AUSTRALIAN ENERGY REGULATOR

DECISION

GRIDX POWER PTY LTD

NETWORK SERVICE PROVIDER APPLICATION FOR EXEMPTION

May 2007

Contents

Glossary

ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
AEMC	Australian Energy Markets Commission
AER	Australian Energy Regulator
AGL	Australian Gas Light Company
AS 3000	Standards Australia: Australian / New Zealand Wiring Rules
DEUS	Department of Energy, Utilities and Sustainability (NSW)
DNSP	Distribution Network Service Provider
DoLR	Distributor of Last Resort
DUOS	Distribution Use Of System
EA	Energy Australia
ESCOSA	Essential Services Commission of South Australia
FRC	Full Retail Competition
GEGs	(Network Service Provider) General Exemption Guidelines
GridX	GridX Power Pty Ltd
IPART	Independent Pricing and Regulatory Tribunal
LNG	Liquefied Natural Gas
NEC	National Electricity Code
NECA	National Electricity Code Administrator
NEL	National Electricity Law
NEM	National Electricity Market
NEMMCO	National Electricity Market Monitoring Company
NER	National Electricity Rules
NSP	Network Service Provider
NSW	New South Wales
RoLR	Retailer of Last Resort
SEGs	(Network Service Provider) Specific Exemption Guidelines
TPA	*Trade Practices Act 1974 (Cth)*

Executive summary

The Australian Energy Regulator (AER) has received an application from GridX Power Pty Ltd (GridX) seeking an exemption from the requirement to register as a network service provider (NSP) under the National Electricity Law (NEL) and National Electricity Rules (NER).

GridX proposes an innovative method of delivering electricity to residential consumers. GridX plans to construct electricity networks on new estates delivering electricity via gas-fired micro-generators buried within those estates. These generators would be supplied via domestic gas reticulation connections. GridX proposes to export excess energy generated within each embedded network to the National Electricity Market (NEM) but proposes that, as its generation system is self-contained, its network be configured so that the import of electricity from the NEM into a GridX network is not possible. GridX has also applied for a licence for the retail supply of electricity in New South Wales (NSW), and GridX have indicated that it plans to operate similar networks in other states. Effectively, GridX propose to operate a combined generation, distribution and electricity retail operation under the model (the 'GridX model' network) that is the subject of this decision.

Under the NER the AER has the power to exempt GridX from the requirement to register as an NSP under the NEL. The AER also has the power to grant a more limited exemption only from compliance with the requirements applicable to NSPs under chapter 5 of the NER. Either form of exemption can be granted on conditions. For example, the AER could exempt a person from the obligation to register on the condition that they comply with certain specified provisions of the NER.

The granting of an exemption must promote legislative objectives. Specifically, the AER must be satisfied that the exemption is not inconsistent with the national electricity market objective.

The AER has concluded for the reasons set out in chapter 3 of this decision, that it is not appropriate to grant a general (or class) exemption for the GridX model. However, the AER is keen to foster innovation and considers that:

1. it is more appropriate to grant GridX a specific exemption from the requirement to register as a network service provider under the NER, and exemption from compliance with certain (but not all) obligations applicable to NSPs under chapter 5 of the NER in respect of a specific 'GridX model' network; and

2. any exemption would be subject to the conditions detailed in chapter 3. GridX would need to apply for exemption in relation to each discrete network that it proposes to operate. There may be circumstances in which an exemption is not appropriate, or the conditions in chapter 3 require variation.

The AER has decided therefore, not to grant GridX a general exemption as sought in their application dated April, 2006.

1 Introduction

In April 2006, the Australian Energy Regulator (AER) received an application from GridX Power Pty Ltd (GridX) seeking an exemption from the requirement to register as a Network Service Provider (NSP) under the National Electricity Law (NEL) and National Electricity Rules (NER).

GridX proposes an innovative method of delivering electricity and associated utility services to residential consumers. GridX plans to construct electricity networks on new estates delivering electricity and other services to homes via gas-fired micro-generators buried within those estates. The 'GridX model network' is described below and in GridX's revised application to the AER, which can be found at www.aer.gov.au.

GridX's application does not request an exemption in respect of a particular operational or proposed network. Rather, the application seeks an in-principle indication from the AER that if a GridX model network were constructed, GridX would be entitled to be granted an exemption from registration in respect of its interest in that network. The AER has assessed GridX's application on the basis that GridX seeks a general exemption for the GridX model. The AER has also canvassed the merits of a specific exemption for GridX.

GridX has indicated that it is currently pursuing development projects in New South Wales (NSW), and GridX has also applied for a retail licence in NSW. Effectively, GridX proposes to operate a combined generation, distribution and electricity retail operation under the GridX model network.

GridX has indicated that it is in discussions with the Independent Pricing and Regulatory Tribunal of NSW (IPART) to determine appropriate terms and conditions that would apply to the operation and sale of electricity through a GridX model network. GridX has indicated that current legislative provisions in NSW require GridX to include consumer protection and minimum guaranteed customer service standards as part of its product offering for any retail electricity supply service that it may deliver in NSW. GridX has also indicated that as a registered retailer it would also be required to become a member of the NSW Energy and Water Ombudsman Scheme, in respect of GridX model networks operated in NSW.

Other state consumer protection and dispute resolution arrangements may also apply to operations in other states. GridX has not detailed these, although GridX has indicated that it is planning development activities in other NEM states.

The AER does not have a direct role in regulating the retail provision of electricity in state jurisdictions. State-based legislation and/or regulations provide the appropriate safeguards for retail consumers in states where GridX model networks might be established.

1.1 GridX Power's application

GridX Power Pty Ltd is a new venture seeking to develop innovative energy solutions for new residential housing estates, GridX proposes to install embedded networks to service 'greenfields' housing and apartment estates, initially in NSW. GridX proposes to generate electricity from small, natural gas-fired generating units connected to the domestic gas reticulation system and embedded within the electricity network situated within such estates. GridX proposes that electricity and waste heat produced by the generating units would supply electricity and hot water to the residences on these estates. GridX's system also includes optional provision for cooling via reticulated chilled water.

GridX proposes that a GridX model network would be connected to the national electricity grid at a connection point for each estate / cluster of dwellings. The design of the GridX model network is such that it is not possible to import electricity from the national electricity grid into these estates. Excess electricity generated within a GridX network can, however be exported to the national electricity grid.

1.2 The Glenfield Showcase Site

GridX is currently running an embedded generation showcase trial at Glenfield in NSW. This showcase consists of a contract relating to 16 homes within a larger Mirvac property group development.

At the Glenfield showcase trial site, GridX proposes that customers purchasing homes on the estate constructed by Mirvac would be required (through a condition of sale included within the Contract of Sale) to:

- enter into a binding contractual arrangement with GridX whereby GridX would supply hot, and (optionally) chilled water to home occupiers. As part of this arrangement GridX would supply certain domestic appliances specifically adapted for efficient operation with utility services provided by the GridX model network

- enter into an agreement to use GridX's 'wrap' (combined billing) service for energy services including gas, water and electricity supplied to these homes whereby GridX would provide a combined utilities account to each home, and

- nominate AGL as the exclusive retail supplier of gas and electricity services.

GridX notified the ACCC of the third-line forcing arrangements proposed at the Glenfield display site in January 2006. Having considered the notification, the ACCC advised GridX in February 2006 that it did not intend to take any further action on the matter at that time.

The AER does not consider that the immunity resulting from the notification to the ACCC of GridX's conduct at the Glenfield display site should be reviewed at this time. However, the construction of further networks along the lines of the Glenfield model network or the GridX model network may well raise similar exclusive dealing/third line forcing issues under the *Trade Practices Act 1974 (Cth)* (the 'TPA'). Where appropriate, GridX should seek further immunity for additional Glenfield-type networks through the notification and/or authorisation provisions of the TPA.

The Glenfield showcase trial site and Glenfield model network is not representative of the proposed GridX network that GridX have submitted to the AER in their application for an exemption from registering as a NSP. It is however, illustrative of the technologies, appliances and systems that together, form the basis of the GridX design approach.

1.3 The Glenfield model network and GridX model network

While the showcase trial illustrates many of the benefits of a GridX model-type design, there are important differences between the network model developed for the showcase site (the 'Glenfield model network') and the GridX model network that is the subject of this decision.

Firstly, in the Glenfield model network, Integral Energy (a registered NSW distribution business) owns the network infrastructure used to connect and provide utility services (hot and chilled water, electricity and gas) to individual homes connected to that network.

GridX proposes that in the ordinary course of business, electricity generated by micro-generators controlled by GridX at the Glenfield site would be sold back to Integral Energy. Energy required by consumers on a GridX estate would be purchased through AGL, although GridX has indicated that, in an emergency situation, it would be possible to supply houses connected in the Glenfield model network with power from GridX generators directly.

In contrast, under the proposed GridX model network, GridX plan to own both the generation and distribution infrastructure within a GridX model network estate. The distinction between the ownership structures is important as the test used to determine whether registration in required under the NER (considered further, below) is whether a person or corporation 'owns, operates or controls' a relevant network that is 'connected' to another transmission or distribution system. At the Glenfield site, GridX does not plan to 'own, operate or control' the network infrastructure. Under the GridX model network, GridX proposes to 'own, operate or control' network infrastructure that is 'connected' to another distribution system and accordingly in respect of the GridX model network, GridX are required to register (or seek exemption) under the NER.

Additionally, the network constructed to deliver electricity and other utility services to homes within the Glenfield showcase site has the ability to both import electricity and gas, and export electricity. By way of comparison, GridX proposes that the GridX model network be configured so that importation of electricity into their network is not possible, although the importation of gas and the export of electricity would both be possible under the GridX model network.

