheme to foster excellence in the operation and management of retirement villages.

The RVA website at http://www.rva.com.au provides further information about its activities.

The RVA represents the interests of more than 300 retirement villages nationally and in this matter represents the interests of many thousands of retirement village residents who would potentially benefit from their villages becoming embedded electricity networks.

TTEG Consultants

Trans Tasman Energy Group Consultants (TTEG) www.tteg.com.au has prepared this Submission in collaboration with Marden Energy Pty Ltd for the Victorian Retirement Village Association.

Acknowledgements

The support funding from the Advocacy Panel of the National Electricity Code for RVA representation in this matter is gratefully acknowledged as it has enabled this Submission to be prepared.

Further Assistance

NEMMCO is invited to seek further comments on any points in this Submission from:

Retirement Villages Association Ltd
4/335 Flinders Lane
Melbourne Vic 3000
Tel 03 9629 4520

And from supporting consultants,

Mr Craig Marschall
Principal Consultant
Trans Tasman Energy Group
Ph. 03 9418 3907
info@tteg.com.au

and

Mr Dennis Etchells
Marden Energy Pty Ltd
Ph. 03 9807 5286

Table of Contents

1 DEFINITIONS CLARIFIED

This preamble addresses some terminology necessary for clear consideration of embedded network issues and addresses a confusing term in the NEMMCO paper and also proposes a new term.

The NEMMCO Paper *Exempt Distribution Networks* (the Paper) refers to a key term *end-use-consumer* without definition and the overall meaning of the Paper is greatly influenced by the meaning of the term.

NEMMCO has verbally indicated the intended meaning of the term *end-use-consumer* to be;

> *"customers within the embedded network who do not purchase their electricity from the embedded network operator."*

This definition is quite important throughout this Paper and the various interpretations will be discussed in some sections.

The term *child metering point (CMP)* has been defined in the NEMMCO paper as being the "metering point downstream of a parent metering point at a connection point with an end-use-consumer; energy recorded at the child metering point will be simultaneously recorded at both the parent and child metering points."

It follows that energy attributable to the embedded network operator will be the energy recorded at the parent metering point less the energy recorded at the child metering point.

The situation will be made much clearer if a new term is introduced to specifically identify customers of the embedded network who have check meters in place to facilitate on-selling of energy by the embedded network operator. The energy recorded by the check meters for these customers is recorded at the parent metering point and is part of the energy that is attributable to the embedded network operator.

It is proposed that these consumers be termed *Embedded Network Customers.*

An *Embedded Network Customer (ENC)* can be defined as being the "check metering point downstream of a parent metering point; energy recorded at the ENC check metering point will be simultaneously recorded at both the parent and ENC check metering points but will not be separately recorded in the NEM."

It follows that energy attributable to the embedded network operator will include the energy recorded at the ENC check metering point.

The above terms are used throughout this submission to clearly differentiate child meters that are registered with the NEM (*child metering points*) and check meters that are not registered with the NEM (*Embedded Network Customer)*.

2 EXECUTIVE SUMMARY

Submission Background

The RVA recognised that many retirement village residents currently and potentially will benefit by their village becoming an embedded network and that if those residents were to have input into the development of the embedded networks process then the RVA would be best placed to co-ordinate their representation.

This submission offers a customers perspective on matters related to the NEMMCO Code Consultation process and the paper *Exempt Distribution Networks,* August 2004 (the Paper).

This submission comments and presents proposals on matters which may not always appear to directly relate to the NEMMCO paper but which relate to the management of embedded networks and hence need to be considered in the context and direction of the NEMMCO paper.

Electricity Purchases

The RVA supports the right of residents of retirement villages to purchase electricity from their retailer of choice including their own village if it has exempt retailer status.

It is our view that facilitation by regulators to enable residents of retirement villages to purchase from any retailer should not place undue requirements or costs upon the consumer or any of the other stakeholders in the process, nor should it diminish the potential benefits available to residents of retirement villages that become embedded networks.

Care must be taken to ensure that administrative requirements for embedded networks do not reduce supply side competition or increase the cost of bulk energy for the embedded network.

