



Australian Energy Market Commission

## **DRAFT RULE DETERMINATION**

National Electricity Amendment (AEMO access to demand forecasting information) Rule 2015

**Rule proponent**  
COAG Energy Council

30 July 2015

**RULE  
CHANGE**

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## **About the AEMC**

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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## Summary

The Australian Energy Market Commission has made a draft rule that explicitly allows the Australian Energy Market Operator (AEMO) to prepare demand forecasts at the connection point and regional level<sup>1</sup> as part of its National Transmission Planner functions.

The draft rule, which is a more preferable rule, is the result of a rule change request from the COAG Energy Council.

There is currently some doubt that AEMO can compel persons to provide connection point data and information to enable it to improve its demand forecasts.

As proposed by the COAG Energy Council, the draft rule explicitly recognises demand forecasting at the connection point and regional level as a National Transmission Planner function in the NER. As a result, there is no doubt that AEMO can compel persons to provide the relevant information using its information gathering powers in the National Electricity Law, namely market information orders and market information notices.

By putting it beyond doubt that AEMO has access to connection point data, the draft rule has the potential to improve AEMO's long term electricity demand forecasts as it will enable it to develop a better understanding of the increased diversity of activities occurring within distribution networks.

These improvements to AEMO's long term demand forecasts may lead to improved transmission network planning forecasts by AEMO and potentially more efficient investment and operation of electricity services by network service providers and other energy market stakeholders such as generators and customers, to the extent that they use the forecasts. Improved demand forecasts may also lead to more informed revenue determinations by the Australian Energy Regulator (AER) which may make use of the forecasts.

Given that connection point information will also inform AEMO's regional level forecasts, the draft rule also recognises demand forecasting at the regional level as a National Transmission Planner function for AEMO. This is consistent with the proposed rule.

In addition to expressly allowing AEMO to develop connection point and regional demand forecasts, the draft rule also requires AEMO to publish any forecasts it prepares and the information it uses to prepare the forecasts, subject to any confidentiality of the information. This information must be included in the National Transmission Network Development Plan database.

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<sup>1</sup> Regional level forecasting refers to forecasting which is effectively undertaken at a state level, there being five regions currently in the National Electricity Market: Queensland, New South Wales including the ACT, Victoria, Tasmania and South Australia. Forecasting at the connection point level is undertaken at a greater level of granularity within a region's transmission network.

Publication of this information will provide greater transparency as to how the forecasts were calculated which may provide greater confidence in the demand forecasts. This, in turn, may make it more likely that the draft more preferable rule will lead to better investment in and operation of electricity services by network service providers and other energy market stakeholders. It may also give these stakeholders access to new information and enable them to develop their own forecasts should they wish to do so.

This aspect of the draft rule was not included in the COAG Energy Council's rule change request but has been included in response to stakeholder comments on the rule change request.

The draft rule is also different to the proposed rule in that it does not include specific provisions regarding the exchange of information and consultation between the AER and AEMO in relation to the forecasts as the National Electricity Law sufficiently addresses such issues. Nor has it considered it necessary to supplement AEMO's information gathering powers in the National Electricity Law with an obligation in the NER for network service providers to provide assistance to AEMO.

Most stakeholders were generally supportive of the rule change request during consultation.

It is proposed that, if made, the rule would commence at the publication of the final rule determination.

Submissions on this draft rule determination and draft rule are to be made by 10 September 2015.

# Contents

<b>1</b>	<b>The COAG Energy Council's rule change request .....</b>	<b>1</b>
1.1	The rule change request .....	1
1.2	Current arrangements .....	1
1.3	Reasons for the rule change request .....	2
1.4	Solution proposed in the rule change request.....	3
1.5	The rule making process to date .....	4
1.6	Consultation on draft rule determination.....	4
<b>2</b>	<b>Draft rule determination .....</b>	<b>6</b>
2.1	Rule making test.....	6
2.2	Assessment framework .....	7
2.3	Summary of reasons .....	7
2.4	Strategic priority.....	8
<b>3</b>	<b>Is there a problem?.....</b>	<b>9</b>
3.1	Will connection point forecasts prepared by AEMO be useful? .....	9
3.2	Is AEMO the appropriate body to collect the information and prepare the forecasts? .....	11
3.3	Can AEMO already collect connection point information and data under the NER?12	
<b>4</b>	<b>What level of forecasting should AEMO be able to undertake? .....</b>	<b>14</b>
4.1	The COAG Energy Council's view .....	14
4.2	Stakeholder views .....	14
4.3	Analysis and conclusions.....	15
<b>5</b>	<b>Should the demand forecasts and the information used to develop the forecasts be published?.....</b>	<b>16</b>
5.1	The COAG Energy Council's view .....	16
5.2	Stakeholder views .....	16
5.3	Analysis and conclusions.....	16
<b>6</b>	<b>AEMO coordination with the AER.....</b>	<b>18</b>
6.1	The COAG Energy Council's view .....	18

6.2	Stakeholder views .....	18
6.3	Analysis and conclusions .....	18
<b>7</b>	<b>Providing assistance to AEMO.....</b>	<b>20</b>
7.1	The COAG Energy Council's view .....	20
7.2	Stakeholder views .....	20
7.3	Analysis and conclusions.....	20
	<b>Abbreviations.....</b>	<b>22</b>
<b>A</b>	<b>AEMO's information gathering powers in the NEL.....</b>	<b>23</b>
<b>B</b>	<b>Summary of other issues raised in submissions.....</b>	<b>24</b>
<b>C</b>	<b>Legal requirements under the NEL .....</b>	<b>25</b>
C.1	Draft rule determination .....	25
C.2	Power to make the rule .....	25
C.3	Commission's considerations .....	25
C.4	Civil penalties .....	26

# 1 The COAG Energy Council's rule change request

## 1.1 The rule change request

On 2 February 2015, the COAG Energy Council made a request to the Australian Energy Market Commission (AEMC or Commission) to make a rule regarding the Australian Energy Market Operator's (AEMO's) access to demand forecasting information (rule change request).