This distinction is important, as consumers at the Glenfield network would, in the absence of the ACCC's authorisation of GridX's proposed third-line forcing arrangements, be able to access gas and electricity retailers of choice. Under the GridX model network, electricity consumers are unable to access alternative retailers, and must contract with GridX (or as directed by GridX) for the provision of gas and electricity and other services.

1.4 Process of considering the GridX Power Pty Ltd application

After receiving GridX's application in May 2006, the AER released an Issues Paper on the application on 14 June 2006. The AER considered that this was appropriate as GridX indicated that it was planning development activities in several NEM jurisdictions. The GridX proposal itself raises several novel issues, as regulatory licensing arrangements differ across jurisdictions.

The GridX Issues Paper was emailed to interested parties, and posted on the AER's website. Stakeholders were invited to make submissions on the matters raised in the Issues Paper, and on GridX's NSP exemption application, by 14 July 2006.

The AER received 11 written submissions from stakeholders. The respondents are listed in Appendix C and submissions are discussed elsewhere in this decision. The submissions are also available on the AER's website.

The AER wrote to GridX on 4 September 2006 requesting that GridX provide further clarification and information in relation to its application. In that letter the AER drew on the responses received on the Issues Paper. On 15 September 2006 GridX provided further information and clarification in relation to its application. Both the September letter to GridX and the response from GridX to that letter have also been posted on the AER's website. The AER considered the application following submissions and further information from GridX but considered it could not finalise its process without further consultation with NSW agencies regarding the likelihood of GridX coming within the purview of NSW retail regulation.

1.5 GridX's application for a retail licence with IPART

On 12 December 2006, IPART announced that GridX had applied for a retail electricity licence in NSW, and invited submissions on GridX's application. In January 2007, the AER made a submission to IPART on that application.

In that submission, the AER indicated that granting GridX a general class exemption from registration as a distribution network service provider under the General Exemption framework administered by the AER was unlikely to be appropriate.

The AER also indicated that it had concerns in relation to the retail pricing arrangements and safety and technical standards that would or might apply to any operating GridX model network (detailed below). Subject to the satisfactory resolution of these concerns, the AER indicated that it would consider any request put to the AER by GridX for a specific exemption under the AER's Specific Exemption framework, on a site-by-site basis.

In that submission, the AER noted that, currently, retail pricing, safety and technical requirements that might apply within a GridX model network remain to be determined under appropriate state legislation, and these matters are exclusively the province of jurisdictional regulators. The AER has no power to impose safety, technical or pricing arrangements in respect of distribution networks (absent those mandated in the NER) or in respect of retailing of electricity

The AER also suggested that if GridX were to propose retailing electricity to customers where full retail competition (FRC) was not available, IPART should include an appropriate retail price-capping arrangement in the retail licence conditions, so that customers supplied through such an arrangement would not be disadvantaged with respect to price vis-à-vis customers supplied through more conventional networks.

The AER raised a concern that GridX might not be required to be licensed as a distribution network service provider in NSW by virtue of the joint operation of section 13 of the *Electricity Supply Act 1995 (NSW)* and regulation 66 of the *Electricity Supply (General) Regulations 2001 (NSW).* The AER commented that, (because of these legislative arrangements specific to NSW) any network operated by GridX may not be required to be operated in accordance with all the safety and technical standards that would otherwise apply to registered distributors in NSW.

In conclusion, the AER was concerned to ensure that the safety and technical standards of any GridX model network were maintained and that appropriate price controls were put in place in respect of GridX's retail activities, although the AER does not have a direct power to impose conditions relating to these matters. To ensure close coordination between any conditions imposed by the NSW jurisdiction and any exemption granted by the AER to GridX, the AER will impose conditions that require GridX to obtain necessary jurisdictional consents, exemptions and/or licences and to maintain compliance with the terms and conditions of those jurisdictional instruments.

2 The regulatory framework

This chapter details the assessment framework that the AER must adopt in relation to the assessment of GridX's application. Secondly, the chapter draws together themes that have emerged from submissions received on the Issues Paper on GridX's application previously released by the AER, including further responses received from GridX about the issues raised in responses to the Issues Paper.

2.1 The National Electricity Law (NEL) and National Electricity Rules (NER)

Under section 11(2) of the NEL, a person must not own, control or operate a distribution system that forms part of the interconnected transmission and distribution system, unless that person is registered or has gained an exemption from the AER from the requirement to register.

Clause 2.5.1 of the NER provides that a person must not own, control or operate a distribution system that is connected to another transmission or distribution system, unless that person is registered or has gained an exemption from the AER from registration requirements.

Under clause 2.5.1(d) of the NER, the AER has the power to issue guidelines stating the process associated with, and the matters that the AER will consider, in determining any application for exemption.

The AER can grant an exemption from the obligation to register as a NSP. By definition, this also exempts a person from compliance with the obligations in chapter 5 of the NER that would otherwise apply to a person registered as a NSP.

Alternatively, the AER can grant a more limited exemption from the operation of chapter 5 of the NER. This means a person must still register, but need not comply with the obligations in chapter 5 that would otherwise apply to that person by virtue of that registration.

Either form of exemption can be granted on conditions. For example, if the AER is willing to grant an exemption, but considers that some obligations in chapter 5 should continue to apply, it can grant an exemption that is conditional on compliance with specific obligations contained within chapter 5. However, the AER can only grant an exemption (whether conditional or unconditional) if it is satisfied that the exemption is not inconsistent with the NEM objective.

2.2 Registration obligations

The purpose and principles which underpin chapter 5 of the NER (Network Connection), and the general obligations of registered participants (of whom NSPs are a subset) are set down in clause 5.1 and 5.2 of the NER. At a high level, the NER requires that all registered participants should have the opportunity to form a connection to a network forming part of the national grid, and have access to network services provided by the networks forming part of the national grid. Where appropriate, connection to, and provision of network services are to be set out in commercial agreements on reasonable terms.[1] Additionally, the technical terms of connection agreements should be set at appropriate standards to maintain the security and reliability of the larger grid network.[2]

The specific obligations of NSPs are set down in clause 5.2.3 of the NER. In particular, an NSP must: [3]

- comply with the power system performance and quality of supply standards
- comply with applicable regulatory instruments[4]
- report connection arrangements where there are variations on the connection standards set down in the NER and
- follow prescribed processes and observe certain protocols and standards in relation to any application to connect to that NSP's network, and the operation of that network.\

Jurisdictional derogations and licensing arrangements substantially modify the application of many of the provisions concerning connection and service standards to distribution network service providers (DNSPs). Many of the technical and safety obligations of distribution businesses are contained in industry-specific Codes that vary between jurisdictions and effectively apply only to licensed distributors.

2.3 The market objective

An exemption made under clause 2.5.1(d) must not be inconsistent with the NEM objective, which appears in section 7 of the NEL and reads as follows:

> *'The national electricity market objective is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.'*

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1 *National Electricity Rules* s. 5.1.3(b)
2 *National Electricity Rules* s. 5.1.3(b1)
3 Further detailed provisions are found in ss. 5.2.1, 5.2.2, and 5.2.3 of the *National Electricity Rules*.
4 These are defined in the NER to include relevant jurisdictional laws and requirements.

2.4 The NSP General and Specific Exemption Guidelines

NECA, as the body previously responsible for the assessment of NSP exemption applications under a framework broadly similar to the current framework, drafted a set of exemption guidelines (the 'NSP General Exemption Guidelines' and the 'NSP Specific Exemption Guidelines') outlining the factors it considered relevant to the exercise of its discretion in this regard. The AER, as the body responsible for assessing exemption applications from July 2005, inherited these guidelines.

Under these Guidelines, exemptions can be general or specific in nature. A general exemption exempts a person from the obligation to register if that person falls into a class of persons defined in the exemption. A specific exemption is an exemption granted to a specific person, in relation to a specific network.

In August 2000 NECA released the NSP General Exemption Guideline (GEGs) outlining the circumstances in which it considered that the granting of general exemptions would be appropriate. The GEGs (reproduced in Appendix B) define the classes of persons who are exempt from the requirement to register as a NSP and the conditions that apply to these general exemptions.

Alternatively, networks that do not fall under the standing categories listed in the GEGs can be assessed for a specific exemption under the NSP Specific Exemption Guidelines (SEGs).

The criteria relevant to the consideration of whether a specific exemption from registration should be granted, appear in full in Appendix A. The criteria that are relevant for the assessment of GridX's application are listed in paragraphs 6.1 to 6.8 of the SEGs. A detailed assessment of GridX's application against these assessment criteria appears in chapter 3 of this decision.

An application that does not satisfy each of these principles can still be granted if the AER is satisfied that the exemption is consistent with the object of clause 2.5 of the NER and is not inconsistent with the NEM objective.

Finally, section 8 of the SEGs allows for the grant of a conditional or unconditional exemption where an application does not meet all of the eight listed assessment criteria, if the application is none-the-less consistent with clause 2.5 of the NER.

This decision sets out the AER's considerations about whether to grant a general exemption for the GridX model. The AER also considered the merits of granting a specific exemption for a network of the type proposed by GridX. This is because there is a high degree of overlap between the issues that are relevant to both types of exemption. As set out below, the AER considers that there would be a good case for a conditional, specific exemption to be granted to GridX in respect of the GridX model network, subject to the GridX submitting a specific request for a specific exemption, setting out the relevant site details and regulatory arrangements.

2.5 The assessment framework

As indicated in section 2.4 of this decision, the AER has adopted the previously established two-tier framework for the assessment of circumstances in which providers of network services should be regulated. The first tier of that assessment framework involves network providers self-assessing their activities against the classes of exempt persons defined in the GEGs.

