

# Governance and regulation of market/system operators

Australian Energy Council and Energy Networks Australia

9 September 2020



## **Important notice**

This document was prepared by Cambridge Economic Policy Associates Pty Ltd (trading as CEPA) for the exclusive use of the recipient(s) named herein.

The information contained in this document has been compiled by CEPA and may include material from other sources, which is believed to be reliable but has not been verified or audited. Public information, industry and statistical data are from sources we deem to be reliable; however, no reliance may be placed for any purposes whatsoever on the contents of this document or on its completeness. No representation or warranty, express or implied, is given and no responsibility or liability is or will be accepted by or on behalf of CEPA or by any of its directors, members, employees, agents or any other person as to the accuracy, completeness or correctness of the information contained in this document and any such liability is expressly disclaimed.

The findings enclosed in this document may contain predictions based on current data and historical trends. Any such predictions are subject to inherent risks and uncertainties.

The opinions expressed in this document are valid only for the purpose stated herein and as of the date stated. No obligation is assumed to revise this document to reflect changes, events or conditions, which occur subsequent to the date hereof.

CEPA does not accept or assume any responsibility in respect of the document to any readers of it (third parties), other than the recipient(s) named therein. To the fullest extent permitted by law, CEPA will accept no liability in respect of the document to any third parties. Should any third parties choose to rely on the document, then they do so at their own risk.

The content contained within this document is the copyright of the recipient(s) named herein, or CEPA has licensed its copyright to recipient(s) named herein. The recipient(s) or any third parties may not reproduce or pass on this document, directly or indirectly, to any other person in whole or in part, for any other purpose than stated herein, without our prior approval.

## Contents

<b>EXECUTIVE SUMMARY</b> .....	<b>4</b>		
<b>1. INTRODUCTION</b> .....	<b>9</b>		
1.1. Our scope .....	9		
1.2. Our approach .....	9		
<b>2. CONTEXT</b> .....	<b>10</b>		
2.1. AEMO’s establishment and functions .....	10		
2.2. AEMO’s costs and fees .....	12		
2.3. Recent developments.....	13		
<b>3. PRINCIPLES OF GOOD GOVERNANCE</b> .....	<b>14</b>		
<b>4. OVERVIEW OF GOVERNANCE MODELS</b> .....	<b>17</b>		
4.1. Introducing the case studies .....	17		
4.2. AEMO (NEM) .....	18		
4.3. AEMO (WEM) .....	19		
4.4. NGENSO (Great Britain) .....	20		
4.5. ELEXON (Great Britain) .....	21		
4.6. PJM (US).....	22		
4.7. Transpower (New Zealand).....	23		
4.8. Market operation service providers (New Zealand) .....	24		
<b>5. COMPARATIVE ASSESSMENT</b> .....	<b>25</b>		
5.1. Principle 1: Roles and responsibilities .....	25		
		5.2. Principle 2: Board composition.....	27
		5.3. Principle 3: Purpose and strategy .....	30
		5.4. Principle 4: Performance .....	33
		5.5. Principle 5: Transparency and accountability.....	37
		5.6. Principle 6: Stakeholder engagement .....	39
		5.7. Summary.....	42
		<b>6. ALTERNATIVE MODELS</b> .....	<b>44</b>
		6.1. Model 1: ‘No regrets’ .....	44
		6.2. Model 2: Enhanced Member oversight.....	46
		6.3. Model 3: Regulatory oversight .....	48
		<b>7. CONCLUSIONS AND RECOMMENDATIONS</b> .....	<b>51</b>

## EXECUTIVE SUMMARY

CEPA has been engaged by Energy Networks Australia and the Australian Energy Council to provide insights on the current governance arrangements for the market and system operator roles in the National Electricity Market (NEM). In the NEM, market and system operations are undertaken by the Australian Energy Market Operator (AEMO). We have been asked to identify what governance models have been put in place for entities with similar functions in other jurisdictions and to consider what lessons these approaches might offer.

The intent of this project is to inform consideration of whether, given the continued evolution of AEMO’s functions since it was established in 2009, the current governance arrangements remain appropriate. It is important to note that our observations relate to the governance structures and parameters within which AEMO operates, rather than reflecting on AEMO’s performance of its critical role in the energy market. Our conclusions are offered as a starting point for further discussion, rather than a comprehensive package of recommendations.

