

Australian Energy Market Commission

Final Rule determination

Rule Proposal: *Publication of information for non-scheduled generation*

Proponent: *NEMMCO*

Date: *December 2005*

Commissioners:
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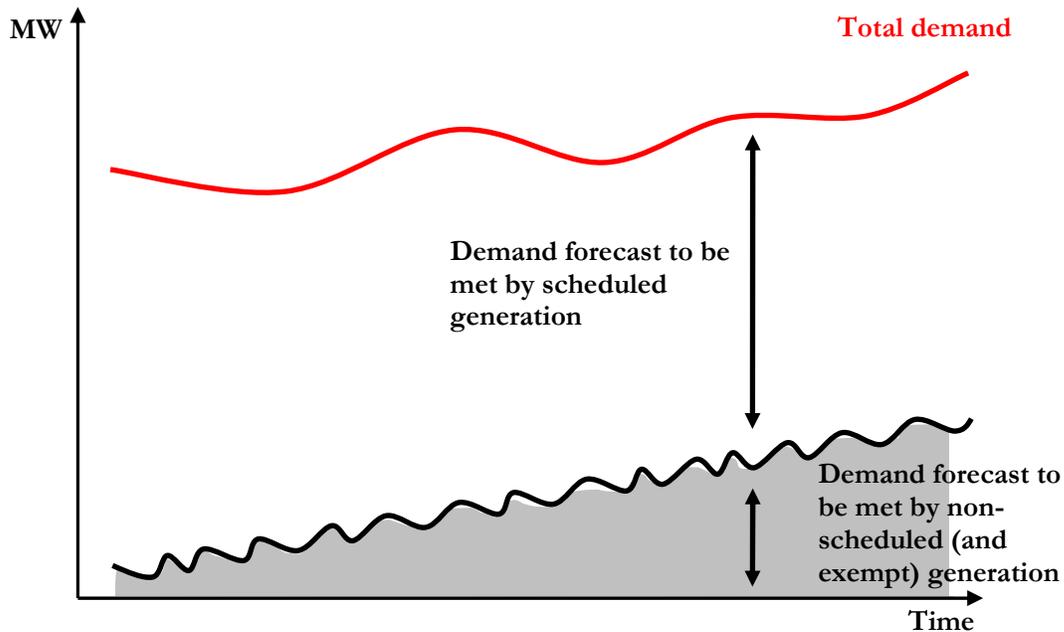
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Summary

The National Electricity Market Management Company (NEMMCO) has proposed that a change be made to the National Electricity Rules (Rules) to allow NEMMCO to publish additional information in relation to non-scheduled generation in the National Electricity Market (NEM). The additional information relates to aggregated regional generation values for non-scheduled generation in the medium-term projected assessment of system adequacy (MT PASA), the short-term PASA, and pre-dispatch forecasting processes as well as aggregated actual non-scheduled generation values for each dispatch interval and actual non-scheduled generation values for each trading interval.

In its application, NEMMCO stated that the recent expansion of wind generation projects has resulted in non-scheduled generation representing a significant generation source for the NEM and a very significant source in particular regions such as South Australia and Tasmania with further projects being considered in other NEM regions. NEMMCO considers that the increasing significance of non-scheduled generation and its variability have introduced an increased level of uncertainty for market participants in relation to their assessments of the future dispatch and pricing of scheduled generation.

The problem NEMMCO has identified is illustrated schematically in the diagram below¹. As NEMMCO forecasts demand to be met by scheduled generation, the increasing market impact of non-scheduled generation increases the difficulty for market participants in forecasting total and component generation requirements in the absence of further information.



¹ This is a stylised representation and is intended only to demonstrate the components of demand and the component forecast by NEMMCO. It is not intended to indicate the forecast or actual composition of supply.

NEMMCO considers that the proposed Rule changes to enable it to provide forecasting and historical information regarding non-scheduled generation to market participants will provide a more informed basis for the assessment of the market's requirements for scheduled generation. The market operator considers that provision of this additional information to the market will assist in ensuring the continued efficient operation and transparency of the NEM as the impact of non-scheduled generation increases.

NEMMCO's proposal was originally lodged with the National Electricity Code Administrator (NECA) on 6 April 2005. From 1 July 2005, the Australian Energy Market Commission (Commission) became responsible for taking the proposal forward. This Final Rule Determination contains the Commission's assessment of the proposal, carried out in accordance with the requirements of the National Electricity Law (NEL).

