VENCorp

Victorian Energy Networks Corporation

Office of the Chief Executive Officer
Victorian Energy Networks Corporation
Level 2 Yarra Tower
World Trade Centre
Siddeley Street
Melbourne Vic 3005
Telephone (03) 8664 6500
Facsimile (03) 8664 6510

6 June 2008

Dr John Tamblyn
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Ref: 243574
Your Ref: N/A
Contact: Franc Cavoli
Ph: 03 8664 6616

By email: submissions@aemc.gov.au

Dear John,

NGF request for Rule change to modify the confidentiality arrangements in respect of information required for power system studies

On 8 April 2008, the NGF put forward a proposal for a rule change to clarify the confidentiality protection given to Connection Applicants in respect of generator models provided in the course of the connection application process.

VENCorp welcomes the opportunity to provide a submission to the AEMC on the National Generators' Forum's (NGF) rule change proposal in respect of information required for power system studies.

This submission seeks to show that:

- NSPs have several obligations under the National Electricity Rules (NER) to discharge on receipt of a connection application;
- a full generator model (including for some aspects of those obligations, the source code) is necessary to discharge those obligations, without increased reliance on commissioning tests;
- if full generator models (including source code) are not provided, or are made more difficult to obtain, greater reliance will be placed on commissioning tests results and the generator performance as warranted during the connection application process; and
- if the generator performance, as warranted, and the commissioning test results do not match, this could lead to commissioning delays and increased costs.

Should you have any questions on anything in the submission please do not hesitate to contact Franc Cavoli on (03) 8664 6616 or Louis Tirpcou on (03) 8664 6615.

Yours sincerely

M. Zema

Matt Zema
Chief Executive Officer

Submission - Request for a Rule change to modify the confidentiality arrangements in respect of information required for power system studies

Summary

On 8 April 2008, the NGF put forward a proposal for a rule change to clarify the confidentiality protection given to Connection Applicants in respect of generator models provided in the course of the connection application process.

VENCorp welcomes the opportunity to provide a submission to the AEMC on the National Generators' Forum's (NGF) rule change proposal in respect of information required for power system studies. This is an important issue for NSPs since it impacts directly on their ability to assess connection applications and their responsibility to maintain the security and stability of the system in response to changes caused by an increasing rate of generator connections. The introduction on an Emission Trading Scheme is only expected to contribute to that increasing rate.

In general, VENCorp understands and agrees with the need for manufacturers to maintain confidentiality over proprietary information in relation to generator characteristics. The plant models and data used to build those models generally evolve out of a great deal of time consuming work and represent a large investment. However, VENCorp also believes that the value that complete generator models give to NSPs in assessing network stability is invaluable to the integrity of the system.

Also, the risk in restricting the flow of information to NSPs will be that NSPs will increasingly rely on commissioning tests to discharge their obligations under the NER. Since NSPs will be unable to scrutinise information given to it by connection applicants, the connection applicants will bear a greater risk that the claimed performance is consistent with the observed performance. Discrepancies can lead to commissioning delays and therefore inevitably to increased costs for the connection applicant.

NSP's obligations under the NER

It is clear that the NSP has clearly defined responsibilities under the NER that would be undermined by this proposed rule change. For instance, a NSP must use its reasonable endeavours to ensure that modelling data used for planning, design and operational purposes is complete and accurate[1]. A model of the network cannot be done without complete models of all generators on the network. In order to discharge its obligations under this rule, NSPs would need to have models that it can verify for accuracy and completeness.

Further, NSPs have an obligation to ensure that the proposed connection does not reduce inter-regional or intra-regional power transfer capability or impact on customer load within a region[2]. It can only effectively and efficiently do this with a complete generator model.

In relation to negotiated access standards, a NSP must following the receipt of a proposed *negotiated access standard* consult with and seek the advice of NEMMCO in relation to the negotiated access standard[3]. This is not possible if the NSP does not have access to the complete model since it will not be furnished with all the information necessary to make an informed consultation. Consequently, this has the potential to compromise the planning process as potential security issues may not be picked up until it is too late.