Metering

The RVA has a strong view (based on practical applications within our member's existing embedded networks) that the only meters that should require a NMI are those that provide consumption data for settlement in the NEM. In terms on the NEMMCO Paper this would only require Parent Meters and Child Meters of the embedded network that is the *end-use-consumers.* Embedded network Customer meters would not require NMI.

Whilst maintaining the integrity of the market process the administrative costs and obligations should be kept to a minimum.

This Submission supports:

- ⇒ Role of the LNSP as the appropriate party to allocate NMI's for Child Meters
- ⇒ Right of choice of embedded networks to have either interval meters or accumulation meters for their Embedded Network Customer meters.
- ⇒ Use of interval meters for Child Meters of embedded networks.
- ⇒ Development of guidelines that will facilitate fair and orderly establishment and operation of embedded networks.

This Submission does not support:

- ⇒ Role of the LNSP as being the only party that can be the Responsible Person (RP) for Child (sub 160 MWh) customers of embedded networks.

3 GENERAL COMMENTS

The RVA applauds and supports the NEMMCO initiative to resolve and clarify the numerous important and often complex issues relating to the fair and efficient operation of embedded networks.

Retailer Choice Supported

The right of residents within retirement villages and other embedded networks to select their retailer of choice is supported. It is indeed this right of choice that enables the villages themselves to become a supply option for their residents. Villages recognise that in their role as exempt retailers, if they cannot provide better electricity prices and service to their residents then the residents can select alternative retailers.

Savings Returned to Residents

As most retirement villages return all of the savings achieved from being an embedded network to the residents then the exempt retailer benefits available to the residents usually represent a competitive choice for the resident to be an electricity customer of the village.

Minimise Cost Imposts

Care must be taken to maintain the sound and satisfactory operation of the national electricity market but at the same time minimise or eliminate any adverse embedded network rules, procedures and process aspects that would have the effect of:

- reduced competition among energy suppliers to embedded networks, or
- increased network tariffs, or
- imposing unnecessary administrative tasks upon embedded network operators

Metering

The process of subtracting the usage of Child customers of embedded networks from the usage of the parent meter and completing the settlement process must be clearly defined. The registering of the embedded network code (ENC) to establish the relationship between a Child Meter and the Parent Meter provides a basis for the subtraction process.

The Market Connection Point is the connection point for the Parent Meter to the embedded network and it is also the effective connection point to the NEM for Child meters. These customers must have their usage as measured by a child meter subtracted from the parent meter in order to determine net usage of the exempt retailer.

Industry Working Group

In NEMMCO's previous Discussion Paper, February 2004: Embedded Networks and Retailer Choice, an Industry Working Group was mooted in Section 2.5.

The RVA supported the Industry Working Group process and sought participation in the process. We would therefore appreciate being advised of any developments in this regard.

3.1 System Losses

It is our view that the DLF[1] for Child Connection Points should be the same as for the Market Connection Point and that losses between the Market Connection Point and the Child Connection Point should be the responsibility of, and borne by, the embedded network operator.

Meters at Child Connection Points must be either type 4 or 5 meters[2] to facilitate like and like subtraction from the parent meter.

The RVA have proposed to the Essential Service Commission, Victoria that the mandatory roll out of Type 5[2] meters should not apply to Embedded Network Customer meters and that the exempt retailer have the option to use either interval meters or complying accumulation meters as check meters in the embedded network.
In cases where the embedded network operator has installed complying interval meters throughout the embedded network, possibly in conjunction with remote reading facilities, and the data for child metering point customer is available in a suitable format for the FRMP to that child metering point, then the provision of that data should be able to be accepted by the FRMP and the LNSP.

3.2 NMI for Embedded Networks

The NMI for the Market Connection Point is clearly allocated by the Local Network Service Provide (LNSP) and the Financially Responsible Market Participant (FRMP) is the retailer to the parent meter.

The NEMMCO paper proposes that the LNSP allocate NMI for any child metering point. This submission agrees with that proposal.

