Peter Adams
National Electricity Code Administrator
Level 5, 41 Currie Street
Adelaide South Australia 5000

By email: padams@neca.com.au

25 May 2005

Dear Mr Adams,

Proposed Code Changes: Information publication for non-scheduled generation

The National Generators Forum (NGF) welcomes the opportunity to comment on the code change proposal submitted by NEMMCO concerning publication of information related to non-scheduled generation. We support these code changes, subject to several enhancements outlined below, and believe they should be advanced rapidly in order to unlock the immediate market efficiency benefits they will enable. Our more detailed views are outlined below.

1. The code change proposal enjoys wide industry support

As NEMMCO have indicated in their submission, these code changes have already been the subject of significant industry discussion through the DPRG process. From the NGF's participation in this process, we understand that the need for these changes is broadly supported across market facing participant groups. It is certainly the case that the wide-range of market facing generators that make up the NGF consider that the need for this change is non-controversial and that it should be rapidly progressed.

2. Market facing generators expect the change to improve market efficiency

From a market facing generators perspective, improved transparency on non-scheduled generation will:

- Provide transparency on NEMMCO customer demand forecasts, and allow the calculation of historical actual aggregate customer demand;
- Allow scheduled generators to make more informed unit commitment decisions;
- Improve transparency around market price forecasts produced by NEMMCO;
- Enhance investor confidence by providing more transparency on demand data, which will facilitate more dependable long term supply/demand analysis, and;
- Allow participants to examine historical impacts of wind farm operation on particular network constraints.

All of these elements will enhance market efficiency.

3. Improved data publication can deliver immediate benefits to the market

We note that NEMMCO is already experiencing problems with achieving accurate demand forecasts in South Australia, with errors of more than 200MW not being uncommon. Transparency over wind energy assumptions made by NEMMCO will allow participants to better manage this uncertainty, and consequently implementation of these changes is likely to lead to immediate improvements in market efficiency.

4. Code change wording broadly acceptable, however several changes are recommended

The NGF has reviewed the detailed wording proposed by NEMMCO, and support the wording proposed, apart from amendments to clauses 3.7.2 (f), 3.13.4 (s) and 3.13.4 (q), discussed below.

4.1 Removal of "most probable" from clause 3.7.2(f)

Clause 3.7.2(f) says in effect that "....NEMMCO must prepare and publish .... for medium term PASA ..... forecasts of the most probable peak power system load plus required reserve.....". NEMMCO proposes to remove the words "most probable" from this clause.

The deletion of the words "most probable" from the clause 3.7.2(f) is not relevant to the stated intent of this code change proposal (ie. the provision of non-scheduled generator information), and the reason for this proposed change is not explained in the supporting material. The change is however relevant to the establishment of load forecasts and calculation of reserve based on the reliability standard.

The reliability standard that has been adopted for the NEM (0.002 percent Unserved Energy (“USE”)), is a probabilistic standard. This standard aims to achieve 0.002% USE on average over a number of years. The current wording of the Code is consistent with a probabilistic approach to the calculation of reserve in that NEMMCO must forecast "the most probable peak power system load". The change NEMMCO proposes is a move toward codifying a more deterministic and conservative approach and is therefore inconsistent with the basis for calculation of reserve and the intent of the Code.

In addition to this proposed change making the PASA forecasting clause inconsistent within itself (referring to load and reserve calculated on a different basis), this change would also make the clause inconsistent with the pre-dispatch forecasting clause that has retained the word "probable".

The NGF has previously raised concerns with NEMMCO that its long-term forecasting is excessively biased towards extreme demands leading to alarmist forecasts. We are concerned that this change is being driven by a desire to make the code compliant with current practice-and locking that practice in-rather than looking to improve practices in line with the code's intent.

The NGF therefore opposes the removal of these words from the Code.