## 1.2 Current arrangements

For some time, AEMO has developed long term forecasts of demand at the regional level.<sup>2</sup> AEMO currently forecasts demand for each National Electricity Market (NEM) region over a 20 year period. It publishes these forecasts annually in its national electricity forecasting report.<sup>3</sup>

These regional level forecasts inform the National Transmission Network Development Plan (NTNDP) which provides AEMO's view of the efficient development of the transmission network in the NEM for the next 20 years. The development of the NTNDP is a National Transmission Planner (NTP) function for AEMO under the National Electricity Law (NEL).<sup>4</sup>

The forecasts also inform AEMO's electricity statement of opportunities which provides AEMO's assessment of supply adequacy in the NEM for the next 10 years. AEMO is required to prepare this report under the National Electricity Rules (NER).<sup>5</sup>

The regional level demand forecasts are developed using a "top down" econometric process. This involves taking historical levels of regional demand and projecting them forward using assumptions including on gross state product, specific expansions or contractions to major industrial loads, energy efficiency improvements and the uptake of emerging technologies such as solar panels. AEMO currently has access to a reasonably detailed level of information for developing regional demand forecasts through its market operator role.

More recently AEMO has begun to publish transmission connection point demand forecasts for each region in the NEM. These "bottom up" forecasts make use of historical and forecast demand information at transmission connection points and on the distribution network. AEMO is currently receiving much of the information required to prepare these forecasts from NSPs.

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<sup>2</sup> Regional level forecasting refers to forecasting which is effectively undertaken at a state level, there being five regions currently in the National Electricity Market: Queensland, New South Wales including the ACT, Victoria, Tasmania and South Australia.

<sup>3</sup> AEMO website, [www.aemo.com.au](http://www.aemo.com.au), viewed 20 July 2015.

<sup>4</sup> s. 49(2)(a) of the NEL.

<sup>5</sup> NER clauses 3.13.3(q).

AEMO has now published transmission connection point forecasts for all NEM regions.<sup>6</sup> AEMO states that it will update these transmission connection point demand forecasts annually.<sup>7</sup>

The transmission connection point forecasts have been prepared by AEMO as a result of the 2012 COAG endorsed energy reform package. As part of this package, the then Standing Council on Energy and Resources (SCER) requested AEMO to provide demand forecasts to the Australian Energy Regulator (AER) to enhance the AER's ability to assess demand forecasts submitted by network service providers as part of their regulatory proposals.<sup>8</sup> For similar reasons, the AEMC also recommended that AEMO produce transmission connection point demand forecasts for each region in the NEM in its transmission frameworks review final report in April 2013.<sup>9</sup>

As part of the 2012 reform package, the then SCER was also tasked with preparing a rule change request should AEMO not have access to the information required to prepare the connection point forecasts.<sup>10</sup> The result of this work is the current rule change request.

Related to this rule change request, the AEMC has recently completed an assessment of a rule change request aimed at improving demand side participation information provided to AEMO by registered participants.<sup>11</sup> The resulting final rule provides a process by which AEMO may obtain information on demand side participation from registered participants in the NEM.<sup>12</sup>

The rule commenced on 26 March 2015. AEMO must develop and publish the guidelines by no later than 26 September 2016.<sup>13</sup>

### **1.3 Reasons for the rule change request**

The COAG Energy Council submits that AEMO may not be able to compel persons to provide connection point data and information such that it can improve its demand forecasts.

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<sup>6</sup> In June 2015 AEMO published transmission connection point forecasts for Queensland. This completed the first set of transmission connection point forecasts for each region in the NEM.

<sup>7</sup> AEMO website, [www.aemo.com.au](http://www.aemo.com.au), viewed 10 July 2015.

<sup>8</sup> SCER, *COAG Energy Market Reform - Implementation Plan*, 7 December 2012, pp10-11.

<sup>9</sup> AEMC, *Transmission Frameworks Review Final Report*, 11 April 2013, pp145-146.

<sup>10</sup> SCER, *COAG Energy Market Reform - Implementation Plan*, 7 December 2012, pp10-11.

<sup>11</sup> AEMC, *Improving demand side participation information provided to AEMO by registered participants*, Final rule determination, 26 March 2015.

<sup>12</sup> *ibid.* pi.

<sup>13</sup> *ibid.*

It suggests that increased access to connection point information will enable AEMO to improve its long term demand forecasts which:

- will be used as an input into the NTNDP and inform other planning reports prepared by AEMO such as the electricity statement of opportunities;
- will help inform transmission network service providers' (TNSPs') investment decisions and enhance the ability of market participants more generally to identify and respond to investment issues; and
- may assist the Australian Energy Regulator (AER) to assess Network Service Providers' (NSPs') regulatory proposals as part of their revenue determination processes.<sup>14</sup>

In addition, it considers that AEMO's increased access to data will raise market participant confidence in the accuracy of AEMO's forecasts and planning reports.<sup>15</sup>

#### **1.4 Solution proposed in the rule change request**

The COAG Energy Council seeks to resolve the issue discussed above by proposing a rule to expressly recognise demand forecasting at the connection point and regional level as a NTP function for AEMO.<sup>16</sup>

As a consequence of this proposed change, the COAG Energy Council submits that it would be clear that AEMO would be able to use its existing information gathering powers in the NEL to compel persons to provide the information it requires to develop these demand forecasts.<sup>17,18</sup>

These information gathering powers are in the form of market information orders and market information notices which are similar to regulatory information orders and regulatory information notices that the AER can use to collect information for the purpose of its functions.<sup>19</sup> More information on AEMO's information gathering powers under the NEL is provided in Appendix A.