We do however recognise that (as the market develops) at some future time the LNSP may not be the Responsible Person (RP) [2] for all sub 160 MWh sites in an embedded network. At that time we would expect the LNSP's role would still be to issue the NMI for a child metering point but that the RP role may become the responsibility of a registered Meter

[1] Distribution Loss Factor

[2] As specified by the NEC Metrology Process

Provider (MP) and Meter Data Agent (MDA) that supplies a metering system within the embedded network and is chosen by the retailer to the child metering point.

If the definition of *end-use-consumer* in the NEMMCO Paper means second tier child (refer Definitions Clarified – page 1 of this Submission) then the NEMMCO paper says that an embedded network customer does not require a NMI. The RVA agrees with that proposal.

This submission contends that administrative processes to issue and maintain NMI's for embedded network customers would represent a significant and unwarranted imposition upon stakeholders in embedded networks and would not enhance retail competition, but increase costs for consumers in an embedded network.

3.3 Guidelines for embedded networks

The NEMMCO Paper proposes the development of guidelines for the procedures and processes related to the establishment and operation of embedded networks in a fair and sound manner. This submission supports that proposal.

3.4 Subtract network charges.

An issue that requires some consideration is whether duplication of network charging occurs and whether it is relevant.

Child metering point customers of will be charged network charges by the LNSP via their retailer. These charges should be the regulated network charges that would normally apply, that is, as if the *end-use-customer* was not contained within an embedded network. Care must be taken in procedures to ensure that network charges are not duplicated at the Parent Meter.

The embedded network operator will also be charged network charges by the LNSP. Some of the components (eg demand and consumption) as measured at the Parent Meter will naturally include the demand and consumption for all child metering points.. Consideration may be required regarding subtraction of Demand attributable to child metering points.

3.5 Subtract energy charges.

The settlement process will subtract usage for child metering points from the usage measured at the Parent Meter to arrive at a net usage for the exempt retailer.

Responsibilities in this settlement process are described in the MSATS Procedures, CATS Procedures, Part 1 Principles and Obligations that also relates to this Code Consultation.

4 COMMENTS ON THE NEMMCO PAPER

This section of the submission offers comments on the particular items presented in the NEMMCO Paper.

It is the view of the RVA that the NEMMCO paper presents a sound and responsible approach, and provides a suitable framework to develop policies and procedures to manage embedded networks.

The following specific comments regarding the NEMMCO Paper are submitted by the RVA from a customer's perspective:

4.1 Amendments to MSATS Procedures (NEMMCO Paper 3.1).

The Paper's proposal is supported on the basis that it applies to child metering point customers of the embedded network.

4.2 Amendments to the Jurisdictional Metrology Procedures (Paper 3.2)

The three definitions in the NEMMCO Paper are supported subject to the definition of *Child Metering Point* being expanded to specify that this definition only applies to customers who do not purchase their electricity from the embedded network operator or the exempt retailer.

The description of the subtraction process to determine the energy attributable to the FRMP appears to support the *Child Metering Point* fulfilling the above qualification.

4.3 Amendments to the NECA General Networks Exemptions (Paper 3.3)

We agree that changes to the NECA General Network Exemptions should be carried out to allow the LNSP in cases where they are the RP for the Child Metering point to have access to the Child Metering point equipment and installation.

4.4 Retailer of Choice within the National Electricity Market (NEMMCO Paper 4)

This submission agrees that the connection point for a Child Metering point can have an agreed connection point at the boundary between the exempt network and the registered network and that this facilitates access by the Child metering point customer to a Retailer of Choice.

4.5 Parent and Child (NEMMCO Paper 5.5)

This submission supports the definitions and terms used in this section, but only on the basis that the *end-use-consumer* is not an embedded network customer.

The NEMMCO paper appears to hold the view that a name and definition is not required for the customers of the embedded network and their metering points. This is supported by the RVA as providing a reasonable and pragmatic approach because these customer metering points are only 'check meters' for the benefit of the embedded network operator with the usage attributable to those meters recorded in MSATS as part of the usage of the Parent Meter, however in order to clarify discussions about embedded networks it is helpful to have a term to describe the consumers who purchase their energy from the embedded network operator or exempt retailer and this submission has proposed the term *Embedded Network Customer* as detailed in Page 1 of this submission..