The GEGs provide automatic exemption from registration under, and compliance with, the NER for certain caravan parks, office buildings, flats, units and apartments sharing common network infrastructure, and for industrial parks and shopping centres. Further information in relation to general exemption categories is included in Appendix B.

If network providers do not fall within one of the categories indicated in the GEGs, they can either choose to register with NEMMCO as a NSP under the NER or seek a specific exemption. A prospective NSP can file an application with the AER for a specific exemption from the requirement to register or the requirement to comply with chapter 5 of the NER, or both, as stipulated in clause 2.5.1(d) of the NER. The SEGs specify the matters that must be addressed in this process.

Section 7 of the SEGs states that where an applicant satisfies criteria 6.1 to 6.4 (considered above in section 2.4 of this decision) an exemption from the requirement to comply with chapter 5 of the NER (rather than an exemption to register) will generally be granted. If all section 6 criteria are met then an exemption from registration or from compliance with chapter 5 will usually be granted.

Section 8 of the SEGs provides that even where an application for exemption from registration does not satisfy all of the exemption principles the AER may still grant an exemption if the application is consistent with the intent of clause 2.5 of NER. However, there is a greater likelihood that the AER will consider it appropriate to attach conditions to the exemption in such a case.

As noted earlier in this decision, the assessment of GridX's application against the SEGs provides guidance as to whether, and on what terms, exemption from registration might be granted. However, pursuant to clause 2.5.1(d) of the NER, consideration of the question of whether the granting of an exemption (and any conditions on the granting of an exemption) is not inconsistent with the NEM objective is also necessary.

2.6 The practical impact of granting an exemption

As stated in the SEGs, registration as an NSP is designed to ensure that providers of electricity networks are subject to the provisions of the NER dealing with system security (NER chapter 4), network standards (NER chapters 5 and 7), pricing (NER chapter 6) and dispute resolution (NER chapter 8).

In practice, granting an exemption from the requirement to register as an NSP may allow GridX to:

- restrict access to its network by other distributors or retailers, and
- avoid the technical requirements of NSPs as set down in chapter 5 of the NER.

GridX has indicated that it considers that it will be required to maintain technical standards under connection agreements with the relevant local distributor. In further discussions with the AER, GridX has clarified that its exemption request extends also to an exemption from compliance with the technical connection rules set down in chapter 5 of the NER.

There are retail and distribution licensing arrangements operating within the state jurisdictions, and the exemption of GridX from the requirement to register as an NSP under the NEL does not necessarily mean that GridX is or will be exempted from requirements put in place by jurisdictions under those frameworks. In NSW, the Minister for Energy is responsible for granting retail licences and determining the conditions on which those licences are granted, on recommendation from IPART. IPART also administer the licensing regime in NSW.

In NSW, an indication of the licence conditions covering retail supply is set down in the *NSW Electricity Retail Suppliers Licence Conditions Reference Document*.[5] These conditions cover, amongst other things:

- prudential and credit support arrangements that must be observed by retailers seeking to purchase energy from the wholesale electricity market
- approved business-to-business procedures
- pricing and price-control arrangements
- standards of conduct for marketing arrangements
- arrangements concerning the provision of information to customers
- the form of customer supply contract used to supply retail customers with electricity and the matters that are required to be included within those contracts
- telephone hotline arrangements for faults and difficulties with electrical works and customer connection queries

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[5] Available at http://www.ipart.nsw.gov.au/Files/Reference%20Document%20Electricity%20Retail%20Supplier%20Version%203%20Licence%20Conditions%20Website%20document%20-%20energy%20licensing.PDF

- mandated service levels for different categories of customer service queries
- record-keeping requirements
- customer transfer arrangements
- commencement and discontinuance of supply arrangements
- billing standards
- meter testing arrangements
- various reporting and compliance management obligations and
- dispute resolution procedures

This is a high-level, non-exhaustive list of retail licensing requirements and illustrates the range of issues that would be required to be covered off by GridX in the event that it were to hold and maintain a retail electricity licence in NSW.

2.7 Submissions received on the Issues Paper

As part of the consultation process on the Issues Paper, the AER posed several questions at the conclusion of that paper that it considered relevant in the context of the assessment of GridX's application, including whether granting GridX an exemption would be inconsistent with the NEM objective, and related questions.

The responses detailed common themes amongst stakeholders. After the close of submissions, the AER wrote back to GridX inviting GridX to respond to the issues raised in submissions. This step was taken in response to over-riding concern expressed by many respondents that GridX had not provided sufficient information in its application to allow a fully informed assessment of the application to be made.

Overview of submissions

The AER received submissions from Energy Australia, the National Electricity Market Management Company (NEMMCO), Country Energy, Integral Energy, AGL, Energex, Ergon Energy, CitiPower & Powercor, the New South Wales Department of Energy, Utilities and Sustainability (DEUS), SP AusNet, TruEnergy and United Energy. Many submissions expressed support for the innovative nature of GridX's proposal, although most respondents did not consider it appropriate to grant GridX an exemption from NSP registration requirements.

The central themes of respondents' submissions appear below, and further analysis of these issues is contained within chapter 3 of this decision. In summary, respondents raised the following issues:

- **Reliability and performance standards applicable to a GridX model network:** Many of the submissions[6] consider that the 'islanded' network design of the GridX model network raises reliability and performance issues because the GridX model network cannot draw electricity from the national grid, and is wholly dependent on a constant supply of gas to provide both gas and electricity to GridX-connected customers.

- **Technical and safety standards applicable to a GridX model network**: Many of the submissions[7] query the level of protection that would be provided to GridX model network customers in relation to technical, safety and emergency standards and consumer protection. Submissions also question whether distribution safety and technical standards applicable to other distributors in NSW, are applicable to GridX in view of the legislative arrangements peculiar to NSW.

- **The setting of network charges and retail electricity prices within a GridX model network:** many of the submissions[8] raised concerns that the GridX proposal is unlikely to advance the NEM objective, particularly the element of the objective that relates to safeguarding the long-term interests of consumer in respect to price. While many of the submissions acknowledge that network charging and retail electricity charging issues could be addressed by imposing retail price caps on GridX based on benchmarked prices charged by standard retailers, concern remains that this might prove an ineffective form of customer protection over the longer term if benchmarked prices are discontinued at some future date.

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6 See Ergon; CitiPower/Powercor; EnergyAustralia; Country Energy; AGL and United Energy.
7 See EnergyAustralia, Integral Energy, CitiPower/Powercor; and United Energy
8 See Energy Australia; Country Energy; Citipower/Powercor; and United Energy

- **The applicability of Retailer and Distributor of Last Resort arrangements to a GridX model network:** Many of the submissions[9] comment that customers connected to a GridX model network would not have access to retailer of last resort (RoLR)[10] and distributor of last resort protection arrangements. These arrangements ensure that the market remains effective, that customers enjoy uninterrupted and secure electricity supply and that they receive sufficient information about the transfer process to be able to make informed choices about who will supply them in the event that their existing electricity supplier is unable to supply electricity.

- **Informed consent:** Some submissions raise concern that GridX customers may not be sufficiently informed about the electricity supply arrangements within a GridX model network, and detail concerns that GridX consumers might have difficulty in assessing the economic, value and service aspects of a GridX supply arrangement.

- **Access to Full Retail Competition (FRC):** Many of the submissions[11] argue that GridX's proposal may, or is likely to be inconsistent with price and retail competition aspects of the NEM objective, due to the design of the GridX model network which effectively restricts customers from accessing different retailers offering a variety of price / service offerings.

- **Inconsistency with the AER's Network Service Provider exemption guidelines:** Many submissions note that GridX's proposal fails to satisfy key principles contained in the SEGs and therefore consider that GridX should not be granted an exemption at this time.

- **Whether GridX are required to co-operate in long-term network planning activities:** Many submissions[12] raise concerns about the effect that the proliferation of GridX model networks will have on network planning by DNSPs. Respondents are concerned that if GridX model networks are built in parallel (and without regard to) host distribution networks, host network assets may be left stranded or underutilised.

- **Whether GridX's proposal should be examined in the context of a contestable market for electricity supply, or a contestable market for different types of housing:** AGL considers that while there are no competition benefits from the GridX proposal within the NEM, there may be competition benefits at the real estate investment level. AGL argue that construction of GridX model networks promotes consumer choice in housing stock, and that concerns about the restrictive nature of the GridX proposal are less relevant as consumers have considerable freedom of choice about whether to buy into, or rent a house connected to a GridX model network.

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9 Integral Energy; CitiPower/Powercor; EnergyAustralia; Country Energy; AGL and United Energy.

10 A RoLR is a supplier that may have customers transferred to it from another supplier who, for example, has been suspended from the NEM.

11 See EnergyAustralia, DEUS, Country Energy, Integral Energy, Ergon and United Energy.

12 See EnergyAustralia; CitiPower/Powercor; United Energy; and Country Energy.

3 Considerations in relation to GridX's application

This chapter details the AER's assessment of GridX's application against the NEM objective and the SEGs, and details the AER's conclusions in relation to GridX's application.

Considerations in this chapter pertain to GridX's intended distribution activities only. GridX has indicated that it intends to operate electricity generators and to, when appropriate, feed electricity into the national grid. The regulation of these generation-based activities are subject to a separate set of regulatory, safety and scheduling requirements and these matters are not considered in this decision.

Legislative arrangements in relation to the regulation of the NEM have changed significantly since the original formulation of the GEGs and SEGs. Importantly, the NEL now contains an over-arching NEM objective and all decisions made under the NEL are subject to that objective. The decision to grant an exemption from NSP registration requirements is no different.