The COAG Energy Council's rule change request includes a proposed rule.<sup>20</sup>

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14 COAG Energy Council's rule change request, 30 January 2015, p5.

15 *ibid.* p8.

16 COAG Energy Council's rule change request, 30 January 2015, p3.

17 The NEL provides that AEMO can issue a market information instrument requesting information from a person or a class of persons if it considers it reasonably necessary to do so for the exercise of a relevant function, which includes the NTP functions set out in s. 49(2) of the NEL.

18 COAG Energy Council's rule change request, 30 January 2015.

19 The AER's general information gathering powers in the NEL are set out in Part 3 Division 3.

20 COAG Energy Council's rule change request, 30 January 2015, p6.

In addition to expressly recognising demand forecasting at the connection point and regional level as an NTP function for AEMO, the proposed rule:

- clarifies that AEMO may consult with the AER in developing the forecasts;
- requires the demand forecasts to be included in the NTNDP database; and
- requires AEMO to provide the demand forecasts to the AER upon the AER's request.<sup>21</sup>

The proposed rule also amends clause 5.20.5 of the NER to require NSPs to provide assistance that AEMO reasonably requests in connection with the performance of its NTP functions.<sup>22</sup> Currently this clause only places an obligation on jurisdictional planning bodies to provide assistance to AEMO.<sup>23</sup>

Finally, the proposed rule includes a minor drafting amendment in the heading to clause 5.20.1 of the NER.<sup>24</sup>

## 1.5 The rule making process to date

On 7 May 2015, the Commission published a notice advising of its commencement of the rule making process and the first round of consultation in respect of the rule change request.<sup>25</sup> A consultation paper identifying specific issues and questions for consultation was also published with the notice. Submissions closed on 4 June 2015.

The Commission received seven submissions as part of the first round of consultation. They are available on the AEMC website.<sup>26</sup> Issues raised in submissions and the Commission's response are generally set out in Chapters 3 to 7 of this draft rule determination. Some other issues raised in submissions and the Commission's response to these are set out in Appendix B.

## 1.6 Consultation on draft rule determination

The Commission invites submissions on this draft rule determination including the draft rule, by 10 September 2015.

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21 *ibid.* pp6-8.

22 *ibid.* pp6-7.

23 A jurisdictional planning body is defined in the NEL as "the entity nominated by the relevant Minister of a participating jurisdiction as having *transmission system* planning responsibility in that participating jurisdiction." According to AEMO's website the jurisdictional planning bodies are the TNSPs in each state except in Victoria where it is AEMO.

24 COAG Energy Council's rule change request, 30 January 2015, p6.

25 This notice was published under section 95 of the National Electricity Law (NEL).

26 [www.aemc.gov.au](http://www.aemc.gov.au)

Any person or body may request that the Commission hold a hearing in relation to the draft rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 6 August 2015.

Submissions and requests for a hearing should quote project number ERC0184 and may be lodged online at [www.aemc.gov.au](http://www.aemc.gov.au) or by mail to:

Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

## 2 Draft rule determination

The Commission's draft rule determination is to make a more preferable draft rule.

The more preferable draft rule explicitly provides that AEMO may develop demand forecasts at the connection point and regional level as a NTP function.

It also requires AEMO to publish in the NTNDP database any such forecasts it prepares and the information on which they are based.<sup>27</sup>

As a consequence of the draft rule, it will be clear that AEMO can use its information gathering powers in the NEL, namely market information orders and market information notices, to compel persons to provide detailed connection point data to inform the development of its demand forecasts.

The more preferable draft rule made by the Commission is attached to and published with this draft rule determination.

This chapter outlines:

- the Commission's rule making test for changes to the NER;
- the Commission's assessment framework for considering the rule change request; and
- the Commission's consideration of the more preferable draft rule against the national electricity objective (NEO).

Further information on the legal requirements for making this draft rule determination is set out in Appendix C.

### 2.1 Rule making test

Under the NEL the Commission 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 objective (NEO). This is the decision making framework that the Commission must apply.

The NEO is:

“to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.”

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<sup>27</sup> AEMO must treat any confidential information it receives in accordance with the NEL.

## 2.2 Assessment framework

The most relevant aspect of the NEO for the purpose of this rule change request is the efficient investment in, and operation of, electricity services, in particular the transmission networks in the NEM.

To determine whether the proposed rule, if made, is likely to promote the NEO the following issues were considered:

- **Potential for better informed investment and operational decisions.** Whether improving AEMO's demand forecasts may lead to improved planning forecasts by AEMO. To the extent they make use of the forecasts, whether energy market stakeholders can make more efficient investment and operational decisions.<sup>28</sup>

Whether giving the AER access to an improved set of forecasts of demand that are independent of the NSPs will lead to more informed revenue determinations by the AER.

- **Potential regulatory and administrative burden.** The potential regulatory and/or administrative burden on NSPs and AEMO that may arise if the proposed rule is implemented.

The proposed rule was assessed against the relevant counterfactual of not making the proposed change to the NER. That is, against the current situation where there is no explicit provision in the NER allowing AEMO to develop forecasts of demand at the connection point or (regional) state level as part of its NTP functions.