In assessing the proposal, the Commission has recognised the initial consultation steps taken by NECA and the Code Change Panel to seek the views of interested parties.

The Commission made a Draft Rule Determination on 20 September 2005. That Determination took into consideration three submissions on NEMMCO's proposal that had been received by NECA as well as a number of issues identified by the Commission in the course of its assessment. In that Draft Rule Determination, the Commission made a number of changes to the Rule proposal submitted by NEMMCO.

In making this Final Rule Determination, the Commission has taken into account submissions received on its Draft Rule Determination from NEMMCO and the National Generators' Forum (NGF) and made three changes to the Draft Rule. These concern the inclusion of available data and publishing information concerning total underlying demand and additional factors.

The Commission is satisfied that the Final Rule is likely to contribute to the NEM objective, and therefore satisfies the Rule making test, in that it will improve the availability of information to make the trading and investment decisions upon which the efficient and reliable operation of the NEM depends.

Accordingly, the Commission has made a Rule to address the issue raised in NEMMCO's proposal. This Final Rule Determination, including the Rule that the Commission has made, sets out the reasons of the Commission in accordance with the requirements of the NEL.

1. The proponent's Rule proposal

NEMMCO lodged a proposal with NECA on 6 April 2005 to change the National Electricity Code (now Rules) to require it to publish forecast and historic information with respect to non-scheduled generation. To date, the Rules do not provide for NEMMCO to publish this information.

The reason for the proposed change has been the recent expansion of wind generation projects. Wind generation is normally registered in the NEM as non-scheduled generation. Such generation now represents a significant generation source for the NEM and a very significant source in some NEM regions such as South Australia and Tasmania. NEMMCO noted in its application that further wind generation projects are currently being investigated by developers including potentially significant projects in Victoria and New South Wales.

In its proposal NEMMCO states that non-scheduled generation can impact on market participants in terms of market prices, self-commitment decisions and dispatch targets for scheduled generation, NEMMCO demand forecasts and network flows.

Following a recommendation from the wind energy technical advisory group (WETAG), NEMMCO consulted with industry through its Dispatch and Pricing Working Group (DPRG) and wind generators both represented and not represented on the DPRG to consider appropriate disclosure arrangements for non-scheduled generation in the NEM.

According to NEMMCO, that information is now required for the continued efficient operation and transparency of the market. NEMMCO stated that its Rule change proposal reflects the position reached following discussion with the DPRG, and endorsed by all groups in its consultation process.

In summary, NEMMCO proposed the following changes to the Rules:

- for MT PASA, ST PASA and pre-dispatch, publication of the volume allowance aggregated for each region, for non-scheduled generation made by NEMMCO in its forecasts of the demand to be met by scheduled generation;
- for five minute dispatch, publication of actual non-scheduled generation aggregated for each region (where such units or generating systems are greater than 30MW) within 5 minutes of each time NEMMCO runs the dispatch algorithm;
- publication of actual generation for each non-scheduled generating unit or non-scheduled generating system (greater than 30MW) for the previous trading day; and
- several other changes in the draft Rule accompanying the application.

2. The final Rule determination

The Commission has determined, in accordance with section 102 of the NEL, to make the final Rule set out at Attachment 1 of this final Rule determination. The wording of the final Rule amends aspects of the proposed Rule as put forward by NEMMCO, for the reasons set out at section 6 of this determination.

In coming to its decision, the Commission has considered:

- the Rule proposal and the proposed Rule put forward by NEMMCO (see section 1 of this determination);
- submissions received (see sections 4 and 5 of this determination); and
- the requirements under the NEL (see section 3 of this determination).

The Commission has applied the statutory Rule making test and for the reasons set out in section 6 of this final Rule determination, is satisfied that the final Rule is likely to contribute to the achievement of the NEM objective.

3. Requirements under the NEL

3.1 The Rule making test

The NEL requires the Commission to apply the Rule making test in its analysis and assessment of a Rule proposal at the draft determination phase of the Rule making process. The Rule making test states:

- (1) The AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective.
- (2) For the purposes of subsection (1), the AEMC may give such weight to any aspect of the national electricity market objective as it considers appropriate in all the circumstances, having regard to any relevant MCE statement of policy principles. (s.88 NEL)

The NEM objective is at the centre of the Rule making test and is set out in section 7 of the NEL:

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.