3.1 AER's considerations: general exemption

The AER could grant GridX a general exemption by adding the GridX model to the classes of networks that are defined in the GEGs as being exempt from the obligation to register. However, the AER does not consider that it is appropriate to grant a general exemption for the GridX model. This is because the classes of networks for which general exemptions have been granted are usually operated:

- in circumstances where occupancy of the premises is transitory (eg. caravan parks) or where electricity reticulation infrastructure has an intrinsic shared or common element (eg. shopping centres, flats, apartments and units) where compliance would impose an unduly excessive administrative burden on network operators, relative to the number of customers that might benefit from the network operator being required to register and comply with the requirements of the NER; or

- under commercially-negotiated arrangements where significant disparities in bargaining power between the supplier and user parties are less likely to exist (eg. industrial parks, office buildings).

Whilst these criteria are not formally documented, to be considered in the general exemption category, the AER would need to conclude that operation of the a GridX model network occurs in a climate where occupancy is transitory, has a significant shared element, or where there is some equivalence of on-going bargaining power.

Unlike the situation which arises‘transitory’ accommodation arrangements, GridX has the ability to change its price / service offering where its customers are locked in to exclusive long-term service arrangements with GridX. Unilateral changes in GridX’s price / service offering may potentially disadvantaging the long-term interests of investors or owners that have bought into GridX developments (eg in circumstances where owners do not have the ability to periodically determine the terms and conditions of leasing or accommodation arrangements).

Additionally, in all general exemption categories, a mechanism establishing the maximum price for the on-selling of energy must be in place, or access to alternative retailers must be available to occupiers. Under the GridX model network, access to alternative retailers is not available.

Finally, in so far as the assessment criteria in the SEGs give guidance on the matters that should be considered in determining whether to add a ‘GridX model network’ as a general exemption category, the GridX model network does not meet a number of SEG criteria, discussed later in this chapter.

Submissions from NSW distributors noted that if a general exemption was granted, normal regulatory controls would not automatically apply to GridX, as these networks are not subject to any further on-going oversight. The concern is that a gap in the legal framework in NSW for the regulation of exempt distribution network owners may have the effect of removing GridX from the normal safety and technical standards that otherwise apply to distributors.[13]

Approval of a general exemption for a GridX model network across the NEM would remove GridX model networks from a significant degree of regulatory oversight and could compromise safety and technical standards for customers connected to a GridX model network. Adding the GridX model network as a general exemption class may also leave those customers subject to abuse of monopoly power in relation to the supply of electricity.

Accordingly, the AER does not consider that the GridX model, as a generic type of network is characterised by the elements which have usually accompanied general exemptions.

As the AER does not believe a general exemption based on the GridX model would be consistent with the NEM objective, it has decided not to grant a general exemption either from the requirement to register or from the operation of chapter 5.

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[13] Independently of whether GridX is granted a general or specific exemption, NSW regulations do not require GridX distribution activities to be licensed as a distribution network service provider. The ramifications of not requiring GridX to register as a distributor in NSW are discussed more fully in chapter 3 of this Decision.

As discussed below, the AER considers that an exemption for a network operated under the GridX model could be appropriate in specified locations and on specified conditions. However, the merits of an application for such an exemption will vary depending on the jurisdiction in which the network is operated, as well as the specific characteristics of the network, including its size, location and the terms and conditions under which it is operated.

3.2 AER's considerations: specific exemption

The AER notes that GridX applied for an exemption for its model network and expressed a preference that the exemption be general rather than specific. Based on the issues discussed above, the AER does not consider the grant of a general exemption (effectively adding the GridX model network to the classes of network defined in the GEGs) to be appropriate. However, there is a high degree of overlap between the issues relevant to the consideration of general exemptions and specific exemptions.

Accordingly, the AER has considered the 'in principle' merits of a specific exemption, the details of which are set out below. As indicated in section 3.1, the AER considers it is not appropriate to grant a prospective specific exemption in relation to all 'GridX model' developments: this would amount to conferring a de facto 'general exemption' in respect of that model which, as discussed above, is not desirable.

Upon receipt of an application from GridX identifying a specific locality or estate for which exemption is sought, and depending on the surrounding jurisdictional regulatory arrangements, the AER could grant an exemption in respect of that locality on such conditions as are considered necessary in the particular circumstances.

In determining whether a specific exemption would be appropriate for a specific application, there are three options that could be adopted.. The AER could:

- refuse to grant an exemption and require GridX to register as a NSP
- grant a specific exemption not subject to conditions, or
- grant a specific exemption subject to conditions.

These three options are considered below. In assessing the application, the AER has found assessment criteria 6.2, 6.3 and 6.4 to be particularly relevant and these assessment criteria are discussed in detail in this section. The remaining assessment criteria and issues raised in consultation are discussed in section 3.5 of this decision.

Option 1: Refuse to grant an exemption

The AER considers that on a strict legal evaluation, GridX's application does not meet a number of assessment criteria which must be satisfied as basic requirements for the grant of a conditional or unconditional exemption. Therefore, rejection of GridX's application in respect of both a conditional or unconditional exemption is an option that is available to the AER.

Specifically, the AER considers that the GridX model network does not meet the following assessment criteria set down in the SEGs:

- **Assessment Criteria 6.2**: the provision of the network (and any supply of electricity to other parties) must be incidental to the business of the applicant

- **Assessment Criteria 6.3**: Standards or other regulatory controls should be in place in respect of the relevant network

- **Assessment Criteria 6.4**: The granting of the exemption should not unduly limit access of parties to the national electricity market contrary to the market objectives

Detailed assessment of GridX's application against these assessment criteria appears below.

Assessment Criteria 6.2: the 'incidental to the business' test

GridX proposes to provide network services as part of its business activities. On this view the supply of electricity through a GridX model network is not 'incidental' to the business of GridX. Rather, it could be said that it is an integral component of GridX's business model.

GridX argues it is possible to characterise the main business of GridX as that of an innovative integrated energy services provider and in this context to regard the provision of network services as incidental to the main business of providing electricity and hot water and chilled water services to premises.

The AER does not consider that the provision of network services and the supply of electricity is incidental to the business of GridX. Even if it is accepted that GridX is an innovative integrated energy services provider, the operation of the distribution network and the supply of electricity is an integral, constituent component of this business.

However, this does not mean that an exemption must necessarily be refused. The 'incidental to the business of the applicant' test is important to the question of whether any type of exemption should be granted, but circumstances can, and do arise which make this principle less important or suggest that considerations relevant to this criterion merit less weight in overall considerations relevant to any decision to grant an exemption.

Sections 4 and 8 of the SEGs specifically recognise that the interplay of assessment criteria is complex and that the AER has discretion in the relative weight that it chooses to attach to various exemption criteria, provided always that the outcome of the AER's considerations is not inconsistent with the NEM objective. For example, the AER is keen to facilitate innovation in the electricity networks where this is economically feasible and promotes energy efficiency, customer choice or other desirable goals, where that innovation may be stifled by the unnecessary imposition of regulations which do not secure commensurate benefits for customers or other stakeholders.

The AER considers that in respect of the GridX model network, the question of whether the provision of the network and the supply of electricity through that network is incidental to the business of GridX does not provide a decisive justification for requiring GridX to meet chapter 5 and registration requirements. In GridX's case, there are other factors which the AER considers have a greater bearing on the determination of this application, and accordingly the relative weighting attached to this criteria is small.

Assessment Criteria 6.3: Standards or other regulatory controls should be in place in respect of the regulation of GridX's distribution network activities

By virtue of regulation 66 of the *Electricity Supply (General) Regulations 2001 (NSW)*, GridX is currently exempted from any requirement to hold a distribution network service provider's licence in NSW. This does not mean, however, that there are no jurisdictional obligations applicable to GridX: various obligations in the *Electricity Supply Act 1995 (NSW)* apply to an operator of an electricity distribution network regardless of whether that operator is required to, or actually holds a distribution licence with IPART.[14]

In principle the AER considers that, unlike industrial park and commercial network connections between large, well-informed parties where any particular network configuration is likely to be subject to detailed negotiation, it is particularly important to ensure that technical and safety standards apply to significant residential networks. Residents also have a legitimate expectation that electrical networks that supply power to their homes will be installed, operated and maintained in accordance with appropriate safety and technical standards.

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[14] Distribution licensing arrangements in place within other NEM jurisdictions ordinarily provide vital safety and technical safeguards that operate for the substantial benefit of customers connected to those distribution networks. For example, distribution businesses that seek an exemption in Victoria also seek exemption from the jurisdictional regime in the form of an Order-In-Council. These Orders are powerful instruments that can both impose and remove restrictions on the activities of the exempt business through the imposition of conditions by the Essential Services Commission of Victoria (ESCV). The South Australian and Queensland regimes differ but do impose technical and safety requirements on all firms whether exempt or registered. No exemption request has yet arisen in Tasmania or the ACT so the operation of relevant jurisdictional instruments remains untested in those jurisdictions.

More pertinently, whatever standards and regulatory controls are in place that can govern the operation of a GridX model network *at a jurisdictional level*, this remains the case regardless of whether GridX is registered as an NSP under the NER.

Specifically, even if registered as a distributor by NEMMCO, GridX would not be automatically subject to any of the NSW provisions dealing with safety and technical matters because the NSW regulation exempts GridX from holding a distribution licence.

The AER also understands that NSW construction standards and safety management requirements are usually imposed through the distribution licence or *may* be imposed if the Director General of the Department of Energy Utilities and Sustainability NSW (DEUS) deems it appropriate. However, in practice this requires another party to request that standards or conditions be imposed, by bringing the matter to the notice of the Department. In other states these standards and safety requirements are either the law of the State or are routinely imposed by conditions attached to exemptions from the various jurisdictional licensing regimes.