## 2.3 Summary of reasons

Having regard to the issues raised in the rule change request, the Commission is satisfied that the more preferable draft rule will, or is likely to, contribute to the achievement of the NEO for the following reasons:

- There is some doubt that AEMO can collect data and information at the connection point level to inform the development of its demand forecasts.
- Giving AEMO access to connection point data and information will allow AEMO to better understand the increased diversity of activities occurring within distribution networks which may allow AEMO to develop improved demand forecasts.
- Improvements to AEMO's long term demand forecasts may lead to improved transmission network planning forecasts by AEMO and potentially more efficient investment and operation of electricity services by network service providers and

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<sup>28</sup> In this context, other energy market stakeholders may include market participants, consumers and network service providers.

other energy market stakeholders such as generators and customers, to the extent that they use the forecasts.

- Improved demand forecasts may also lead to more informed revenue determinations by the Australian Energy Regulator (AER) which may make use of the forecasts.
- It is appropriate that AEMO develops the demand forecasts given that they inform its NTNDP. NSPs and the AER can continue to develop their own forecasts.
- As NSPs are currently providing AEMO with connection point information there is not expected to be a significant increase in administrative burden associated with explicitly allowing AEMO to prepare these forecasts as an NTP function.
- As connection point demand forecasts, developed from the "bottom up", will inform and help improve AEMO's regional level forecasts, developed from the "top down", the NER should also explicitly identify the preparation of regional level demand forecasts as an NTP function for AEMO. The regional level forecasts will also inform the connection point level forecasts.

The Commission is also satisfied that the draft more preferable rule will, or is likely to, better contribute to the NEO, compared to the proposed rule, because:

- Requiring AEMO to publish the information it uses to prepare the demand forecasts will provide transparency as to how AEMO calculates its demand forecasts. This may provide greater confidence in AEMO's demand forecasts which, in turn may make it more likely that the draft more preferable rule will lead to better investment and operation of electricity services by NSPs and other energy market stakeholders. It may also give NSPs and other energy market stakeholders access to new information and enable them to develop their own forecasts should they wish to do so.
- No explicit provisions in the NER are necessary to enable AEMO to consult with the AER about the development of the forecasts or to require AEMO to provide the forecasts to the AER upon the AER's request.
- Similarly, it is not necessary to supplement AEMO's information gathering powers in the NEL with an obligation in the NER for network service providers to provide assistance to AEMO.

## **2.4 Strategic priority**

This rule change request relates to the AEMC's strategic priority relating to market arrangements that encourage efficient investment and flexibility. This is because explicitly allowing AEMO to develop demand forecasts at the connection point and regional level as a NTP function may impact on efficient investment in electricity networks in the NEM, particularly transmission networks.

### 3 Is there a problem?

This chapter considers:

- whether connection point demand forecasts prepared by AEMO will be useful;
- whether AEMO is the appropriate body to collect the information and prepare the forecasts; and
- whether AEMO can already collect connection point information under the NER.

#### 3.1 Will connection point forecasts prepared by AEMO be useful?

##### 3.1.1 The COAG Energy Council's view

The COAG Energy Council submits that the demand forecasts that AEMO may prepare if the proposed rule were to be made:

- would be used as an input into the NTNDP and inform other planning reports prepared by AEMO such as the electricity statement of opportunities;
- would enhance the ability of the market more generally to identify and respond to investment issues; and
- may assist the AER to assess NSPs' regulatory proposals as part of their revenue determination processes.<sup>29</sup>

It considers that giving AEMO increased access to data will raise market participant confidence in the accuracy of AEMO's forecasts and planning reports.<sup>30</sup>

The COAG Energy Council identifies some costs that may be incurred as a result of allowing AEMO to collect connection point data and information, in particular costs to NSPs in providing information to AEMO.<sup>31</sup>

##### 3.1.2 Stakeholder views

Where commented, most stakeholders consider that giving AEMO access to information to develop connection point forecasts would enable AEMO to prepare improved planning forecasts for the NTNDP.<sup>32</sup> However, GDF Suez considers it is not

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<sup>29</sup> The COAG Energy Council's rule change request, 30 January 2015, p5.

<sup>30</sup> *ibid.* p8.

<sup>31</sup> *ibid.* pp8-9.

<sup>32</sup> Submissions to consultation paper: AEMO, 4 June 2015, p2; AER, 15 June 2015, p1; ENA, 4 June 2015, pp1,3.

clear that AEMO would require demand forecasts to the connection point level to enable it to prepare the NTNDP.<sup>33</sup>

The AER considers that connection point forecasts developed by AEMO to date have already helped produce better forecasts of capital expenditure requirements and, in turn, better informed investment decisions by NSPs.<sup>34</sup> On the other hand, the Energy Networks Association (ENA) queries the ability of AEMO's connection point forecasts to improve TNSPs' investment decisions noting the long lead times in planning investment.<sup>35</sup> Similarly, GDF Suez considers it is not clear that TNSPs would be better informed by connection point demand forecasts prepared by AEMO as they already have access to connection point information within their region of responsibility.<sup>36</sup> However, it considers there may be some benefit for market participants that do not already have access to such data.<sup>37</sup>

In relation to the demand forecasts being used by the AER, the AER submits that connection point demand forecasts developed by AEMO will assist the AER in assessing regulatory proposals from NSPs which it considers will also lead to more robust revenue determinations.<sup>38</sup> The ENA also supports the demand forecasts being available to the AER for the purpose of assessing NSPs' regulatory proposals.<sup>39</sup> GDF Suez considers it is not clear that connection point demand forecasts would assist the AER given that the AER can already request the relevant data and information from NSPs.<sup>40</sup>

### 3.1.3 Analysis and conclusion

Allowing AEMO to prepare connection point forecasts will give AEMO access to connection point data and information that will allow AEMO to better understand the activities occurring within distribution networks. This includes the increasing amount of embedded generation and the potential impact of emerging technologies such as storage.