The Second Reading Speech for the new NEL also provides guidance as to the way in which the NEM objective is to be understood:

The market objective is an economic concept and should be interpreted as such. For example, investment in and use of, electricity services will be efficient when services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.

The long term interests of consumers of electricity requires the economic welfare of consumers, over the long term, to be maximised. If the NEM is efficient in an economic sense the long term interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximised. (Second Reading Speech for new NEL – emphasis added)

In summary, the Rule making test imposes the following requirements on the Commission in preparing a draft Rule determination:

- the Commission must be satisfied that a Rule that is to be made will or is likely to contribute to the achievement of the NEM objective;
- the NEM objective is to be understood and interpreted as an economic objective;
- the Commission may only make a Rule if it is satisfied in accordance with the Rule making test;

- the Commission is empowered to give weight to any aspect of the NEM objective as it considers appropriate in the factual circumstances presented by particular Rule proposals;
- in weighting aspects of the NEM objective, the Commission must have regard to any relevant MCE statement of policy principles; and
- the Commission must set out the reasons as to whether it is satisfied as to the Rule making test in its draft determination in relation to a proposal for a Rule (s.99(2) NEL).

3.2 Content of a Final Rule Determination

A final Rule determination must contain a statement of reasons of the Commission as to whether or not it should make the proposed Rule or another Rule.

The statement of reasons must (at least) include:

1. reasons as to whether the Commission is satisfied the proposed Rule or the other Rule (if any) will or is likely to contribute to the achievement of the NEM objective;
2. reasons having regard to any relevant Ministerial Council on Energy (MCE) statement of policy principles; and
3. in the case where the proposed Rule or other Rule is a proposed jurisdictional derogation, the reasons having regard to the matters specified in s.89.

If the Commission determines to make a Rule, the final Rule determination must contain the Rule to be made. The final Rule determination must also contain any other matters prescribed by the Regulations.

4. Consultation process

As noted in section 1, following a recommendation from WETAG, prior to lodging its Rule change proposal with NECA, NEMMCO consulted with industry through its DPRG and with wind generators both represented and not represented in that group. The DPRG included representation from the National Generators Forum (NGF), the Electricity Retailers Association of Australia (ERAA), network businesses, NECA and NEMMCO itself.

Following receipt of the (then) Code change proposal on 6 April 2005, NECA's Code Change Panel invited submissions from interested parties. Three were received from the NGF, TXU and Origin Energy by 25 May 2005. All were supportive of the core thrust of the proposed changes although each recommended a number of alterations.

Under the transitional provisions of the NEL, current Code change proposals that had not been finalised as at the date of commencement of the Commission on 1 July 2005, are to be treated as Rule making requests under the newly amended NEL, and are to be progressed by the Commission.

The Commission made an assessment that the (now) Rule proposal meets the content requirements for a proposal under the new NEL.

Under the transitional powers, the Commission may decide to dispense with a step in the Rule making process if it is of the opinion that it duplicates a step that was taken as part of the Code change process. The Commission notes that the proposal had already been the subject of consultation by the previous Code Change Panel and considered that it would be appropriate to accept the submissions received in response to that consultation as if they had been received by the Commission in the first stage of the Rule making process.

Accordingly, the Commission made a draft Rule determination on 20 September 2005. That draft Rule determination and accompanying notice under s.99 of the NEL were published on 22 September 2005.

Submissions on the draft Rule determination closed on 4 November 2005. Two submissions were received, one from NEMMCO and one from the NGF.

In accordance with s.101 of the NEL, any interested person or body may request the Commission to hold a hearing in relation to the draft Rule determination. No such request was received.

5. Matters raised in analysis and consultation

As noted in section 4 of this determination, NECA's Code Change Panel received three submissions in relation to NEMMCO's proposal. All were supportive of the core thrust of the proposed changes although each recommended a number of alterations. Submissions were received from the NGF and NEMMCO in relation to the Draft Determination, both seeking changes. This section addresses all of those recommendations as well as issues that have emerged during the Commission's analysis of the proposal.