Additionally, the AER notes that provisions in chapter 5 of the NER do contain a number of broader technical and safety requirements, including a requirement for NSPs to operate their networks in accordance with 'good electricity industry practice' and an obligation to comply with 'applicable regulatory instruments'[15]

The AER could grant GridX an exemption from registration, and require GridX to observe those parts of chapter 5 of the NER that require GridX to observe good industry practice and appropriate standards, without compromising the standards or regulatory controls that would apply to a GridX model network if GridX was a registered DNSP.

Accordingly, the AER concludes that considerations relevant to whether there are standards or regulatory controls in place in respect of GridX's distribution network activities are not determinative of whether any application for exemption from registration by GridX should be refused: the imposition of standards and regulatory controls can be achieved regardless of GridX's registration status.

Assessment Criteria 6.4: The granting of the exemption should not unduly limit access of parties to the national electricity market contrary to the market objectives

Most respondents to the Issues Paper expressed concern about the lack of competition and consumer choice that is available to electricity consumers connected to a GridX model network. Respondents noted that the lack of competitive discipline on GridX's product, price and service offering:

- may result in GridX engaging in price-gouging behaviour by removing competitive restraints on pricing

[15] *National Electricity Rules* clause 5.2.1(a)(3)

- may compromise consumers' ability to benefit from the transfer of discretionary energy use between gas and electricity fuel sources

- may compromise the efficient and effective delivery of services associated with that supply due the lack of a market discipline mechanism

GridX's position: FRC

GridX contends that restriction of access to competing retailers is inherent in the design of the GridX model network. GridX also contends that while competition may not exist at the utility-supplier level, competition does exist *at the housing level* and consumers who do not feel comfortable with GridX model network arrangements need not purchase or rent a home on a GridX estate.

GridX also argues that the number of properties connected to a GridX model network will, in comparison with the number of properties connected via conventional distribution arrangements, be very small. Customers have significant choice in housing and energy-supply arrangements. GridX also argue that connection to the GridX model network will be a positive selling feature.

AER's observations: FRC

A number of respondents noted that granting a NSP exemption to GridX would appear to be contrary to the NEM objective, as the GridX model network is designed around the exclusive capture and fulfilment of all the energy and utilities needs of consumers within that network. Concern about the discord between the market objective and the design of the GridX model network is based on the presumption that access to the NEM brings with it the right to access full retail competition (FRC). In principle, the AER supports this proposition. However, regardless of whether GridX is registered or conditionally or unconditionally exempted from NER chapter 5 requirements, practical competition outcomes do not change in GridX's case. Irrespective of exemption status, access to FRC may not be realistic within a GridX model network because under the GridX model the network is separated from the grid, and there is no import capability.

Consequently, the decision to refuse or grant an exemption may have little influence upon the level of access to the national electricity market that may be enjoyed by customers connected to a GridX model network.

For example, competing retailers may not be attracted to supplying electricity to customers within a GridX model network because that network would be, in effect, an island region with an export only capability served by a vertically integrated (generation, distribution and retail) monopoly. GridX would retain substantial control over the price that might apply for the purchase of energy from GridX generators by competing retailers. In these circumstances, competing retailers may not consider winning customers within a GridX estate to be a viable business proposition.[16]

Generators within the GridX network are of a size well below the market registration threshold and are automatically exempt from registration as scheduled generating units. As such, they are not subject to the NER chapter 3 (market dispatch rules) provisions that apply to scheduled generators. GridX will only deliver surplus energy to the pool that forms the basis of wholesale trade. As there is no import capability, all energy retailed within a GridX model network must be purchased from GridX generators at prices determined by GridX. Additionally, there are strong disincentives for GridX to co-operate with competing retailers that might wish to operate within GridX's exclusive network.

That the configuration of the GridX network does not allow for any import capability is a design and commercial decision made by GridX, and is entirely at their discretion. The AER has no control over the design of the GridX network nor has it any ability to compel GridX to design an import compatible network.

As with Assessment Criteria 6.3, the question of whether access to the national electricity market would be unduly restricted if GridX were granted an exemption from registration is not relevant to the decision of whether to grant an exemption. The fundamental design of the GridX model appears to restrict retail competition regardless of whether an exemption is granted or not. Therefore, the AER does not consider that refusing an exemption application under Assessment Criteria 6.4 would address the retail competition deficiencies that are likely to exist within a GridX model network.

Summary: Option 1: rejection of GridX's application

As discussed in relation to Assessment Criteria 6.3 and 6.4, it is likely that requiring GridX to register as a DNSP, or granting them an exemption from registration will not materially affect the level of technical and safety standards within a GridX model network, or the level of retail competition available within such a network.

The AER considers that that outright rejection of an exemption would force GridX to either:

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16 As noted by the Retail Policy Working Group, *National Framework for Distribution and Retail Regulation (draft) Working Paper 2 (draft)*, December 2006, (Appendix 1), in NSW a distributor may refuse to provide customer connection services if the customer fails to contribute towards extension or augmentation (including reimbursement of customers who have already paid for such a connection). Effectively this means that a customer would be required to provide the full cost of constructing an import-capable connection between a GridX model network, and a adjoining distribution network, if a customer wanted access to alternative retailers.

- abandon its GridX model proposal
- change its business model to avoid regulatory oversight
- seek legislative changes in NSW to bring a GridX model network within the scope of conventionally-regulated networks so that an exemption could more easily be granted by the AER or
- register as a DNSP with NEMMCO

Outright rejection of GridX's request for an NSP exemption may also deter others investigating alternative energy service and delivery models. The AER does not consider stifling this search for innovation to be in the best long-term interests of consumers. Similarly, lobbying for legislative change in NSW in the near term is also unlikely to be a viable option, and would force GridX to abandon its business model or modify its network design potentially to the detriment of its customers and the NEM.

Faced with the prospect of being required to register as a DNSP, GridX could choose to adopt an alternative network design that does not connect a GridX network to the NEM. In that case it is arguable that GridX customers are no better off and are arguably worse off. In this case GridX's assets will remain the same, GridX will not be subject to any AER regulatory oversight and GridX's generating assets would be used less efficiently: the NEM would lose the benefit attached to the export by GridX of surplus energy. Not requiring GridX to register would avoid this problem.

Requiring GridX to register as a DNSP may impose a significant administrative burden on GridX to comply with many provisions of the NER that cannot realistically be applied within a GridX model network, or which have uncertain application within a GridX model network. These are likely to include Rules found in chapters 3, 4, 5 and 7 of the NER relating to transfer procedures, network planning, settlement procedures, system security, customer connections, planning procedures and metrology requirements. If GridX were to arrive at the conclusion that it could not comply with one or more of these provisions, (where determining this might in itself be a time-consuming and expensive process) GridX would then need to apply to the AEMC to seek a derogation to avoid complying with those provisions. This would entail additional costs that must ultimately be borne by GridX customers.

The AER considers that outright rejection of GridX's application, is, for the reasons stated above, not in the long-term best interests of consumers, and is unlikely to be the option that best furthers the NEM objective.

Further, an exemption can be granted to GridX and conditions attached to that exemption that enable the AER to ensure that appropriate safety and technical standards apply in relation to GridX's network. These two ideas are not mutually exclusive.

Specifically, the AER can require that GridX observes 'good industry practice' in the construction and operation of physical networks based on the GridX network model, require it to comply with applicable regulatory instruments as defined in the NER, and impose an obligation on GridX to observe the applicable provisions of chapter 5 that involve technical and/or safety standards.

Observance of such requirements by GridX would provide some assurance that the GridX network will be constructed, operated and maintained in an appropriate manner, while balancing the objective of promoting the introduction of innovative energy networks where this is appropriate.

Option 2: Unconditional exemption

Taking a broader view of the GridX application to operate its business model in all States and Territories of the NEM, the AER could choose to grant GridX an unconditional exemption either from the obligation to register or the operation of chapter 5.

However, such an exemption would limit the distribution safety and technical standards applicable to the GridX network in NSW (although the situation in other states may be different, as previously discussed). Whilst GridX would remain subject to the general electrical safety wiring rules contained in AS/NZS 3000:2000 this standard does not extend to distribution activities and is an inadequate substitute for the application of a distribution safety regime. For this reason, the AER considers that an unconditional exemption, either from the requirement to register or the operation of chapter 5, would be inconsistent with the NEM objective. [17]

Option 3: Conditional exemption

As noted above clause 2.5.1(d) of the NER gives the AER the power to exempt a party from the requirement to:

- register as an NSP; or
- comply with the requirements of chapter 5 of the NER

subject to such conditions as the AER considers appropriate (as long as such exemption is not inconsistent with the NEM objective). That is, an exemption can be conditional.

Exemption from registration

[17] Note also the discussion in section 3.5 of this Decision, which refers to the *discretionary* power of the Director-General of DEUS in NSW to impose further requirements on GridX.

As detailed in section 3.2, registration as an NSP means that GridX must comply with all relevant provisions of the NER, including rules that are likely to be difficult to apply in relation to a GridX model network – provisions relating to metrology procedures, retail transfer arrangements, system security and network planning amongst others. Additionally, and as previously noted, GridX would be obliged to approach the AEMC and seek participant derogations from the specific provisions with which it cannot comply.

Accordingly, the AER considers that it would be appropriate to grant GridX an exemption from the requirement to register as a NSP. The second question to consider is whether an exemption from compliance with chapter 5 would also be appropriate. This question is addressed below.