4.2 Inclusion of forecast dispatch interval data

As currently proposed, clause 3.13.4 (s) appropriately provides for the publication of actual aggregate non-scheduled generator output used in each NEMMCO dispatch run. Our suggestion is that it would be preferable if NEMMCO also published the forecast aggregate non-scheduled generation at the end of each 5-minute dispatch cycle (sometimes referred to in the NEM as the aggregate "target" non-scheduled generation). Publication of this forecast aggregate would ensure that adequate data was available for the market to calculate the forecast total customer demand at the end of each dispatch interval, which is important in understanding the basis on which forecast generator dispatch targets are calculated.

We understand that under current market processes, and for processes to apply in the immediate future, NEMMCO uses "persistence" forecasting to estimate the output of wind farms at the end of each dispatch interval (ie. It is assumed that the output of wind farms won't change across the five-minute interval). Under this process, the additional data we are proposing should be published, would be the same as the data proposed by NEMMCO (ie. The forecast non-scheduled output is the same as the actual at the start of the dispatch interval). However, our proposed addition to the published data set would future proof the code against:

- Possible enhancements to short term wind farm forecasting, which may move away from the "persistence" method, and;
- The installation of significant non-scheduled generation technologies other than Wind Farms, for which the "persistence" method is not appropriate.

4.3 Inclusion of all available data

As currently proposed, clause 3.13.4 (s) and 3.13.4 (q) excludes provision for the publication of aggregate non-scheduled generator output for small systems below 30MW in capacity. Our suggestion is that it would be preferable if NEMMCO published all data it has available (even that below 30MW). It is stressed that this is not intended to widen the requirement for small generating units or systems to provide SCADA data to NEMMCO, but merely to require NEMMCO to include all available output data in the aggregated total reported to the market.

In the market as a whole, this change will not be material in the short term but might become so, if there were to be a significant number of small non-scheduled generating systems in any area of the NEM. For example, in Tasmania, approximately 85MW of existing non-scheduled generation would remain unreported with the original proposal. This is significant in relation to a minimum regional system load of about 900MW.

Our proposed amendments to clauses 3.7.2(f), 3.13.4 (s) and 3.13.4 (q) are attached as an appendix.

Please contact me on (02) 6243 5120 should you wish to discuss our position further.

Yours sincerely

John Boshier
Executive Director

Appendix: NGF proposed wording changes

Our changes from the NEMMCO proposal are underlined for ease of reference.

3.7.2 (f)

NEMMCO must prepare and *publish* the following information in respect of each day covered by the *medium term PASA* in accordance with clause 3.13.4:

(1) forecasts of the most probable peak power system load plus required reserve, adjusted to make allowance for scheduled load, for each region and for the total power system;

(1A) details of any allowance in MW made by NEMMCO for non-scheduled generation in forecasts published pursuant to clause 3.7.2(f)(1);

3.13.4 (s)

Within 5 minutes of each time NEMMCO runs the dispatch algorithm, NEMMCO must publish for each regional reference node:

(1) the sum of actual generation for each *non-scheduled generating unit* or *generating system* comprised of non-scheduled *generating units* where that data is available to NEMMCO ~~and where that *non-scheduled generating unit* or *generating system* comprised of non-scheduled *generating units* has a combined nameplate rating greater than 30MW~~; and

(2) the sum of generation forecast at the end of the relevant *dispatch interval* for each *non-scheduled generating unit* or *generating system* comprised of non-scheduled *generating units* used in the dispatch run by NEMMCO.

3.13.4 (q)

Each day, in accordance with the timetable, NEMMCO must publish details of the following:

(1) actual generation, dispatched generation, dispatched *network service* or *dispatched load* for each *scheduled generating unit, scheduled network service* and *scheduled load*, respectively, in each *trading interval* for the previous *trading day*; and

(2) actual *generation* for each *non-scheduled generating unit* or *generating system* comprised of non-scheduled *generating units* where that data is available to NEMMCO ~~and where that non-scheduled generating unit or generating system comprised of non-scheduled generating units has a combined nameplate rating greater than 30MW~~, in each *trading interval* for the previous *trading day*.