5.1 *Inclusion of forecast dispatch interval data*

What the proponent said

NEMMCO proposed a change to clause 3.13.4 of the Rules to enable it to publish details of aggregated actual non-scheduled generation above 30 MW for each region following each 5 minute dispatch interval. This would assist in enhancing market transparency and enabling market participants to continue to model and understand the dynamics of consumer demand (the demand to be met by both scheduled and non-scheduled generation).

What the submissions said

The NGF, TXU and Origin Energy endorsed NEMMCO's proposal and suggested that it be enhanced to require NEMMCO to also publish at the end of each dispatch interval the forecast aggregate non-scheduled generation used for that interval. All three claimed that having both the forecast and the actual information together would further enhance participants' ability to understand and address consumer demand.

It was acknowledged by the NGF that, at present, the forecast data would be the same as the actual data NEMMCO proposes to publish. However, the NGF also stated that, in the future, the potential for refinements to short term wind farm forecasting or the installation of significant non-scheduled generation other than wind farms may lead to differences between the two. Thus, the proposed enhancement would serve to future proof the Rules.

The Commission's consideration and reasoning

The Commission agrees that publication of the forecast allowance for non-scheduled generation would, together with the historic data, be likely to assist market participants in modelling the forecast demand for scheduled generation required to satisfy forecast total demand. In particular, that improved modelling may, as a consequence, enhance the decisions of scheduled generators whether or not to commit to and bid into the spot market.

NEMMCO has advised that the changes will involve negligible additional cost.

The Commission's finding in relation to this issue

For the reasons set out above, the Commission accepts as reasonable the proposals to publish details of forecast and actual aggregated non-scheduled generation information in the dispatch interval timeframe.

5.2 Inclusion of all available data

What the proponent said

As noted in section 1, NEMMCO's proposal is to publish:

- for MT PASA, ST PASA and pre-dispatch, the volume allowance, aggregated for each region, for non-scheduled generation made by NEMMCO in its forecasts of the demand to be met by scheduled generation;
- for five minute dispatch, actual non-scheduled generation aggregated for each region (where such units or generating systems are greater than 30MW) within 5 minutes of each time NEMMCO runs the dispatch algorithm; and
- actual generation for each non-scheduled generating unit or non-scheduled generating system (greater than 30MW) for the previous trading day.

NEMMCO did not make explicit the reason for the greater than 30MW criterion in relation to the second and third proposed changes other than referring to the desirability of maintaining consistency with the existing Rules as they apply to scheduled generation.

What the submissions said

The NGF, supported by TXU, submitted that it would be preferable that NEMMCO publish actual generation information for all non-scheduled generation that it has available, including for non-scheduled generating systems that are less than 30MW in size. This proposal relates to both NEMMCO's proposed new clause 3.13.4(s) under which regional aggregates of actual non-scheduled generation would be published every five minutes and clause 3.13.4(q) under which the actual generation from non-scheduled units or systems would be published the following day.

The parties argued that, while not currently the case in the market as a whole, the impact of this change may become material if a significant number of small non-scheduled generating units or systems arise in any market region. The NGF cited Tasmania as an example, where they argued that approximately 85MW of existing non-scheduled generation would remain unreported under NEMMCO's original proposal and that this is a significant proportion of the minimum regional demand of about 900MW.

In its response to the Draft Determination, NEMMCO indicated that there are five non-scheduled generators greater than 30MW in size that currently do not have the capability to provide other than limited information to the market operator. None of these are wind farms. NEMMCO submitted that, if the Commission agreed that it should be required to publish only the data it has available to it, irrespective of generator size, then the Draft Rule would need to be amended to clarify this.

The Commission's considerations

At present, NEMMCO requires only limited information from generators of less than 30MW in size. The Commission understands that this information is not at present used for forecasting but for other purposes, such as network planning and network operations.

In discussions with the Commission, NEMMCO accepted that publication of information for non-scheduled generation units of less than 30 MW would enhance the quality of information made available to the market but noted that the value of this information would diminish as the reporting size threshold was reduced. It confirmed that there would be negligible additional cost incurred in publishing information about plants it takes into account in making its forecasts.

Consistent with its reasoning in section 5.1 above, the Commission considers that publication of the information would be likely to have value to participants. In particular, it would provide participants with greater transparency of one of the components of the scheduled demand that could be taken into account in participants' own forecasting processes.