A better understanding of the activities occurring within distribution networks may better inform demand and in turn, planning forecasts by AEMO. Better planning forecasts by AEMO in the NTNDP may lead to more efficient investment and operational decisions by NSPs and other energy market stakeholders, in particular TNSPs.

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33 GDF Suez submission to consultation paper, 4 June 2015, p2.

34 AER submission to consultation paper, 15 June 2015, p1.

35 ENA submission to consultation paper, 4 June 2015, p3.

36 GDF Suez submission to consultation paper, 4 June 2015, p2.

37 *ibid.* p3.

38 AER submission to consultation paper, 15 June 2015, p2.

39 ENA submission to consultation paper, 4 June 2015.

40 GDF Suez submission to consultation paper, 4 June 2015, p2.

NSPs and other energy market stakeholders may also use the demand forecasts to inform their planning and operational and investment decisions. In support of this view, the AER notes that TasNetworks used AEMO's forecasts to identify connection points that did not require augmentation in its most recent transmission revenue determination.<sup>41</sup>

In addition, the demand forecasts may be used by the AER to assess NSP forecasts in their regulatory proposals. The AER submits that it was able to confirm the validity of forecasts submitted by distribution network service providers (DNSPs) in New South Wales and Queensland, by reconciling with AEMO's forecasts.<sup>42</sup> Therefore, having access to an improved independent set of demand forecasts may enable the AER to make more informed revenue determinations.

As AEMO is already preparing connection point demand forecasts and NSPs are providing the information to support these, there is not expected to be a significant increase in administrative burden associated with explicitly allowing AEMO to prepare connection point forecasts as an NTP function.

In summary, the Commission considers that enabling AEMO to prepare connection point forecasts will be useful.

### **3.2 Is AEMO the appropriate body to collect the information and prepare the forecasts?**

#### **3.2.1 The COAG Energy Council's view**

The COAG Energy Council considers it appropriate that AEMO collects the information and prepares connection point demand forecasts.<sup>43</sup> It recognises that under the current arrangements the AER occasionally seeks independent forecasts during the revenue determination processes.<sup>44</sup>

#### **3.2.2 Stakeholder views**

Where commented, most stakeholders consider it appropriate for AEMO to develop connection point forecasts.<sup>45</sup> However, Energy Australia considers that NSPs are best placed to develop connection point forecasts. It considers the proposed rule may result in unnecessary duplication.<sup>46</sup>

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<sup>41</sup> AER submission to consultation paper, 15 June 2015, pp1-2.

<sup>42</sup> *ibid.* pp1-2.

<sup>43</sup> COAG Energy Council's rule change request, 30 January 2015.

<sup>44</sup> COAG Energy Council's rule change request, 30 January 2015, p10.

<sup>45</sup> Submissions to consultation paper: AER, 15 June 2015, pp3-4; ENA, 4 June 2015, pp3-4; GDF Suez, 4 June 2015, p3.

<sup>46</sup> Energy Australia submission to consultation paper, 4 June 2015, p1.

### **3.2.3 Analysis and conclusion**

It is appropriate that AEMO collect connection point data and information and prepare any forecasts that result from this. As discussed in section 3.1, AEMO may use this information to improve its demand forecasts which it uses to prepare the NTNDP.

In addition, the collection of connection point information and preparation of any connection point forecasts complements AEMO's development of regional forecasts which it has prepared for some time. This is because the regional, top down, forecasts and connection point, bottom up forecasts, inform one another.

The Commission recognises that NSPs may develop connection point forecasts for the purpose of developing their annual planning reports as noted by Energy Australia. However, allowing AEMO develop these forecasts enables consistency of approach to developing the forecasts across the NEM which may lead to more efficient planning decisions. In addition, allowing AEMO develop these forecasts will give the AER access to a set of connection point forecasts that is independent from the NSPs.

It should be noted that the draft more preferable rule would not prevent the AER from seeking independent demand forecasts from other sources for the purpose of regulatory determination processes should it wish to do so.

## **3.3 Can AEMO already collect connection point information and data under the NER?**

### **3.3.1 The COAG Energy Council's view**

As set out in section 1.3, the COAG Energy Council submits that AEMO may not currently have access to detailed connection point data and information so that it can improve its demand forecasts.

### **3.3.2 Stakeholder views**

Where commented, most stakeholders consider there is some doubt that AEMO can compel persons to provide connection point data and information and that this should be put beyond doubt in the NER.<sup>47</sup> In contrast, GDF Suez considers it is not clear that AEMO needs additional powers to prepare connection point forecasts noting that AEMO has already commenced publication of forecast connection point information.<sup>48</sup>

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<sup>47</sup> Submissions to consultation paper: AEMO, 4 June 2015, p2; AER, 15 June 2015, p3; ENA, 4 June 2015, p4.

<sup>48</sup> GDF Suez submission to consultation paper, 4 June 2015, p2.

### 3.3.3 Analysis and conclusion

The development of the NTNDP and the associated NTNDP database are NTP functions in the NEL. This allows AEMO to collect information relevant to these functions using its information gathering powers under the NEL.

However, as indicated in stakeholder submissions there is currently some doubt that AEMO can compel persons to provide connection point data and information to improve its demand forecasts.

This uncertainty arises as a result of AEMO being able to only issue a market information order or market information notice if it considers it is reasonably necessary to do so for the exercise of a relevant function.<sup>49</sup> That is, it may be argued that the collection of connection point data and information may not be necessary for AEMO to perform its current NTP functions.