Exemption from the operation of chapter 5 of the NER

Compliance with all of the requirements stated in chapter 5 of the NER requires that GridX must develop connection procedures, equipment design standards, access arrangements for generators, planning and development procedures, an inspection and testing program, connection, disconnection and reconnection arrangements, in addition to a number of other planning and technical requirements. As part of the chapter 5 requirements, GridX would also be under the obligation to operate a network in accordance with 'good industry practice' and operate a GridX model network in accordance with the requirements of schedules 5.1 (network performance requirements) 5.1A (system standards) and schedule 5.3 (conditions for connection of customers).

In combination these schedules introduce some (but not all) of the technical and safety requirements otherwise observed by registered network service providers. Many of the other requirements of chapter 5 (having being drafted to apply to conventional, integrated distribution and transmission networks) are not relevant in the consideration of the practical operation of a GridX model network, due to that model's semi-islanded nature.

Accordingly, the AER considers that compliance with all of the requirements set down in that chapter is likely to impose an excessive administrative burden on GridX, relative to the size, complexity and supply characteristics of the GridX model network. Placing an excessive administrative burden on smaller niche players that are prepared to develop and implement innovative energy and utility delivery models is not consistent with the NEM objective.

Subject to conditions designed to give effect to this approach, the AER considers that requiring GridX to observe relevant requirements of chapter 5 of the NER to be an acceptable alternative to the outright refusal of an exemption. However, the AER will act to ensure that the particular requirements, where relevant, are kept to a minimum necessary to meet the NEM objective.

The AER considers that it will also be feasible to negotiate with GridX to obtain undertakings to address any residual safety and technical concerns, particularly the lodgement of safety management plans with DEUS. A similar approach was adopted by the AER with respect to the NSW Rail Businesses when they sought NSP exemption. There, the NSW rail businesses proposed (and the AER accepted) that they would lodge safety management plans with DEUS as is otherwise required of NSW distributors. The AER would seek to have GridX give a similar undertaking.

Other matters relating to retailing of electricity in NSW or any other state (dispute resolution, price controls, service levels etc) are likely to be subject to retail licence provisions and can be managed under any retail licence.

3.3 Additional observations

The AER makes the following additional observations on other issues raised by respondents in the consultation process, and on other assessment criteria contained within the SEGs that have not been addressed above.

Assessment Criteria 6.5 and 6.6: Appropriate price-setting mechanisms for network and electricity consumption charges should be in place

In relation to assessment criteria 6.5 and 6.6, GridX propose to operate a vertically integrated facility, supplying bundled distribution and retail services. GridX have also suggested that it is appropriate for GridX's retail prices to be subject to the same retail price-capping arrangements that are in place for other retailers within NSW, and, where relevant, other states. As network charges for conventionally-delivered electricity usually form a part of the total retail price for electricity paid by customers, it is appropriate to consider assessment criteria 6.5 and 6.6 together.

Although price-capping arrangements can be implemented to ensure that GridX consumers on a GridX model network can be protected in some measure from being subject to price-gouging behaviour, the AER does not have jurisdiction in relation to enforcing these arrangements. Retail pricing is the domain of relevant state regulators, and in New South Wales', this is IPART. The AER notes that there are retail price-capping arrangements currently in operation in NSW[18], and price-capping arrangements also operate in other jurisdictions.[19]

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18 In NSW, price controls are imposed by the regulator and constrain both the average tariffs and changes to individual tariffs See IPART, NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07, Final Report and Determination, June 2004 and for an update on retail pricing in NSW from July 2007, see IPART, Review of regulated retail tariffs and charges for electricity 2007 to 2010 – Issues Paper, July 2006

19 In Queensland, default tariffs are set directly by the Queensland government. In Victoria, the government sets changes in average default tariffs through agreements with retailers. In South Australia, the local regulator, ESCOSA, regulates default tariffs.

Overall, the AER considers that the capping of GridX's retail electricity prices in accordance with arrangements currently in place in NSW is not likely to place consumers connected to a GridX network in NSW at a significant disadvantage with respect to price, as compared to consumers connected to a conventional distribution network.

Accordingly, the AER considers that were it to grant an exemption, as a condition of exemption GridX would be required to hold and maintain a retail licence with the relevant jurisdictional regulator. GridX would also be required to demonstrate to the AER's satisfaction that there are appropriate price-setting arrangements in place in respect of each GridX model network constructed to ensure that appropriate retail pricing arrangements are in place, and that customers connected to a GridX model network do not face higher electricity charges than customers connected to conventional distribution networks.

Assessment Criteria 6.7: Access to appropriate dispute resolution mechanisms

Under SEG assessment criteria 6.7, a consideration relevant to GridX's application is that end users should have appropriate recourse in the event of disputes, for example to the dispute resolution arrangements contained in chapter 8 of the NER.

GridX has indicated that, as a licensed retailer of electricity in NSW, it will be required to join the NSW Ombudsman Scheme, and customers will have access to the Ombudsman Scheme for both retail and network queries.

In relation to states other than NSW, GridX has indicated that it is prepared to accept as a condition of exemption a condition requiring it to join an ombudsman scheme in the relevant state (if one is in operation for electricity disputes) whether or not jurisdictional arrangements require this.

The AER considers that accepting an undertaking from GridX to join an appropriate ombudsman scheme either as part of its obligations as a retail supplier of electricity or otherwise, will satisfy the requirement that customers who have a dispute with GridX have appropriate recourse to a dispute resolution mechanism.

Assessment Criteria 6.8: Compliance with jurisdictional requirements

Under SEG Assessment Criteria 6.8, a relevant consideration in the context of considering an application for exemption is that the applicant should have obtained, or have applied for exemption from relevant jurisdictional requirements under licensing or other regulations.

GridX has indicated that it considers that it is required to apply for and hold a NSW retail supplier's licence. GridX anticipates that the usual conditions applicable to a retail supplier will appear on the licence except for those which relate to transfer obligations and last resort supply arrangements as these obligations are not appropriate to customers within a GridX model network.

As discussed elsewhere in this decision, the AER considers that state licensing requirements ensure that network and retail electricity suppliers are subject to important safeguards to protect electricity customers. While some of the obligations imposed on retailer suppliers in NSW are covered in section 2.4 of this decision, licensing arrangements differ between jurisdictions. For example, under regulation 66 of the *Electricity Supply (General) 2001 (NSW)* GridX are exempted from any requirement to hold a distribution network service provider's licence. As a result, GridX is not required to comply with some of the NSW requirements that apply to licensed distributors.

However, other states may require GridX to hold such a licence if GridX established operations in those states.

The AER considers that, if it were to grant an exemption, it would be appropriate to require GridX to hold, as any condition of gaining exemption from registration or chapter 5 requirements, retail or distribution licenses as appropriate.

Retailer and Distributor of Last Resort (RoLR and DoLR) arrangements

In the NEM, jurisdictions have "retailer of last resort" (RoLR) schemes that rely on a local electricity distributor continuing to be present even in the event of a retailer failing – being unable or unwilling to continue to deliver services, through de-registration, inability to secure wholesale energy supply, or through financial failure. In the event of a retailer failing, that distributor typically continues to supply energy and a nominated party acts as retailer until affected consumers select new retailers. These arrangements are referred to as "Retailer of Last Resort"(or RoLR) schemes.[20]

Likewise, should a distributor fail - an event generally considered very low risk - the primary asset of a (regulated) distribution business is its right to distribute electricity to a captive market. Therefore, in a situation of financial failure, an administrator is likely to ascertain that the best interests of the creditors of a failed distributor are best served if that administrator sells the distribution business as a going concern to a new owner. In this paper this scenario is referred to as a 'Distributor of Last Resort" (DoLR) situation.

Many respondents asserted that these RoLR and DoLR arrangements underpin the effective operation of the market.

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[20] RoLR provisions vary between states. However, in the event of a failed local (tier 1) retailer, all NEM jurisdictions nominate one or more of the remaining local retailers as the retailer of last resort on the basis of market shares or some other arrangement. Differences arise in the allocated RoLR of a failed non-local (tier 2) retailer. In the event of tier-2 retailer failure, the relevant host (tier 1) retailer is assigned to provide RoLR services in NSW, Queensland and the ACT. In NSW, RoLR responsibilities appear as a licence condition, creating a contractual relationship between the local distributor and the RoLR. In Victoria, RoLR responsibility is automatically assigned to the host retailer. In SA, the local distributor (ETSA Utilities) is the RoLR for all first and second tier customers. NSW and Victoria also have RoLR provisions in place for the failure of gas supply. In the event of a retailer failure in Victoria, the RoLR is the remaining local gas retailer. In NSW, the RoLR is the host gas retailer.

The GridX model network arrangement is unlike that found within a conventional generator / distributor / retail arrangements: in GridX's case all these activities are combined within the one GridX business. For present purposes, and due to the combined generation, distribution and retail nature of the GridX model network, RoLR and DoLR arrangements applying in such a network are not easily distinguishable and can be assessed together.

The issue here is that it is unclear whether (and / or on what terms) consumers within a GridX model network will be supplied with electricity (and other utility services) in the event that GridX is financially unable to provide distribution or retail services. Financial failure could result from:

- the failure of GridX to correctly assess the risks / costs and returns of its model, compromising liquidity and cash-flow, resulting in insolvent trading, or

- GridX being unable to secure a long-term supply of gas at a price to enable it to operate in a financially viable manner.

This issue is particularly relevant given that GridX is looking to construct several larger-scale (1,000 homes +) projects: the AER is keen to ensure that, where possible, appropriate arrangements are in place to ensure that large numbers of electricity consumers are not left without electricity (or other utility or gas) supply. The AER also notes that consumers purchasing homes connected to a GridX model network are required to make significant investment in special appliances (dishwashers, dryers and other similar household items) and the AER is keen to ensure that consumers are not stranded with ineffective or inefficient appliances in the event that GridX is unable to provide retail or distribution services.