However, the Commission agrees with NEMMCO that the value obtained may not be great for very small generating plant and that the availability of that information may vary from plant to plant. The number of smaller generating systems could also become large in the future, giving rise to large amounts of data if it is all published on a generating unit or generating system basis. There may therefore be merit in making provision for a degree of aggregation of data in respect of smaller plant.

Normally, generators of 30MW or greater in size are required to provide operational metering data to NEMMCO. However, NEMMCO has indicated that there are several non-scheduled generators of that or larger size that currently do not have the capability to do so. None of the five are wind farms. It has also indicated in subsequent discussions that there would be a cost to those generators to build that capability.

The Commission notes that one of the reasons for the Rule change proposal was to put in place information disclosure requirements for non-scheduled generation, the main driver being the increasing development of wind generation. It also notes that a key aspect of this determination has been to allow information to be released by, rather than to compel its provision to, NEMMCO. Accordingly, and consistent with its view concerning the availability of information from smaller generators set out above, the Commission does not, as part of the current Rule change, propose to require NEMMCO to publish operational information with respect to existing non-scheduled generators where the market operator does not have that information available.

The Commission also notes that the NGF and TXU proposal would require NEMMCO to publish *any* information it has available to it rather than the specific information used to determine its forecast allowance for non-scheduled generation. Such an arrangement may give rise to a lack of consistency between actual non-scheduled generation information and

the basis on which non-scheduled generation forecasts are determined, which may work against the purpose of publishing the information in the first place. On the other hand, consistency would not be guaranteed by the NEMMCO proposal either, if it included non-scheduled generation less than 30MW in its forecast allowances, but only published actual generation for generators larger than 30MW in size.

If NEMMCO was required to only publish actual generation of non-scheduled plant that it actually uses in one or more of its forecasting processes, regardless of the 30MW criterion, then participants may be denied access to information that could be useful for their own forecasting purposes. It is also arguable that if NEMMCO is not using all non-scheduled generation information available to it in determining its forecast allowances, then the allowances would not be as accurate as they could be.

On the basis of the above considerations, the actual / forecast information consistency is a matter the Commission considers will arise regardless of whether the 30MW threshold is maintained in NEMMCO's proposal. It will need to be managed through appropriate transparency and documentation of the processes, which is provided for in the rules at 3.7.2(g) (MT PASA), 3.7.3(j) (ST PASA), 3.8.20(i) (pre-dispatch) and 3.8.21(l) (five-minute dispatch).

The Commission's finding in relation to this issue

On balance, the Commission accepts the enhancement raised in submissions to include information available to NEMMCO concerning non-scheduled generation in terms of the five minute dispatch and next trading day publication timeframes. The Commission has amended the Draft Rule to make it clear that this applies irrespective of generator size. However, in respect of the information to be published the next trading day, the Commission considers that discretion should exist for the information to be aggregated where large numbers of small generating systems, less than 30 MW in size, are involved.

5.3 Removal of "most probable"

What the proponent said

Clause 3.7.2(f) of the Rules imposes an obligation on NEMMCO to prepare and publish MT PASA information. This includes 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.

NEMMCO proposes to add to that information details of any allowance, aggregated on a regional basis, made in the forecasts for non-scheduled generation. In addition, it proposes to remove the words "most probable" from the obligation. NEMMCO stated in its application that the rationale for removing the words was to clarify the Rules.

What the submissions said

The NGF, supported by TXU, opposed removing the words "most probable" from clause 3.7.2(f). It argued that their removal was not relevant to the stated intent of the Rule change,

namely, the provision of information in respect of non-scheduled generation, and that the reason for the change was not satisfactorily explained in NEMMCO's proposal. The NGF pointed out that the wording in question is relevant to the way that NEMMCO calculates its medium term PASA load forecasts:

The current wording of the [Rules] 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 [Rules].

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 Commission's consideration and reasoning

While the Commission is interested in clarity in the Rules, a key question is also how removal of the words contributes to the issue that forms the basis of the Rule change proposal. NEMMCO's explanation in its original proposal was that the change was to clarify the Rules but did not indicate how this related to the core issue. Based on discussion with NEMMCO, it is understood that demand forecasts in NEMMCO's MT PASA process represent 10% probability of exceedance values to align with reliability management processes, and that consideration is being given to also publishing 50% probability of exceedance values.