For this reason, the Commission considers it appropriate to make it clear in the NER that AEMO can compel persons to provide connection point data and information.

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<sup>49</sup> S. 53(1) of the NEL.

## 4 What level of forecasting should AEMO be able to undertake?

This chapter considers whether AEMO's role in developing demand forecasts should be limited to the transmission connection point level and whether there is a need for the NER to reference demand forecasts at the regional level.<sup>50</sup>

### 4.1 The COAG Energy Council's view

The proposed rule explicitly allows AEMO to develop demand forecasts at the connection point and regional level.

A connection point is a defined term in the NER. It is defined as:

"The agreed point of supply established between Network Service Provider(s) and another Registered Participant, Non-Registered Customer or franchise customer".<sup>51</sup>

Regional is also a defined term in the NER. It is defined as:

"an area determined by the AEMC in accordance with Chapter 2A, being an area served by a particular part of the *transmission network* containing one or more major *load centres* or *generation centres* or both."<sup>52</sup>

Currently there are five regions in the NEM: Queensland, New South Wales, Victoria, Tasmania and South Australia.

### 4.2 Stakeholder views

The AER and AEMO consider the NER should include sufficient flexibility to enable AEMO to develop forecasts at levels lower than transmission connection points.<sup>53</sup> The AER submits that this may be required where a distribution network is heavily meshed, for example.<sup>54</sup> AEMO considers this is required to account for the changing nature of the electricity market.<sup>55</sup>

The AER considers it important that the NER refers to regional demand forecasts as well as connection point forecasts. It notes that the two forecasts are prepared through two distinct forecasting techniques. Regional forecasts are developed from the top

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<sup>50</sup> AEMC consultation paper, 7 May 2015, pp9-10.

<sup>51</sup> NER, Chapter 10.

<sup>52</sup> NER, Chapter 10.

<sup>53</sup> Submissions to consultation paper: AER, 15 June 2015, p1; AEMO, 15 June 2015, p2.

<sup>54</sup> AER submission to consultation paper, 15 June 2015, p1.

<sup>55</sup> AEMO submission to consultation paper, 15 June 2015, p2.

down using an econometric process. In contrast, connection point forecasts are developed from the bottom up.<sup>56</sup>

### 4.3 Analysis and conclusions

There may be instances where AEMO needs to understand demand at levels lower than the transmission level for the purpose of forecasting demand at the transmission connection point level. As identified by the AER, AEMO may need to understand demand at distribution zone substations to understand demand at the transmission connection point level where a distribution network is heavily meshed.<sup>57</sup> For this reason, it is not appropriate to restrict AEMO to only being able to develop forecasts at the transmission connection point level.

However, it is important to note that AEMO could not use its information gathering powers in the NEL to develop demand forecasts at points on a distribution network where this does not relate to planning and investment of a transmission network. This is because the function included by the more preferable draft rule will need to be interpreted in the context of the NTP functions.

The Commission considers it appropriate to explicitly allow AEMO to be able to prepare demand forecasts at a regional level. This recognises that some of the information collected at the connection point level will inform, and help to improve, AEMO's regional forecasts. The regional forecasts will also inform AEMO's connection point forecasts as identified by the AER.<sup>58</sup>

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<sup>56</sup> AER submission to consultation paper, 15 June 2015, p4.

<sup>57</sup> AER submission to consultation paper, 15 June 2015, p1.

<sup>58</sup> *ibid.* p4.

## **5 Should the demand forecasts and the information used to develop the forecasts be published?**

This chapter considers whether the demand forecasts should be published in the NTNDP and whether the information used to develop the forecasts should also be published by AEMO.

### **5.1 The COAG Energy Council's view**

As set out in section 1.1, the COAG Energy Council considers that AEMO should be required to include any demand forecasts it prepares in the NTNDP database. AEMO is currently required to establish and maintain this database and make it available to the public.<sup>59</sup> Clause 5.20.4(c) of the NER allows AEMO to establish a part of the database for confidential information.

### **5.2 Stakeholder views**

There was broad stakeholder support for publication of the demand forecasts in the NTNDP database.<sup>60</sup> The ENA and Grid Australia consider the NER should also require AEMO to share the information on which any forecasts are based with NSPs.<sup>61</sup>

### **5.3 Analysis and conclusions**

Any connection point and regional demand forecasts prepared by AEMO under its new NTP function should be published in the NTNDP database as provided for in the rule change request and supported by stakeholders.

Publishing the demand forecasts will provide transparency of the basis on which planning forecasts are determined in the NTNDP and thus may give stakeholders greater confidence in the NTNDP. It will also give TNSPs and other energy market stakeholders access to a set of connection point forecasts which they may use for their operational and investment planning purposes. Where TNSPs conduct their own connection point forecasts, they can compare their forecasts with AEMO's connection point forecasts. The AER could also access the connection point forecasts through the NTNDP database.

Equally, and as proposed by the ENA and Grid Australia, the information used to develop the demand forecasts should also be published by AEMO in the NTNDP database.

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<sup>59</sup> NER clause 5.20.4(a).

<sup>60</sup> Submissions to consultation paper: AEMO, 4 June 2015, p1; AER, 15 June 2015, pi; ENA, 4 June 2015, p1; GDF Suez, 4 June 2015, 1; Grid Australia, 4 June 2015, p1.

<sup>61</sup> Submissions to consultation paper: ENA, 4 June 2015 p1, Grid Australia, 4 June 2015, p1.

Requiring the information used to develop the demand forecasts to be published will provide for greater transparency and potentially greater confidence in AEMO's demand forecasts. NSPs and other energy market stakeholders may therefore be more likely to use the demand forecasts and AEMO's NTNDP for the purpose of their own planning.