---

[1] Rule 5.2.3 National Electricity Rule
[2] Rule S5.2.5.12, National Electricity Rules
[3] Rule 5.3.4A(c) National Electricity Rules

Lastly, if the complete models are not made available to NSPs or are made more difficult or costly to obtain, it is likely that NSPs will place greater reliance on the results of the commissioning tests and compare them against the generator performance warranted by the connection applicant during the connection process. If the test results do not match with the warranted results, this could lead to connection delays and increased project costs.

Sharing of information between NEMMCO and NSPs

VENCorp broadly supports the NGF's initiative but only if it were to be restricted to Registered Participants exclusive of NEMMCO and NSPs.

VENCorp's experience indicates that most connection applicants find it much more time and cost effective to provide complete models (not just user guides) directly to the host NSP. Additionally, in the interests of efficient and informed integrated planning, it is better for NSPs to freely share such information amongst each other. Not only does this enable NSPs to assess the current connection application more quickly and effectively but the sharing of such information allows subsequent applications to be more properly assessed and the interconnected system to be properly modelled for security and other reasons. Having NEMMCO as the sole repository may work against these goals.

To clarify, VENCorp is not suggesting that NSPs be allowed to freely distribute such information without restriction to any person requesting access. We suggest that NSPs be allowed to obtain the complete models and be allowed to share them with other NSPs and NEMMCO to carry out their obligations under the NER. The "carve out" is graphically shown in Attachment 1.

Table 1 shows the type of information that is needed for a NSP to discharge its obligations under the NER. While provision of full models will not remove the necessity for commissioning tests, it should enable a NSP to do most of the necessary work prior to commencement of construction. As can be seen, in order to make most assessments NSPs need the compiled code and for the obligation to consult with NEMMCO, it needs the source code.

Table 1: Model format and its purpose

	Full Block Diagram	Source Code	Compiled Code for PSS/E
Local mode stability	✗	✗	✓
Fault ride-through	✗	✗	✓
Response to system disturbances / transient stability assessment	✗	✗	✓
Small signal system damping impacts	✓ (required for Mudpack)	✗	✓ (alternative to Mudpack)
Use by PMWG / other TNSPs	✓	✗	✓
NEMMCO requirements	✓	✓	✓

PMWG

The proposed framework suggested by the NGF seems to contradict the purpose behind the establishment of the Plant Modelling Working Group (PMWG). Interconnected NSPs realised early on that there was a need to share information relating to the operation and planning of their networks since it affects the operation of all adjoining networks. The PMWG was set up to allow for information to be shared between the NSPs so that issues relating to the networks' interaction could be discussed and resolved.

The Rule change proposal will restrict the information flow and therefore compromise the analysis and problem solving capability of the PMWG since it places an onerous procedure on NSPs to obtain the necessary information.

Cost recovery

Since NSPs can recover the costs of connection applications under their respective negotiating frameworks, the more hurdles and restrictions that are put in the way of NSPs conducting the necessary investigations will generally mean greater delays in commissioning and higher costs. In addition, the suggested administration costs to be passed on by NEMMCO for releasing models would only be passed back to the connection applicant. Lastly, where models are required for planning purposes, the increased costs can only be passed onto customers as part of TUOS. The provisions of complete models directly to the NSP would avoid this cost.

Conclusion

For the reasons set out above VENCorp sees deficiencies in the approach adopted by the NGF and does not support the Rule change proposal in its current format. We have suggested an alternative whereby NSPs are allowed to obtain complete models up to the source code if necessary, and share that information for specific purposes. We note that if the proposal as suggested by the NGF is accepted, the consequences may be a greater reliance on the commissioning tests and therefore greater risks of project delays and costs.

Attachment 1: Suggested confidentiality scheme