The Commission also notes the NGF's concern that removal of the words "most probable" would arguably allow NEMMCO greater latitude in terms of the basis on which it prepares its MT PASA forecasts. This of itself does not establish that any change in that basis would lead to a negative impact on market outcomes.

Notwithstanding the above, it is not clear to the Commission that allowing NEMMCO to publish the allowance it makes in MT PASA forecasts for non-scheduled generation is dependent on for its success upon removal of the words "most probable". Concerns raised by the NGF, though not entirely clear in themselves, indicate that some stakeholders view this part of the proposal as more significant than one of mere clarification. In subsequent discussions, NEMMCO indicated that it was willing not to progress the change in view of the submissions received on this point.

In a related matter, NEMMCO proposed that the word "peak" be removed from the clause 3.13.4(f) obligation in relation to pre-dispatch forecasting set out above. NEMMCO did not provide a reason for this particular change in its original proposal. The Commission understands that information that forms the pre-dispatch schedule represents average half hourly values. On this basis, the reference to "peak" would be unnecessary. The form of non-scheduled information to be published by NEMMCO under this Rule change proposal should ideally be clear in form, and consistent with industry expectations, and removal of the

word “peak” would be helpful in this regard. Furthermore, it is noted that in contrast to the MT PASA matter discussed above, no concern was raised in submissions on this matter.

Finally, NEMMCO proposed that actual generation for non-scheduled generation should be included in the information required to be published by NEMMCO the next trading day under Rules 3.13.4(q). Under that Rule as it currently stands, the market operator is required to publish information in relation to dispatched scheduled generation. NEMMCO does not dispatch non-scheduled generation and, in its application, claimed that the appropriate requirement in relation to non-scheduled generation was to publish data on actual generation. This position was supported in submissions.

NEMMCO also proposed to include a requirement to publish actual information in relation to scheduled generation. It has confirmed that it in fact already does so and that its proposal would bring the Rules into alignment with current practice. The Commission notes that the proposal would also promote consistency in the Rules between the scheduled and non-scheduled generation requirements. No concerns were raised in submissions in relation to the proposal.

The Commission’s finding in relation to this issue

The Commission considers that the words “most probable” should not be removed from clause 3.7.2(f) under this Rule change proposal. The Commission is however satisfied that the proposal to remove the word “peak” from 3.13.4(f) and that the proposal to include actual generation in the information published as part of next-day historic information should both proceed. The Commission has adjusted those proposed changes accordingly in its draft Rule.

5.4 Inclusion of total underlying demand

What the submissions said

In its response to the Draft Determination, the NGF noted that the Draft Rule requires NEMMCO to publish the allowance it makes for non-scheduled generation and the forecast demand to be served by scheduled generation as two separate figures. It submitted that NEMMCO should also be required to publish a single combined number on the basis that this would make clearer the total underlying system demand. It claimed there would be a number of benefits in doing so including enhancing market transparency, facilitating historical demand analysis, supporting contractual activity, assisting trading and operational decisions and improving certainty.

The Commission’s consideration and reasoning

Having accepted that NEMMCO should be required to publish information as to non-scheduled generation for the timeframes sought, the Commission also agrees that the relationship between that information and the material that NEMMCO is currently required to publish in respect of scheduled generation should be as clear as possible in the Rules.

The Commission accepts that the NGF's suggestion that NEMMCO publish a single total figure comprising the two kinds of information would, in principle, enhance that transparency.

There are a number of ways to implement that approach in the Rules depending on the (PASA, pre-dispatch, 5 minute dispatch and next day historic) timeframe in question. In discussions with the Commission, the NGF clarified its preferred methodology for constructing a total demand figure for each of those timeframes. The NGF also sought to introduce the publication in real time of aggregated regional demand information for both scheduled and non-scheduled generation on a trading interval basis in order to assist with particular settlement calculations. The Commission has incorporated that enhancement in its final Rule.

NEMMCO indicated that, with one exception, it would be able to implement the changes to the Rules arising from the Commission's final determination as part of its existing system software. However, the changes required to publish the figures representing total underlying demand will involve additional software changes and will take several months to implement.