In addition to these benefits, publication will assist NSPs and other energy market stakeholders to develop their own forecasts. In support of this view, Grid Australia notes that TNSPs do not currently have access to data on embedded generation and industrial loads which AEMO collects as part of the connection point forecasting process. It considers it would be beneficial for TNSPs to have access to this data, noting that these factors may have a significant impact on load at a transmission connection point.<sup>62</sup>

The Commission recognises that there will be an increase in administrative burden for AEMO to provide this information but considers the benefits of providing this information outweigh this cost.

AEMO must treat any confidential and protected information it receives to develop the demand forecasts in accordance with the NEL. The NEL currently recognise that confidential information can be stored in a confidential part of the NTNDP database which is not published publicly.<sup>63</sup> However, as discussed in chapter 6, the NEL allows for AEMO to share confidential information it receives with the AER.<sup>64</sup>

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<sup>62</sup> Grid Australia submission to consultation paper, 4 June 2015, p1.

<sup>63</sup> NEL clause 5.20.4(c).

<sup>64</sup> Section 54C of the NEL.

## 6 AEMO coordination with the AER

This chapter considers whether the NER should contain specific provisions to enable AEMO to consult with the AER about the development of the forecasts and to require AEMO to provide the forecasts to the AER upon the AER's request.

### 6.1 The COAG Energy Council's view

The proposed rule:

- specifies that AEMO may consult with the AER in developing the demand forecasts; and
- requires AEMO to provide the demand forecasts to the AER upon the AER's request.<sup>65</sup>

### 6.2 Stakeholder views

The AER submits that giving AEMO express discretion to consult and share findings with the AER on the demand forecasts provides regulatory certainty that this process can take place.<sup>66</sup> In contrast, the ENA and Grid Australia do not support expressly allowing AEMO to consult with the AER in the NER. They do not consider it is appropriate given the intent of the rule change request is for forecasts to be developed independently by AEMO.<sup>67</sup> However, the ENA did support expressly requiring AEMO to provide the forecasts to the AER on the AER's request.<sup>68</sup>

### 6.3 Analysis and conclusions

Giving AEMO an express discretion to consult with the AER on the demand forecasts as proposed in the rule change request is unnecessary. The AER and AEMO have agreed to communicate and share information relating to their functions in a memorandum of understanding.<sup>69</sup> In addition, to the extent that the AEMO needs to discuss protected information with the AER, the NEL authorises it to do so.<sup>70</sup>

Similarly, it is not necessary to explicitly require AEMO to provide the AER with the demand forecasts if the AER requests them as proposed in the rule change request. The forecasts will be publicly available and, to the extent that any information is not

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<sup>65</sup> *ibid.* pp6-8.

<sup>66</sup> AER submission to consultation paper, 15 June 2015, p5.

<sup>67</sup> Submissions to consultation paper: ENA, 4 June 2015, p4; Grid Australia, 4 June 2015, p1.

<sup>68</sup> ENA submission to consultation paper, 4 June 2015, p4.

<sup>69</sup> *Memorandum of understanding between the AER and AEMO*, June 2011.

<sup>70</sup> s. 54C of the NEL.

publicly available, the NEL allows AEMO to disclose protected information to the AER should the AER request this information.<sup>71</sup>

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<sup>71</sup> *ibid.*

## 7 Providing assistance to AEMO

This chapter considers whether to amend clause 5.20.5 of the NER to require NSPs to provide assistance AEMO reasonably requests in connection with the performance of its NTP functions.

### 7.1 The COAG Energy Council's view

As set out in section 1.1, the proposed rule amends clause 5.20.5 of the NER to require NSPs to provide assistance that AEMO reasonably requests in connection with the performance of its NTP functions.<sup>72</sup> Currently this clause only places an obligation on jurisdictional planning bodies to provide assistance to AEMO.<sup>73</sup>

### 7.2 Stakeholder views

The AER supports the proposed changes to clause 5.20.5. It considers the proposed clause will complement AEMO's information gathering powers in the NEL and focus the attention of AEMO and NSPs on engaging and seeking to understand each others' input assumptions and forecasting techniques. It submits that in the absence of the proposed change to the clause, AEMO's ability to engage with NSPs and the ability of NSPs to cooperate with AEMO may be limited by a reliance on a prescriptive process, that is, AEMO's information gathering powers under the NEL.<sup>74</sup>

The ENA also supports AEMO having a rules based power to gather the information to develop connection point forecasts in addition to its information gathering powers under the NEL.<sup>75</sup> It considers the NER should include principles that AEMO must consider when seeking information from NSPs. For example, AEMO should be required to ensure that the cost of providing the information for NSPs should not exceed the expected benefits of seeking the information.<sup>76</sup> Energex has expressed a similar view.<sup>77</sup>

### 7.3 Analysis and conclusions

An obligation in the NER for parties to provide demand forecasting information to AEMO is not required. The NEL already provides a regime for AEMO to seek information for the purpose of its NTP functions. This regime provides appropriate

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<sup>72</sup> *ibid.* pp6-7.

<sup>73</sup> A jurisdictional planning body is defined in the NEL as "the entity nominated by the relevant *Minister of a participating jurisdiction* as having *transmission system* planning responsibility in that participating jurisdiction." According to AEMO's website the jurisdictional planning bodies are the TNSPs in each state except in Victoria where it is AEMO.

<sup>74</sup> AER submission to consultation paper, 4 June 2015, p5.

<sup>75</sup> ENA submission to consultation paper, ENA, 4 June 2015.