### What is good governance?

A governance framework refers to the systems and processes through which authority in an organisation is exercised and the organisation is held to account.<sup>1</sup> The fundamental concerns of a governance framework are therefore who is responsible for decision-making and what mechanisms are in place to hold decision makers accountable.

There is no ‘one-size-fits-all’ model for governance, and the most appropriate approach will depend on the context of each organisation. Nonetheless, there are well-established and recognised principles of what constitutes ‘good’ governance. In developing our observations on AEMO’s governance

arrangements, we have primarily referred to the Not-For-Profit (NFP) Governance Principles developed by the Australian Institute of Company Directors (AICD).

Given our terms of reference and limited access to AEMO, our review has necessarily focused on *external* governance arrangements. This means that we have not investigated how the board holds management to account. Rather, we have considered what mechanisms allow outside parties – whether Members<sup>2</sup>, regulators, or other stakeholders – to hold the market or system operator accountable for its decisions. Consequently, we have focused on the six AICD principles that are relevant for this purpose, summarised in Figure E.1 below. For AEMO and each of the case studies, we have identified and compared how the design of the governance arrangements supports each principle.

Figure E.1: AICD Not-For-Profit governance principles



Source: Adapted from AICD (2019)

<sup>1</sup> AICD (2019), *Not-for-profit Governance Principles – Second Edition*, January; AICD (2017), *Guiding principles of good governance*.

<sup>2</sup> ‘Members’ are parties who have satisfied the requirements for formal membership of an organisation. Members may have defined rights and obligations under both the *Corporations Act 2001* (or equivalent legislation) and the organisation’s own rules.

## Do the current arrangements support good governance?

AEMO is a not-for-profit organisation, registered as a public company limited by guarantee. Its membership is split between Government and Industry Members. A 60%/40% weighting on Government and Industry Member voting rights provides a balance between the public interest and the requirements of electricity market participants. AEMO's Board is accountable to its Members for the overall direction, management, and governance of the organisation.<sup>3</sup>

Experience in other jurisdictions indicates that there is no single, dominant governance model for market and system operators (Table E.1). Rather, different jurisdictions have adopted arrangements that are tailored to their context and shaped by the historical development of their market.

Nonetheless, the case studies allow us to make some general observations on what constitutes good practice. We have observed that governance arrangements for system and market operators commonly include:

- Mechanisms for **external review and approval** of business plans and budgets, whether by the organisation's members or a regulator.
- Requirements that guide how **stakeholder consultation** should be incorporated in developing business plans and budgets.
- Requirements to **report against plans and budgets**.

In contrast, while AEMO's board is formally accountable to its Government and Industry Members, there appear to be relatively limited requirements for consultation, review/approval, and reporting arrangements that would support Members in their oversight role (Table E.2). Further, Members do not currently appear to be making active use of the mechanisms that are available to them (for example, moving and voting on resolutions at general meetings). We have not identified clear underlying reasons for this. However, a contributing factor may have been the relative absence of supporting mechanisms (such as reporting

requirements) that, in other jurisdictions, are intended to allow the external parties involved in governance to perform their oversight role effectively.

Table E.1: Overview of governance models

Jurisdiction	Corporate structure	Governance model	Decision-making (business plan, budgets)
AEMO (NEM)	Not-for-profit, owned by Government and Industry Members	Board accountable to Members	Board approves budget and business plan
AEMO (WEM)		Economic regulation by ERA	ERA approves revenues that can be recovered through fees
NGESO (GB)	Private for-profit entity	Economic regulation by Ofgem	Ofgem approves business plan, regulates revenues
ELEXON (GB)	Not-for-profit	Board accountable to members	Board approves budget, business plan
PJM (US)	Not-for-profit, owned by industry members	Two-tiered Board-Member structure, with regulatory oversight by FERC	Members vote on budget, FERC approval for changes to fees
Transpower (NZ)	Commercially-oriented state owned enterprise	Service provider agreement with Electricity Authority	Set through negotiation with Electricity Authority
Market operation service providers (NZ)	Various (Transpower and private for-profit entities)	Service provider agreement with Electricity Authority, subject to competitive tender	

<sup>3</sup> AEMO (2012), *Board Charter*, August; AEMO (2020a), *Corporate Plan FY2021*, July.