The Commission notes that these changes have arisen as part of the final determination process. It sought the NGF's view as to whether imposing a requirement that NEMMCO do so by no later than 1 July 2006 was appropriate. The NGF agreed and the Commission has embodied that requirement in the Rule.

In response to a request by the Commission, the NGF provided further information to the Commission in support of its submission on the Draft Determination. The Commission wishes to address one claim made by the NGF in the further information that it provided. This was that, given the increasing amount of non-scheduled generation, the failure to explicitly publish a total underlying demand figure would be likely to have adverse consequences for counterparties to an electricity contract that continued to define "demand" by reference to the use of that term in the Rules that are the subject of this determination, namely, as demand to be met by scheduled generation. In the Commission's view, the material provided by the NGF was insufficient to warrant the conclusion that existing contracts cannot be amended to accommodate the Rules as they are updated from time to time. To take the NGF's argument to its logical conclusion would mean that the Rules themselves would need to change to ensure that they reflected a broad range of contracts, perhaps after they had been entered into, something arguably that would be an unworkable proposition.

The Commission's finding in relation to this issue

The Commission agrees that the inclusion of figures representing total underlying demand enhances the transparency of the information provided to the market by NEMMCO. It has incorporated the relevant changes in the Rule and provided for them to commence on 1 July 2006, a period that will allow NEMMCO adequate time to reflect the changes in market systems.

5.5 Inclusion of additional factors

What the submissions said

In its response to the Draft Determination, the NGF suggested that NEMMCO also be required to publish the allowances that it makes for non-scheduled generation in the generator availability and projected regional supply surpluses and/or deficits information it publishes for the short-term PASA and pre-dispatch timeframes. Broadly, the change is designed to ensure the consistent treatment of scheduled and non-scheduled generation. In particular, the NGF submitted that, as wind forecasting technology improves in the future, it will become increasingly important that the Rules ensure that the way or ways in which NEMMCO determines those allowances for non-scheduled generation are transparent.

The Commission's consideration and reasoning

Arguably, the NGF's proposal to require NEMMCO to publish the allowances it makes for non-scheduled generation with respect to generator availability and the calculation of regional supply surpluses and/or deficits will be addressed by the current Rule change since, in theory, those allowances would be the same as the allowance NEMMCO makes for non-scheduled generation when forecasting demand. Indeed, the Commission finds it difficult to see why there would be a reason for them to differ: if NEMMCO is aware that the forecast or available amount of non-scheduled generation should change, then it should adjust both the demand and the availability allowances by the same amount.

The NGF suggested that the future development of wind forecasting technologies may provide such a reason. The Commission sought information from NEMMCO as to the prospect for developing the requisite forecasting solutions. NEMMCO advised that those solutions are in the research stage and may take years to progress.

Irrespective, the fact is that NEMMCO necessarily exercises its judgement in making its allowances for non-scheduled generation now. While in theory (and, the Commission understands, in current practice) there may no difference in the demand and availability allowances that NEMMCO makes, the Commission considers it appropriate to ensure that information concerning the way or ways in which the market operator does so is available to participants.

The Rule change proposal submitted by the NGF triggers the requirements on NEMMCO to make available information as to how it exercises those judgements. Those requirements are contained in Rules cl. 3.7.3(j) and 3.8.20(i) in respect of short-term PASA and pre-dispatch, respectively. NEMMCO indicated that, as the changes had arisen from a submission in response to the Commission's draft determination, the associated market software changes would require several months to implement.

The Commission's finding in relation to this issue

The Commission agrees it is appropriate that the Rules be changed to require that NEMMCO publishes information as to the allowances it makes for non-scheduled generation with respect to availability and the calculation of regional supply surpluses and/or

deficits as well as information as to how it determines those allowances. The Commission has provided for the changes to commence on 1 July 2006, a period that will allow NEMMCO adequate time to reflect those changes in market systems.