<sup>76</sup> *ibid.*

<sup>77</sup> Energex submission to consultation paper, p1.

checks and balances for AEMO when considering whether to request information. For example, AEMO should only seek information if it considers it is reasonably necessary to do so for its NTP functions.<sup>78</sup> It must also consider the reasonable costs of compliance when seeking information.<sup>79</sup> Importantly, informal engagement between AEMO and NSPs in relation to information provision would still be expected to, and can, occur under this approach.

More specifically, the proposed obligation is broad in scope making compliance and enforcement uncertain. The information gathering powers in the NEL, namely market information orders and market information notices, provide more certainty for all parties than the proposed obligation. Under these powers, third parties are compelled to provide information where AEMO asks for the information in accordance with the requirements in the NEL, including a framework for consultation regarding the information sought.

The Commission therefore proposes not to amend clause 5.20.5 of the NER to require NSPs to provide assistance AEMO reasonably requests in connection with the performance of its NTP functions.

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<sup>78</sup> s. 53(1) of the NEL.

<sup>79</sup> s. 53(3) of the NEL.

## Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
COAG	Council of Australian Governments
Commission	See AEMC
DNSP	Distribution Network Service Provider
ENA	Energy Networks Association
MCE	Ministerial Council on Energy
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NEO	National electricity objective
NTNDP	National Transmission Network Development Plan
NTP functions	AEMO's National Transmission Planner functions as described in s. 49(2) of the NEL
NSP	Network Service Provider
SCER	Standing Council on Energy and Resources (now COAG Energy Council)
TNSP	Transmission Network Service Provider

## **A AEMO's information gathering powers in the NEL**

AEMO's information gathering powers in the NEL are set out in Part 5 Division 5.

Specifically, the NEL provides that AEMO can request information from a person or a class of persons if it considers it reasonably necessary to do so for the exercise of a relevant function.<sup>80</sup>

The instruments in the NEL that AEMO can use to collect information for the purpose of a relevant function are market information orders and market information notices. A market information order may require information from a class of persons. A market information notice may require information from one person. These market information instruments may require the provision of information on a one-off, an annual or other periodic basis.

In considering whether to serve a market information order or market information notice, AEMO must have regard to the reasonable costs of efficient compliance. In addition, AEMO must invite written representations from whom the instrument is to be served before making it.

If a person does not comply with a market information instrument then they may be subject to a civil penalty. In addition, penalties can be imposed for providing false or misleading information in response to a market information instrument.

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<sup>80</sup> A relevant function is defined in the NEL and includes NTP functions.

## B Summary of other issues raised in submissions

The following table sets out issues that were raised in the first round of consultation which have not been discussed in the main body of this draft rule determination. The Commission's response to these issues is also provided.

Stakeholder	Issue	AEMC response
ENA p3.	Provision should be made within the NER to reconcile differences in forecasts, between AEMO and DNSPs where there are shared planning responsibilities of AEMO and DNSPs in Victoria.	The rule change request relates to giving AEMO access to information to develop connection point demand forecasts for the purpose of enhancing its National Transmission Planner functions. Requiring AEMO's forecasts to reconcile with those of the Victorian DNSPs for the purpose of AEMO's declared network functions in that jurisdiction is out of scope of this rule change request.
ENA pp3-4.	Proposed rule should be amended to reflect that AEMO develop its demand forecasts independently.	This has not been adopted. It may be appropriate that AEMO consults with the AER, NSPs and other parties in the development of the forecasts. However, the explicit references in the proposed rule to allow AEMO to consult with the AER in developing and publishing the demand forecasts has not been included in the more preferable draft rule as this is not necessary. See chapter 6.
Energy Australia p2.	Would like a clearer understanding of specific shortfalls in data AEMO has experienced and further details of AEMO's likely application of the increased information gathering powers.	As discussed in section 3.3, there is some doubt that AEMO may be able to collect information for the purpose of developing connection point demand forecasts. The purpose of the COAG Energy Council's rule change request is to remove this doubt.  The AEMC is unable to comment on AEMO's likely application of increased access to information. However, the information gathering powers under the NEL provide appropriate checks and balances for AEMO when considering whether to collect information. See chapter 7.

## **C Legal requirements under the NEL**

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this draft rule determination.

### **C.1 Draft rule determination**

In accordance with s. 99 of the NEL the Commission has made this more draft rule determination in relation to the rule proposed by the COAG Energy Council.

The Commission's reasons for making this draft rule determination are set out in section 2.3.

A copy of the draft, more preferable, rule is attached to and published with this draft rule determination.<sup>81</sup> Its key features are described in chapter 2.

### **C.2 Power to make the rule**

The Commission is satisfied that the draft rule falls within the subject matter about which the Commission may make rules. The draft rule falls within s. 34 of the NEL as it relates to the operation of the NEM and is otherwise contemplated by the NEL under s. 49(2)(e).

### **C.3 Commission's considerations**

In assessing the rule change request the Commission considered:

- the Commission's powers under the NEL to make the rule;
- the rule change request;
- submissions received during the first round of consultation; and
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NEO.

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of AEMO's declared network functions.<sup>82</sup> The draft rule is compatible with AEMO's declared network functions.

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<sup>81</sup> Under s. 91A of the NEL the AEMC may make a rule that is different (including materially different) from a market initiated proposed rule (a more preferable rule) if the AEMC is satisfied that having regard to the issue or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates), the more preferable rule will or is likely to better contribute to the achievement of the national electricity objective.

<sup>82</sup> See s. 91(8) of the NEL.

## **C.4 Civil penalties**

The draft rule does not amend any clauses that are currently classified as civil penalty provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the more preferable draft rule be classified as civil penalty provisions.