Table E.2: AICD NFP governance principles - Summary of our observations

Principle	Summary of observations
1. Roles and responsibilities	<ul style="list-style-type: none"> <li>While governance roles, responsibilities, and relationships are clearly defined, these may not be operating as described. This may be contributing to a lack of clarity around who the AEMO Board is accountable to, for what, and how.</li> </ul>
2. Board composition	<ul style="list-style-type: none"> <li>The arrangements around AEMO's Board, including the limited role and representation of industry members, are not unusual.</li> </ul>
3. Purpose and strategy	<ul style="list-style-type: none"> <li>AEMO's NEM role is defined in relatively broad terms in the NEL and NER. The continued debate around the interpretation of AEMO's role may have been compounded by an absence of formal processes to guide development of AEMO's strategy, as are in place in other jurisdictions.</li> </ul>
4. Performance	<ul style="list-style-type: none"> <li>Compared to other jurisdictions, the mechanisms for external scrutiny of AEMO's internal and external <sup>4</sup> costs appear to be relatively limited. This may not be sufficient to ensure that costs are both adequate and efficient.</li> </ul>
5. Transparency and accountability	<ul style="list-style-type: none"> <li>Formal mechanisms for accountability to AEMO's Government and Industry Members appear to be relatively limited.</li> </ul>
6. Stakeholder engagement	<ul style="list-style-type: none"> <li>AEMO is actively seeking to improve stakeholder engagement. However, the extent and nature of its stakeholder engagement on strategic issues is largely discretionary, in contrast to the formal requirements that exist in other jurisdictions.</li> </ul>

<sup>4</sup> Internal costs refer to the direct costs of system or market operation, such as staff and IT systems. External costs relate to broader system operation costs, for example in relation to the procurement of ancillary services or strategic reserves.

## The need for change

In a formal sense, the relationship between AEMO's Board and the Members is analogous to that between for-profit companies and their shareholders. However, we have found limited evidence of AEMO demonstrating accountability to its Members, or Members holding AEMO to account, through the formal governance channels. It is possible that oversight by government, either directly or through the Council of Australian Governments (COAG) Energy Council, has replaced the formal governance processes established in the design of AEMO. If so, this scrutiny of AEMO is not transparent, and, while performing a useful function, may not be the most effective way of holding AEMO to account. The formal arrangements to support accountability are weaker than those we observe in other jurisdictions.

Given AEMO's crucial, and growing, role in the NEM, we suggest it is timely to revisit the existing governance framework. In particular, we consider that there is a case for reconsidering the strength of the accountability mechanisms that apply to AEMO, consistent with the level of scrutiny that is applied to system and market operators in other jurisdictions. Other reviews that have touched on AEMO's role within the broader NEM governance structures have also identified a need to revisit, and potentially adjust, the current framework. Most recently, the 2020 review of the Energy Security Board (ESB) echoed earlier recommendations to develop a statement of role for AEMO.<sup>5</sup> This has been agreed by the Energy Ministers.<sup>6</sup>

To fulfil its statutory functions, it is important that AEMO is able to respond effectively and promptly to changes in the markets and systems it operates and, as is deemed appropriate, contribute its expertise to the development of these markets. Clarifying and strengthening AEMO's governance framework need not hamper its flexibility in this regard. Rather, as AEMO's responsibilities in the NEM

<sup>5</sup> Rhys Edwards RMDE Consulting (2020), *Review of Energy Security Board*, June.

<sup>6</sup> *ESB Review – Energy Ministers response*, August 2020.

are expected to increase, clear lines of accountability can support its work by providing explicitly stated and transparent expectations.

In this context, AEMO's 2020-2021 Corporate Plan outlines a range of new initiatives that respond to concerns regarding the transparency of its decision-making and recent increases in its costs and fees. Among other proposals, AEMO is exploring changes to its approach to engaging with stakeholders, and intends to consult on a new operating model.<sup>7</sup> While commendable, in our view these efforts are not a substitute for a well-defined governance framework. Indeed, the changes that AEMO is contemplating may indicate that the current governance arrangements have not, to date, supported the development of fit-for-purpose models for AEMO to engage with and report to its Members.

### **Alternative models for consideration**

There are differences between AEMO's functions and responsibilities, and those of the other system and market operators that we have reviewed. AEMO's corporate structure, the overall institutional arrangements and market context also differ from the case studies. Therefore, we do not consider that it would be appropriate to adopt, in its entirety, any one model from the case studies.

However, certain aspects of these models can inform consideration of arrangements that could be applied in the NEM.