There is therefore no need for the Embedded network Customer meter usage to be independently recorded by MSATS and any requirement for this to occur would simply represent an additional (and in our view totally unnecessary administrative activity for the embedded network operator and result in a cost burden for the customer.

If the approach we have outlined above represents a correct understanding of the approach intended by the NEMMCO paper then this submission is in agreement.

4.6 General Principles for Embedded Networks (NEMMCO Paper 6)

This submission supports the Paper's view that an *end-use-customer's* ability to make a choice of retailer should be made as easy and uniform and cost effective as possible.

This objective however will only be achieved if NEMMCO only requires child metering point customer to have NMI and excludes Embedded Network Customers from this requirement.

4.7 Access to choice of retailer (NEMMCO Paper 6.1)

Our reading of the NEMMCO Paper is that it contends that NMIs are required to enable *end-use-customers* to exercise their choice of retailer?

As stated in the preceding item, this submission does not support allocation of NMI's within an embedded network for other than child metering point meters.

We cannot support the Paper's apparent view that an embedded network customer's ability to make a choice of retailer is restricted by them not having an existing NMI.

This submission contends that an embedded network customer will have a choice as to whether they accept and participate in the offer provided by the embedded network exempt retailer or with any other retailer irrespective of whether they have an individual NMI.

Retailer marketing processes can, and will, provide genuine embedded network customer exposure to retailer choice.

Our view is that commercial and marketing decisions should be, and can effectively be, viewed independently of the NEM process, and that NEM procedures be designed to

accommodate entry and exit of customers to and from the NEM as the customers move in or out of direct NEM participation.
The potential size of the market and the administrative costs in developing and maintaining processes should also be considered, because they will need to be recouped from the market which will lead to decreased savings by retirement village residents.

We do however support the view that processes and procedures must be developed to facilitate trading at connection points for NEM participation. In considering these processes and procedures, we suggest the following for your consideration:

- ⇒ If an embedded network customer decides to transfer from the embedded network to another retailer then a NMI can be established at that time.

- ⇒ It could be a license condition of the ENO that they be required to provide data to any authorised[3] request from a retailer?

- ⇒ The same NMI establishment process be undertaken for child metering points as is currently undertaken for sites new to market and for sites that use more than 160 MWH/year.

This submission contends that access to retailer of choice is not restricted for embedded network customers who may choose to change to another retailer. It would simply require the allocation of a NMI to that meter at the time of transfer.

Any other alternative will provide an (unnecessary) cost impost on the ENO and in turn the customers of the embedded network.

4.8 Party to issue NMI's (NEMMCO Paper 6.2)

This Submission agrees with the NEMMCO proposal.

The second paragraph appears to confirm that only child metering points are to be allocated an NMI. The exclusion of embedded network customers from this requirement is supported by the RVA.

4.9 NMI Discovery (NEMMCO Paper 6.3)

The views of the NEMMCO Paper that jurisdiction regulators may require embedded network customer metering point NMI's to be registered in MSATS for NMI discovery are noted but as discussed later in the NEMMCO Paper this appears to be more a jurisdictional requirement than a requirement for market settlement?

[3] eg subject to provisions of the Privacy Act

As discussed in Point 4.7 of our Submission, it is our view that the NMI plays no part in the selection of retailer and that other options are available to facilitate effective access to retail competition.

The RVA will present the consumer's perspective to the jurisdiction regulator regarding this matter.

4.10 Registration of LNSP for each child NMI (NEMMCO Paper 6.5)

This submission does not agree with the NEMMCO Paper on this matter. In our view the situation would appear to be similar to greater than 160 MWh pa customers with contestable metering.

In those situations the LNSP allocates the NMI however the RP may be another registered MP and MDA. To provide the least cost option to the embedded network customers, we believe a similar principal could, and indeed should apply for < 160 MWh p.a. metering.

4.11 Connection point Agreement (NEMMCO Paper 6.9)

We agree that access to child metering point meters in the embedded network should be provided for the RP to any Second Tier customer within the embedded network.

We however propose this requirement should apply to all RP's and not just the LNSP (in situations where they are the RP).