GridX's position: RoLR and DoLR issues

GridX argues that conventional last resort supply and retail transfer arrangements are predicated upon networks being able to import electricity, such that other retailers can take over the supply and distribution function if this is unable to be provided by the existing host retailer. GridX comment that due to the inherent network design of the GridX model network, network import capacity is not available, and that, as a consequence, conventional last resort supply arrangements are not applicable to a GridX model network.

GridX further indicates that in the event of GridX being unable to provide retail and distribution services for customers within such a network, it is likely that another operator would purchase the business from GridX (or its receivers) and continue to operate a GridX model network. Alternatively, GridX postulates that a new operator might determine that it is economic to operate the network as an import-and-export capable network, and may liaise with the relevant local distributor to arrange for the availability of import capability.

AER's observations: RoLR and DoLR issues

While responses from NSW businesses in particular raised concerns over the RoLR arrangements that might apply in relation to any operative GridX model network, the decision to grant an exemption from the registration requirements of the NEL is not directly relevant to DoLR and RoLR arrangements as these are in the province of state regulation. However, the AER notes that stakeholders, as part of this consultation process, have expressed significant levels of concern over the lack of DoLR and RoLR arrangements attached to the GridX model network proposal, and the lack of any requirement for GridX to provide financial or prudential guarantees in relation to supply.

RoLR provisions vary between states. However, in the event of a failed local (tier 1) retailer, all NEM jurisdictions nominate one or more of the remaining local retailers as the retailer of last resort on the basis of market shares or some other arrangement. Differences arise in the allocated RoLR of a failed non-local (tier 2) retailer. In the event of tier-2 retailer failure in NSW, the relevant host (tier 1) retailer is assigned to provide RoLR services.

Integral's submission asserts that it would not be the retailer of last resort for GridX. The AER has not formed a view with regard to this assertion.

The financial failure of GridX would be likely to have severe consequences for all its customers. Both electricity and gas supply to GridX customers is likely to be compromised. In addition to constraints on electricity supply, specialised appliances designed to work with the GridX system will be inoperable. RoLR arrangements are also unlikely to be effective in providing GridX customers with alternative supply as the inability to import grid electricity into a GridX model network means that alternative sources of electricity in the short term are unlikely to be available.

The AER notes that RoLR matters in NSW remain an issue for IPART and DEUS. The AER understands that this issue will be considered by the NSW agencies in the context of Grid X's application of an "off-grid" retail licence.

The RoLR issues referred to in this section are important concerns but will exist regardless of the approach adopted by the AER in determining whether, or on what terms, an NSP exemption is granted.

Reliability and Performance standards

As earlier indicated, a GridX model network would be connected to the main electricity distribution network at a single connection point only, for the purposes of exporting excess electricity to the grid at times where spot prices make this a viable option. The importation of electricity into the network from the grid would not be possible.

Many of the submissions[21] consider the islanded network design raises reliability performance issues because a GridX model network cannot draw on electricity from the national grid, and supply within a GridX model network is wholly dependent on a constant supply of gas to provide both gas and electricity to GridX customers.

The AER considers that system reliability performance may be an issue for customers on a GridX estate if demand for electricity by GridX customers outstrips the supply capacity of GridX generators. An excess of demand over supply capacity might lead to involuntary load-shedding within the GridX network, as that network would not be able to draw on electricity from the grid to supplement the supply of electricity to GridX customers.

Similarly, interruptions might occur if gas supply to GridX generators was curtailed. The restriction of gas supply would be likely to place GridX customers at the risk of having no energy supply – gas or electricity. EnergyAustralia considers that the importance and relevance of this issue is amplified as there are fundamental design differences between gas and electricity networks. Specifically, gas networks are only duplicated at transmission levels, and that reliability characteristics of gas delivered through a radial or point-to-point gas transmission system are not the same as (and less than) electricity delivered through a mesh or grid network.

When queried on this GridX responded that the gas network has been reliable in the areas in which it proposes to construct its networks and that alternatives exist for overcoming a short-term emergency. These alternatives include using a tanker to provide an emergency supply of gas or substituting mobile diesel generation should the gas supply be interrupted. It also noted that the credibility of its business model and its competitive position versus conventional supply arrangements would be seriously compromised were it to develop any reputation for poor reliability.

The AER notes that reliability performance standards are currently the responsibility of jurisdictional regulators. Performance reliability standards are designed to ensure a minimum acceptable level of reliability is provided to customers. Unlike other registered NSW distribution businesses, GridX would not be required to comply with, and report on reliability performance standards, as GridX would not be required to obtain a distribution licence in NSW, as discussed in section 3.2. In the absence of the requirement to report on and comply with these standards, GridX customers may be subject to lower levels of reliability than other NEM customers.

Additionally, in relation to reliability standards, the AER considers that it is not in a position to impose standards separate from those contained within chapter 5 of the NER which may be in force within NSW or any other NEM jurisdiction. Specifically, the application of a reliability standard is independent of the registration question: the design of the GridX model network does not appear to contravene any design restrictions under the NER or under NSW legislation, and reliability standards applying within a GridX model network remain an issue for the NSW regulator.

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[21] See Ergon; CitiPower/Powercor; EnergyAustralia; Country Energy; AGL and United Energy.

While the NSW Director-General of DEUS holds discretionary power to impose standards on GridX, the decision to impose such standards does not turn on whether GridX is registered with NEMMCO as a distributor, or whether GridX is required to comply with requirements explicitly set down in chapter 5 of the NER. As a further issue, even if the AER was to impose reliability criteria on GridX as a condition of granting an exemption, GridX might choose to meet this criterion by building extra generators within a GridX model network to provide supply support while maintaining the 'export-only' design of the network.

The AER must take into account the NEM objective when it considers GridX's application. The AER believes it would be inconsistent with the NEM objective[22] if GridX were not required to comply with any performance reliability standards either set out in the NER, or performance reliability standards that DEUS may seek to impose on GridX. Accordingly, as discussed above, the AER proposes to grant an exemption on the condition that GridX comply with specific provisions in chapter 5 that impose various technical and safety requirements on GridX by way of an exemption condition and that GridX observe any performance reliability standards by the NSW jurisdiction.

Informed consent

Submissions from Powercor/Citipower, Energex and AGL raise concern that GridX customers may not be sufficiently informed about electricity supply arrangements within a GridX model network. CitiPower and Powercor are also concerned that consumers are not in a good position to make an assessment of the economic costs of maintaining and replacing a GridX distribution network, and accordingly are not well positioned to make an accurate assessment about how this might translate into rental and purchase prices for houses located within such a network. Effectively, CitiPower and Powercor argue that customers face significant difficulties in determining whether houses connected to a GridX model network should be priced at a premium or discount, or at a similar level to other equivalent homes.

GridX believes that purchasers of properties within a GridX estate are likely to be well aware of GridX's distinctive electricity retail and energy supply arrangements. GridX has indicated that the nature of the bundled services provided by GridX to these estates will be advertised as a selling feature of these homes, and has also indicated that caveats indicating the nature of GridX's energy supply arrangements will be placed on the title of all properties located within any operative GridX model network. Additionally, inspection of relevant houses is likely to reveal that innovative energy supply arrangements are in place for such houses.

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[22] In particular, the long-term interests of consumers in respect to reliability and security of supply.

The AER accepts that there is a probability that some consumers may not be fully cognisant of the implications of living in an estate served by GridX. However, the likelihood of this occurring is considered to be small. There is strong competition between developers in the housing market, and a high level of disclosure is required in contracts for the sale of real property. To the extent that GridX fails to meet community expectations of power supply reliability and pricing it is probable that any short-comings will be reflected in other ways including the resale value of housing and/or rental values. AGL and others acknowledge that it may be appropriate to consider the GridX proposal in terms of the competitive housing market and not at the level of energy supply.

The AER considers that on balance, the market for houses within a GridX model network is likely to be efficient, and commensurately that purchase or rental prices for GridX houses are likely to incorporate an appropriate premium or discount reflecting GridX's supply arrangements. Accordingly, whilst competition 'within the market' may be restricted, competition 'for the market' remains competitive is likely to result in appropriate price signals being provided to consumers. At this juncture there is no evidence to suggest that GridX properties will trade at a discount and a there is a distinct possibility based on lifestyle, environmental and greenhouse factors that any effect on property values will be positive. Accordingly, the AER considers that it is appropriate to permit the GridX proposal to proceed but, consistent with the NEM objective will review its decision should material evidence of negative effects emerge.

Network Planning

Many submissions[23] raise concerns that long-term network planning activities currently undertaken by existing distribution businesses may be disrupted by the emergence of 'stand-alone' GridX model networks. Several respondents note that augmentation and expansion policies are usually conducted in the context of a long-term view about the future shape and evolution of networks. Respondents note that a GridX type network could be constructed in a comparatively short period of time, and that if GridX type networks are built in parallel with host networks, significant host network assets may be left stranded or underutilised.

The AER does not accept that there is a real risk of host network assets being left stranded. Under proposed changes to the regulatory framework for distribution regulation the AER will be obliged to recognise historic capital expenditure by a regulated business in determining the opening value of the asset base. There will not be an ex-poste review of that expenditure and therefore, no standing risk should arise as a consequence of subsequent GridX type developments. Whilst the GridX proposal might impact on planned expansions of existing networks, GridX does not currently propose to build networks in competition with existing network assets.

[23] See EnergyAustralia; CitiPower/Powercor; United Energy; and Country Energy.