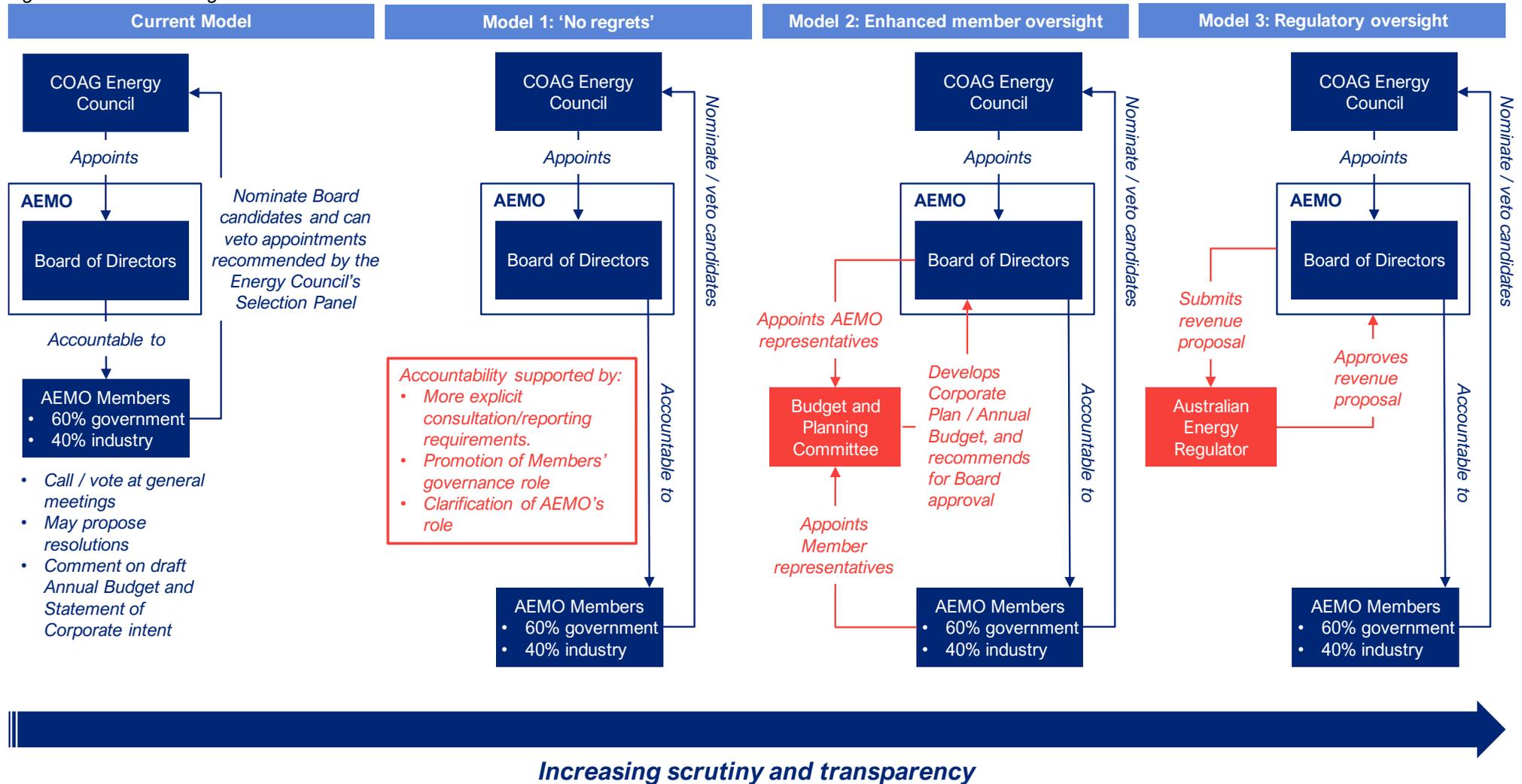
As a starting point for further debate and discussion, we have developed three alternative 'strawperson' models (see Figure E.2 overleaf). These models represent a spectrum of approaches that could be considered. The first "no regrets" model would involve the least intrusive changes to the current arrangements, but there is a risk that in practice there is little improvement. The second model, which includes the enhanced information disclosure elements from Model 1, is designed to strongly reduce information barriers between AEMO and its Members, but it may complicate the decision-making process. The third model, economic regulation, may improve confidence of parties in the scrutiny of AEMO, but it may reduce AEMO's flexibility to respond to the evolution of the market.

