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Manager, MCE Secretariat,  
Department of Industry, Tourism  
and Resources,  
GPO Box 9839  
Canberra ACT 2601

25 May 2007

Dear Sir/Madam,

**Re: Review of network incentives for distributed generation and demand-side response**

The following is GridX Power's (GridX) response to the consultation on the Review of Network Incentives for Distributed Generation and Demand-side Response. We have responded to a number of the sections of the National Electricity Rules and the NERA Economic Consulting "Distribution Rules Review". GridX welcomes the review but has serious concerns that the Rules being considered do not sufficiently encourage DNSPs to undertake capital investments where they are prudent and economically efficient. It would be a serious error if the move to national regulation did not see the best economic approaches adopted.

Customers such as developers of residential, commercial and industrial estates are seeing the clear economic advantage that embedded generation solutions can make if these solutions can gain access to distribution networks. GridX has worked through gaining access to networks in three states of Australia and has achieved success in NSW with Integral Energy, having commissioned the Glenfield embedded tri-generation solution (further information at [www.gridxpower.com](http://www.gridxpower.com)). This development and many we are working on has clearly shown the benefit of using embedded generation solutions to resolve some very challenging network problems and stimulate more rapid economic growth benefiting the economy.

There is great inconsistency across Australia on how networks deal with embedded generation and the AER in our view has a clear leadership role to play in developing a workable and economically efficient system to see embedded generation provide the economic growth and customer solutions required in a prudent and economic fashion.

**Constraints on energy export (NERA 8.3.1)**

GridX does agree that further work needs to be carried out to evaluate if Chapter 5 creates impediments to the efficient use of generation capacity. GridX believes that The Rules as they currently stand provide limited encouragement for new embedded generation projects.

Section 5.5 (b) of the Rules requires that the DNSP must negotiate in good faith with the Connection Applicant. GridX believes that 5.5 (b) would not be sufficient for a DNSP to seriously consider an embedded generation connection. The Rules should require a DNSP to provide within a set timeframe a detailed written response to the embedded generator after its formal connection enquiry has been made – with penalty for non-compliance. This response should identify the technical and economic factors that were considered in determining whether a connection can or cannot be made and would be available to the AER for review if required.

### **Connection information (NERA section 9.2.2)**

The provision of timely and detailed information on existing network constraints will enable the embedded generator to offer the most efficient network support solution. GridX agrees that Chapter 5 of the Rules should require a more thorough information disclosure by both the DNSP and the embedded generator. A regulatory test incorporated into the Rules will enable the embedded generator to determine if a network alternative solution is appropriate to a region.

### **Service Reliability Standards (NERA Section 5.4.1)**

GridX agrees that State authorities should consider the wider benefits when comparing the reliability of a distributed generation system with that of a standard network solution. These other benefits include lower or nil greenhouse gas emissions, higher energy efficiencies and avoided network constraints. This issue is one where DNSPs attempt to argue that the embedded and demand side options are of a lesser reliability than network solutions which is an argument that is rarely valid. All networks in Australia when needing to provide outages on their systems for maintenance or major fault events use embedded generators for system support to maintain their service standards.

The real issue is when the DNSPs rely on the system for peak support (such as very hot weather) and then the issue is the probability of the loss of the generator at that peak time (for less than 24 hours per year) relative to the probability of losing the network assets which occurs under such stress. We would also note that GridX like many potential operators works with a degree of redundancy. The probabilistic approach may alleviate these concerns but generally the argument that generators are somehow less reliable than networks is not technically or operationally supported with fact.

### **Avoided TUOS payments (NERA Section 8.4.3)**

GridX does not believe that the avoided TUOS payments should be removed from Chapter 5 of the Rules. The regulator needs to ensure that price signals are cost reflective by allowing the pass through of both TUOS and DUOS benefits to embedded generators. Under the existing framework the TUOS payments are the only likely network incentive that an embedded generator can receive for a project. These payments should remain in place until an alternative incentive scheme is fully developed and incorporated into the Rules.

GridX would also note that the original concern on this matter was that the DNSP would pay twice for TUOS and not get any effective rebate for the TUOS that is avoided from the TNSP paid to a generator. If the TUOS is avoided the embedded generator should be required to benefit through payment, and this does not seem to be in dispute. The regulatory regime should then ensure that the DNSP is also compensated for avoided TUOS. If this is not the case then the TUOS (and any DUOS) that has not been avoided should not be paid and the Rules should reflect these particular circumstances.

### **Control setting method (NERA section 5.2)**

The Rules should allow network support expenditure to be included in the building block approach to DNSP costs. However GridX does not support the view that the current methodology provides an unbiased approach. Unless there is regulatory risk to capital from imprudent investments for a monopoly network then any network owner would not seek to adopt demand side or embedded generation options. This risk to capital is a fundamental for competition and an effective regulatory regime is required to stimulate innovation in the market and to keep costs to consumers to a minimum.

GridX recommends that the Rules require the DNSPs to be provided with an explicit mechanism to calculate network support payments and the industry be required to develop a standard

approach to contracting for this service that is transparent, timely and has low transactional costs for all concerned.

### **Pricing of negotiated DG connection charges (NERA section 8.3)**

GridX agrees with NERA and its recommendations based on the fact and our own experience that negotiated connection charges are likely to result in abuse of monopoly market power – intentionally or unintentionally. It is also likely that a high connection charge will deter new embedded generation developments. We suggest that caps on connection charges be incorporated into the Rules and supervised by the national regulator along with the adoption of the NERA recommendations.

### **Jurisdictional Regulators**

The Rules Section 6.6.7(c) requires that the Jurisdictional Regulator must approve a DNSPs negotiating framework and that this same regulator is responsible for imposing any amendments or conditions to this framework. GridX however supports direct submissions to the national regulator (not jurisdictional) for their scrutiny and approval.

Section 6.2.5(d)(7)(iii) of the Rules requires the Jurisdictional Regulator to determine if the payments to embedded generators for demand side management programmes are appropriate. GridX believes that only the AER should be responsible for approving demand side management payments. This will provide greater consistency, clarity and financial certainty for embedded generation developers.

### **Moving Forward**

We hope that this information has provided a useful guidance on the appropriate regulatory structure for embedded generation. This issue goes directly to the heart of regulatory economics – if options such as demand side management and embedded generation are not fully allowed to participate in the decisions on network development then the regulatory regime is not based on the fundamentals of regulatory economics and the principles that a market economy should pride itself as having adopted and implemented.

Currently the evidence is clear that the move to implement these principles is struggling and lagging – and where they are given some due care they are rapidly proving to provide real solutions in line with these economic principles. There must be a focus given to this matter by the AER and AEMC in the proper discharge of their role and to live up to the principles underpinning this countries approach to regulatory economics.

Yours sincerely

Craig Chambers  
**Chief Operating Officer**