7 November 2008

The Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney
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2000

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POWER SYSTEM ENGINEERING AND SOFTWARE

Attention Dr Tamblyn

## Comment to Draft Rule: Confidentiality Arrangements in Respect of Information Required for Power System Studies

We refer to proposed rule change as published on the AEMC website.

The proposed rule change goes a long way to address the current problems experienced with access to network data for power system studies. However, currently there is no standard format of dynamic model data exchange between different software products. This problem has been recognized internationally and an EPRI working group "CIM for Dynamic Models" which develops the CIM standard for time domain simulations has been established to address this issue. DIgSILENT is a member and supporter of this working group. Indications are however, that it will take some considerable time before this issue will be resolved. Ideally a format for a DLL model will be established that would enable the free exchange of encrypted dynamic modelling data. In the mean time encrypted dynamic models cannot be exchanged and indications are that it will only be made available by NEMMCO in PSS/E encrypted format.

In the past, NEMMCO also made block diagrams available so that users of other software products could prepare such models and conduct dynamic studies. Such dynamic models were in the past prepared in PowerFactory for the NEM by DIGSILENT with the cooperation of NEMMCO. Many of these models were also benchmarked against PSS/E models in conjunction with NEMMCO. These models were also bought by both TransGrid and Powerlink. There is therefore a proven need for such models in PowerFactory format in the NEM market. Continuing to make such PowerFactory encrypted models available to the market will therefore have financial benefit. There are also a large number of other users such as consultants that would depend on the availability of PowerFactory encrypted models. One reason for this requirement is that PowerFactory software is in particular well suited for modelling of renewable generation and is therefore the preferred software for this purpose by many Australian consultants, generators and other industry participants.

The practical implications of the proposed rule change are twofold:

NEMMCO will only maintain a Siemens PSS/E dynamic model. This
dynamic model cannot be interpreted by any other software. This
has a significant disadvantage to the market requiring many
participants to acquire expensive new PSS/E software. Without this
specific software product, network participants will not be able to

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- conduct dynamic simulations as all data available to network participants will only be in an encrypted format.
- 2. NEMMCO will request dynamic models in Siemens PSS/E form by default as this is most commonly used by them. Where studies are conducted with DIgSILENT PowerFactory software (such as local dynamic ride-through studies), there may be an implied requirement for the delivery of two dynamic models by the Generator one for the study and a separate model to comply with NEMMCO requirements.

## **Our Proposal**

DIGSILENT Pacific would like to propose the following amendments to the draft rule:

- 1. Clause S5.2.4 (6): Replace the existing rule word "nominated" by the word "approved".
- 2. Clause 3.13.3 (k2) (2): Replace the proposed rule wording "in a form that can be interpreted by a software simulation product nominated by NEMMCO" with the words "in a form that can be interpreted by at least three different software simulation products approved by NEMMCO".

It is therefore proposed that NEMMCO maintains at least three different software dynamic models and make these available in an encrypted format to market participants. In our view the proposed changes will enable the free exchange of data whilst maintaining network confidentiality. The benefit to the market is a significant cost saving in software as well as training in the use of specific software products. Competition in providing consultancy services as well as software products will be enhanced.

We thank you for the opportunity to make these comments and proposal.

Yours truly,

Koos Theron Director