5.6 Summary of differences between the proposed and the final Rule

Arising from the above considerations, the Commission has determined to make the following changes to NEMMCO's original proposed Rule in formulating the final Rule that is considered in light of the statutory Rule making test:

- removing the references in clauses 3.13.4(q) and 3.13.4(s) to non-scheduled generating units or generating systems comprising of non-scheduled generating units having a combined nameplate rating greater than 30MW;
- including in clause 3.13.4(t) discretion for NEMMCO to publish actual generation from generating units or systems that are smaller than 30MW in aggregated form;
- including in clause 3.13.4(u) the requirement that NEMMCO publish the aggregate regional forecasts of, and actual generation for, non-scheduled generation used in the dispatch run;
- including in clause 3.13.4(x) the requirement that NEMMCO publish aggregate regional demand data for each trading interval;
- retaining the words “most probable” in clause 3.7.2(f)(1);
- including in clauses 3.7.3(h) and 3.13.4(f) the requirement that, from 1 July 2006, NEMMCO publish the aggregated allowances it makes for non-scheduled generation with respect to generator availability and projected regional supply surpluses and/or deficits; and
- including, the requirement that, from 1 July 2006, NEMMCO publish for each relevant timeframe a figure representing total underlying demand.

In addition to these changes, as identified above, the Commission has modified the wording of parts of the following Rules and proposed Rules to improve their effectiveness as Rules, or the consistency of drafting.

6. Commission's reasons for determination in terms of the Rule making test

The Rule-making test is set out in detail in section 3 of this report and requires the Commission to be satisfied that a Rule that it proposes to make will contribute to the achievement of the NEM objective. The NEM objective is concerned with promoting the efficiency of the NEM in an economic and operational sense for the long term interests of consumers of electricity.

6.1 Assessment against Rule making test

Market participants require relevant market information in order to make efficient trading, operating and investment decisions. The provision of relevant, accurate and timely forecast and historic information by NEMMCO to the marketplace is therefore central to the delivery of efficient market outcomes. Conversely, the absence of information needed to inform efficient decision-making by market participants can undermine the efficient performance of the energy market.

Until recently, there has been little need for NEMMCO to publish information in respect of non-scheduled generation because the amount of that generation as a proportion of the market has been small. However, the Commission accepts that the recent increase in wind power based non-scheduled generation has introduced a greater level of uncertainty for market participants in their capacity to anticipate the market's requirements for scheduled generation. It has therefore concluded that a Rule change requiring NEMMCO to provide forecast and historical information to market participants will improve the efficiency of decision-making by market participants and so contribute to the more efficient performance of the energy market.

The Commission considers that the provision of this information will be of particular significance for the more efficient delivery of the following services:

- provision of wholesale electricity; and
- the purchase of electricity.

The Commission is of the view that the implications of the proposed Rule for other services such as electricity transmission, distribution and ancillary services are likely to be less material.

The Commission has applied the Rule making test to the proposed new Rule, as modified by the outcomes of analysis and discussion in section 5 above (the draft Rule). In applying that test, the Commission has considered the following matters.

In terms of providing wholesale electricity, generators rely on understanding demand variability to efficiently price the financial risk management instruments (such as caps) that they sell to counterparties. Increasingly, in order to do so, they must also understand the implications of the growing significance and variability of non-scheduled generation for the

proportion of consumer demand remaining to be satisfied by scheduled generation. Efficient pricing of electricity in the spot and contract markets is in the long term interests of consumers of electricity because prices that more accurately reflect underlying electricity market conditions provide more efficient signals for both operational and investment responses.

Having sold financial instruments, peaking plant are likely to rely on an ability to foreshadow variations in generation (such as those caused by variations in wind generation) in order to predict the need for physical operation. An improved ability to anticipate the need for physical generation responses will serve the long term interests of consumers of electricity by more efficient dispatch and pricing outcomes in the wholesale market and enhancing the reliability of supply.

Similar considerations apply in respect of purchasing electricity. In response to more accurate forecasts of the demand to be met by scheduled generation and information as to the impact of non-scheduled generation, retailers and individual consumers will be better placed to purchase appropriately structured financial management instruments from generators and to adjust their load requirements in response to forecast demand.

Overall, the Commission is of the view that the quality of the overall information environment available to market participants will be improved if NEMMCO is required to publish the proposed information in relation to non-scheduled generation.

6.2 Summary of reasons

In view of the above discussion, the Commission is satisfied that the Rule, which includes the modifications discussed in section 5, is likely to contribute to the achievement of the NEM objective for the following reasons:

- investment decisions for the provision of energy will be likely to be based on higher quality and more reliable information that better reflects the value of the services; and
- energy consumers will be likely to face prices that are more efficient because they better reflect the market value of the service.

Attachment 1: Final Rule