The AER acknowledges that that augmenting and extending a distribution network is capital intensive and that a co-ordinated approach to network planning is likely to deliver benefits to consumers. Nevertheless, the AER considers that, consistent with the intent of chapter 5 of the NER, GridX should not be prevented from investing in network infrastructure on this basis alone. As a party connecting to existing networks GridX will necessarily have to discuss the likely impacts of its activities with distribution businesses. The AER considers these mechanisms to be sufficient at this time to minimise the potential for the over-building of assets. but may consider imposing a condition to more actively participate in planning activities if evidence of network planning difficulties emerges.

3.4 AER's decision

As a result of a detailed consideration of the issues relevant to the assessment of GridX's application arising from an extensive public consultation process, the AER has determined that it will not grant a general exemption for networks operated under the GridX model, either from the obligation to register as a NSP or the operation of chapter 5.

3.5 Future approach

The AER is however keen to foster innovation and therefore, subject to consideration of the relevant circumstances, it considers that there would be a good case for granting a specific exemption from the obligation to register as a NSP for networks operated by GridX in specified locations on the following conditions:

(a) GridX would need to obtain and hold a retail and/or distribution licence in the relevant jurisdiction that provided for:

  (i) a shadow pricing arrangement to be developed independently and to be subject to regulatory oversight under the retail licence;

  (ii) appropriate dispute resolution arrangements.

(b) GridX would need to comply with the provisions of chapter 5 of the NER requiring it to:

  (i) maintain and operate its network in accordance with good electricity industry practice and applicable Australian Standards;

  (ii) comply with applicable regulatory instruments; and

  (iii) comply with applicable technical and safety standards.

The exact terms of the any conditions would be determined at the time of granting an exemption.

Granting GridX a conditional exemption allows the AER to apply a light-handed regulatory approach that ensures that GridX is required to comply with important safety and technical requirements as set down in the NER, and is required to enter into appropriate arrangements which safeguard the interests of retail customers that may connect to a GridX model network. Conditional exemptions also provide the AER with the flexibility to remove GridX from the need to comply with more onerous and irrelevant provisions that it might be required to observe if it were required to register as an NSP.

While the AER welcomes, and is keen to encourage new and innovative approaches to energy and utility distribution and supply, this decision is limited to consideration of the network configuration proposed by GridX in its current application (the 'GridX model network') only. Alternative network configurations or variation(s) on the GridX model network may give rise to different considerations to those discussed and may result in a different outcome when separately evaluated.

Appendix A: NSP Specific Exemption Guidelines

Introduction

1. Section 9(1) of the National Electricity Law and clause 2.5 of the National Electricity Code require all Network Service Providers (NSPs) to register with NEMMCO.

2. Clause 2.5 Registration of NSPs is designed to ensure that they are subject to the relevant provisions of the Code in relation to:

    2.1. **system security.** Chapter 4 of the Code prescribes facilities and actions required of NSPs to ensure system security is maintained. This is supported by parts of chapter 5;

    2.2. **network standards.** The standards for the network are defined in chapters 5 and 7. These standards ensure that end users and market participants can rely on the network to provide the appropriate quality of supply;

    2.3. **pricing.** The mechanisms for pricing of the network service are defined in chapter 6; and

    2.4. **dispute resolution.** The Code ensures that participants and intending participants have access to appropriate alternative dispute resolution processes, through chapter 8.

3. The National Electricity Code Administrator (NECA) may, in accordance with Guidelines issued by it from time to time, exempt any person or class of persons otherwise required to register with the National Electricity Market Management Company (NEMMCO) as a Network Service Provider (NSP) from:

    3.1. the requirement to register as an NSP; or

    3.2. the operation of chapter 5 of the National Electricity Code and the requirement under chapter 5 to provide an access undertaking to the ACCC subject to such conditions as NECA deems appropriate where in NECA's opinion an exemption is not inconsistent with the market objectives or the Code objectives.

4. These Guidelines are issued to assist parties seeking exemptions under clause 2.5 of the Code. NECA may vary these Guidelines from time to time, subject to clause 2.5(e) of the Code.

5. The granting of any exemption under clause 2.5 of the Code does not reduce any obligation placed on an NSP under any other statutory or other provisions.

Principles

6. The following principles will be applied to assess each application:

    6.1. the relevant network should be wholly contained within premises owned or controlled by the applicant;

    6.2. the provision of the network (and any supply of electricity to other parties) must be incidental to the business of the applicant;

    6.3. standards or other regulatory controls should be in place in respect of the relevant network;

    6.4. the granting of the exemption should not unduly limit access of parties to the national electricity market contrary to the market objectives (clause 1.3 of the National Electricity Code);

    6.5. the proposed charging regimes(s) governing the NSP's network should balance the needs of the network provider and the end user;

    6.6. an appropriate mechanism must exist for the setting of energy charges if users of the network cannot access retailers. Jurisdictional licence conditions or regulations govern the on-selling of energy;

    6.7. end users should have appropriate recourse in the event of disputes, for example to the dispute resolution arrangements contained in chapter 8 of the Code; and

    6.8. the applicant should have obtained, or have applied for exemption from relevant jurisdictional requirements (eg under licensing or other regulations).

7. Where an applicant satisfies NECA that principles 6.1 to 6.4 have been met, exemption from the requirements of chapter 5 will generally be granted. If all principles are met to the satisfaction of NECA, full exemption will generally be allowed.

8. Applications from NSPs which meet some but not all of the principles will be assessed and, if the application is consistent with the intent of clause 2.5 of the Code, NECA may grant full or partial exemption.

General exemptions

9. Consistent with these principles, NECA has granted a series of general exemptions from the requirement to register as an NSP.

Applications for specific exemptions

10. NSPs which fall within one of the general exemptions issued by NECA are not required formally to seek specific exemption. NSPs that do not fall within those general exemptions but that wish to seek a specific exemption from the requirements of the Code must apply to NECA in writing. Applicants may submit their application in parallel to other applications where similar exemptions are being sought (e.g. from the requirement to have supply or other licenses from jurisdictional regulators).

11. Applicants seeking exemption must state:

    11.1 whether they are seeking (or have received) exemptions from other codes or regulations governing the ownership or operation of networks, including details of those exemptions or applications for exemptions;

    11.2 whether they are seeking exemption from the requirement to register as an NSP or just from the application of chapter 5 (and the requirement to provide an access undertaking);

    11.3 the precise network to be subject to the exemption, including circuit diagrams if necessary;

    11.4 what discussions have taken place between the applicant and the NSP to which the relevant network will be connected;

    11.5 what arrangements are proposed for setting network charges for parties using the network; and

    11.6 what arrangements are proposed for energy charges (e.g. fixed percentage of total costs or direct access to retailers by tenants)

12. NECA may request additional information from applicants prior to processing an application for exemption. NECA will normally advise applicants of any additional information required for the processing of their application within 10 working days of the application being received.

13. Decisions by NECA under clause 2.5 of the National Electricity Code are reviewable by the National Electricity Tribunal.

Conditions

4. NECA may, pursuant to clause 2.5 of the Code, place conditions on any exemptions granted.

Revocation of exemptions

15. NECA may revoke an exemption, or vary the conditions imposed, if it forms a reasonable opinion that the NSP no longer meets some or all of principles required for exemption.

Appendix B: NSP General Exemption Guidelines

General exemptions from the requirement to register as an NSP (issued August 2000)

NECA has granted the following general exemptions from the requirement to register as an NSP. Organisations that fall within one of these general exemptions do not need to make an application for a specific exemption.

Class of network owner or operator	Description	Conditions
Caravan parks	Mobile home parks, caravan parks, Areas where space is rented for a mobile or semimobile dwelling, where the provision of power is part of the contract of rental.	A mechanism establishing the maximum price for on-selling of energy must be in place.
Office buildings	Large complexes where floors or individual offices are rented or leased on a short or long term basis, and electricity is supplied as part of the building infrastructure and either separately metered or charged on a basis agreed at the time of the lease.	A mechanism establishing the maximum price for on-selling of energy must be in place.
Flats / apartments	Groups of individual dwellings sharing common walls where electricity is reticulated as part of the building infrastructure.	Where the network is supplied at no cost or a nominal fee and either: 1. access to retailers is available to occupiers; or 2. electricity is made available on terms negotiated as part of the purchase or hiring arrangement and a mechanism exists for setting the maximum price.

Units	Groups of individual dwellings on a common or shared title.	Where the network is supplied at no cost or a nominal fee and either: 1. access to retailers is available to occupiers; or 2. electricity is made available on terms negotiated as part of the purchase or hiring arrangement and a mechanism exists for setting the maximum price.
Industrial parks	Large areas where land and buildings are leased.	Where: 1. the network is supplied at no cost or a nominal fee and access to retailers is available to tenants; and 2. standards for the network are agreed with the local NSP
Shopping centres	Groups of shops and offices owned by a single entity or sharing a title where electricity is reticulated as part of the building infrastructure	Where the network is supplied at no cost or a nominal fee and either: 1. access to retailers is available to tenants; or 2. electricity is made available on terms negotiated as part of the hiring arrangement and a mechanism exists for setting the maximum price.

Appendix C: Submissions to the Issues Paper

Submissions on the Issues Paper were received from the following parties. The detailed submissions are available on the AER's website at www.aer.gov.au.

CitiPower Pty / Powercor Australia Ltd

Country Energy

NSW Department of Energy Utilities and Sustainability

Energy Australia

Ergon Energy Corporation Limited

GridX Power Pty Ltd

Integral Energy Australia

National Electricity Market Management Company Limited (NEMMCO)

SP AusNet

The Australian Gas Light Company

TRUenergy Australia Pty Ltd

United Energy Distribution