4.12 Interval Meter Rollout in Victoria (NEMMCO Paper 12)

The RVA will submit to jurisdictional regulators that they should not require the compulsory replacement of accumulation meters that are simply being used as 'check' meters for embedded network customers. In recommending this approach we would simply be adopting a pragmatic and cost-effective solution for embedded network operators and embedded network customers within the network.

The RVA has also requested that the ACCC consider the exclusion of customers within embedded networks in the derogation for sub 160 MWh p.a. meter provision.

These views will be presented to the appropriate jurisdictional regulators.

5 GLOSSARY

Check Metering point; is a point downsream of the parent metering point where the embedded network operator or the exempt retailer installs a meter to read the energy usage of an embedded network customer for the purposes of on-selling electricity."

Child NMI; a NMI applicable to Child Metering Point.

Child metering point; is the metering point downstream of a parent metering point at a connection point with an end-use-consumer. This metering point will have a NMI and be registered with the NEM. **Code;** the National Electricity Code.

Connection point; the agreed point of *supply* established between *Network Service Provider(s)* and another *Code Participant*, *Non-Registered Customer* or *franchise customer*.

Consumer; as defined in MSAT procedures, means a party purchasing electricity from a retailer where that party's electricity consumption is for its own use.

Customer; is a person who engages in the activity of purchasing electricity supplied through a distribution system and registers with *NEMMCO* as a *customer.*

Distribution Network; a network which is not a transmission network.

Distribution System; a distribution network and connection assets.

Distribution System Operator; the operator of a distribution system.

Embedded Network; Proposed Definition, a distribution system that is supplied energy through a connection point from another distribution network.

Embedded Network Customer; is the check metering point downstream of a parent metering point in an embedded network. An embedded network customer will not be registered in the NEM as their usage is recorded as part of the embedded network operators usage.

Embedded Network Operator*:* Proposed Definition, operator of an *embedded network system*.

Embedded Network Exempt Retailer. An exempt retailer under a general exemption order for a specific *embedded network*. **Financially Responsible Market Participant**; financially responsible in relation to any *market connection point,* a term which is used to describe the *Market Participant* which has classified the *connection point* as one of its *market loads*.

Jurisdictional Regulator; the person authorised by a participating jurisdiction to regulate distribution service prices in that jurisdiction.

Local Network Service Provider (LNSP); The *Code* definition " Within a local area, a *Network Service Provider* to which that geographical area has been allocated by the *Jurisdictional Regulator*". **Interpret as;** the LNSP is registered with NEMMCO and operates a distribution system that is connected to the transmission system.

Market Connection Point; a *connection point* where any load has been classified as a *market load* or where the *network service connected* at that *connection point* is a *market network service*.

Market Customer; a customer who has classified any of its loads as *a market load* and who is also registered with *NEMMCO* as a *Market Customer*.

Market Load; is a load at a *connection point* the electricity relating to which is purchased other than from the *Local Retailer* and which has been classified by the person *connected* at that *connection point* as a *market load*.

Market Participant; a person who has registered with *NEMMCO* as a Market Generator, *Market Customer*, or Market Network Service Provider.

Metering installation; the assembly of components for the purposes of metrology.

NECA; National Electricity Code Administrator Limited, the company responsible for administering the *Code*.

NEM; National Electricity Market.

NEMMCO; the National Electricity Market Management Company Ltd, the company which operates and administers the market in accordance with the *Code*.

NMI; means a National Metering Identifier.

Parent NMI; Proposed Definition, a NMI at the market connection point where the embedded network connects to the LNSP.

Responsible Person (RP); The person who has responsibility for the provision of a *metering installation* for a particular connection point being either the *LNSP* or the *Market Participant*.

Second Tier Child meter A meter pertaining to a *Second Tier Customer of an embedded network*. The meter will have a *NMI* and be registered in the *NEM*.

Second Tier Customer of embedded networks. A consumer within an *embedded network* with a retailer other than the *embedded network exempt retailer*

Transmission Network; *A* network operating 220 kV and above.

Transmission System; A transmission network with connector assets.

Transmission Network Service Provider; An operator of a transmission system.