We consider that each of the models would represent an improvement over the current arrangement for scrutinising AEMO. With Models 2 and 3, the improvements in transparency and scrutiny need to be balanced with the impact on decision making and flexibility. We suggest that careful consideration is given to determine the appropriate approach to moving forward.

---

<sup>7</sup> AEMO (2020a).

Figure E.2: Alternative governance models<sup>8</sup>



<sup>8</sup> Following the formation of the National Federation Reform Council, former COAG Councils, including the Energy Council, are under review. As the outcome of this review was not known at the time of writing, we have continued to refer to the 'COAG Energy Council'.

## 1. INTRODUCTION

### 1.1. OUR SCOPE

CEPA has been engaged by Energy Networks Australia and the Australian Energy Council to provide insights on the current governance arrangements for the market and system operator roles in the NEM. In the NEM, market and system operations are undertaken by AEMO. We have been asked to identify what governance arrangements have been put in place for entities with similar functions in other jurisdictions and consider what lessons these models might offer.

The intent of this project is to inform consideration of whether, given the continued evolution of AEMO's functions since it was established in 2009, the current governance arrangements remain appropriate. Accordingly, the conclusions of this report are offered as a starting point for further discussion, rather than forming definitive recommendations. It is important to note that our observations relate to the governance structures and parameters within which AEMO operates, rather than reflecting on AEMO's performance of its critical role in the energy market.

### 1.2. OUR APPROACH

Our approach to considering this issue has been to identify, based on practice in other jurisdictions, a range of potential governance approaches for entities with similar functions to AEMO. We have then compared how these models, and the arrangements that have been put in place for AEMO, support established principles of good governance. We have used this analysis to identify whether AEMO's governance arrangements are comparable to the models adopted in other jurisdictions, or whether there appear to be gaps in the way that particular governance principles are supported. This acknowledges that there are multiple governance approaches that could potentially achieve the principles.

This analysis has indicated certain areas where AEMO's current governance framework appears to be less comprehensive, particularly in terms of formal requirements and obligations, than approaches adopted elsewhere. In light of

this, we have suggested three high level alternative models that could address the identified gaps in different ways.

While we have endeavoured to present an accurate account of AEMO's existing governance framework, there are always differences between the formal arrangements and how governance operates in practice. We have therefore sought to test our understanding of the current arrangements through discussions with a selection of AEMO's Members, and with AEMO. A draft of this report was provided to AEMO for fact checking.

In relation to the comparisons with other jurisdictions, it is important to note that:

- In line with our terms of reference, we have undertaken a relatively high-level scan of the case studies included in our review. This is intended to highlight material differences between these models and AEMO's governance framework, rather than providing an exhaustive review.
- We have focused on the *design* of arrangements elsewhere, rather than their performance in practice. This is consistent with our use of the case studies, to provide an assessment of how comprehensively AEMO's governance framework supports good governance principles, relative to practice in other jurisdictions. This is not intended to imply that the presence of certain governance mechanisms in other markets means that these arrangements operate smoothly in practice. However, it does allow us to draw conclusions around the level of scrutiny that other jurisdictions have considered appropriate for their system and market operators.

## 2. CONTEXT

### 2.1. AEMO'S ESTABLISHMENT AND FUNCTIONS

AEMO was established in 2009 on the initiative of the COAG to strengthen the national character of energy market governance. AEMO assumed the functions of pre-existing electricity and gas market operators, including the National Electricity Market Management Company (NEMMCO) and a number of state market authorities.<sup>9</sup>

The Australian Energy Market Agreement (AEMA) describes AEMO as being “responsible for the day-to-day operation and administration of both the power system and electricity wholesale spot market in the NEM, the retail electricity markets, the retail and wholesale gas markets and other support activities”.<sup>10</sup>

AEMO's Constitution requires AEMO to perform the functions conferred on it by relevant rules and legislation and directions from the COAG Energy Council.<sup>11,12</sup> In relation to AEMO's NEM functions, the National Electricity Law (NEL) sets out statutory functions for AEMO, while the National Electricity Rules (NER) also introduce specific activities and obligations.

Since its inception, AEMO has progressively acquired new roles, including becoming Western Australia's wholesale electricity and retail gas market operator in 2015 and power system operator in 2016.<sup>13</sup> AEMO currently operates over 30 ring-fenced functions,<sup>14</sup> including:

- **market and system operations** and **transmission planning** in the NEM;

- providing shared **transmission network services in Victoria**, including planning of future requirements and procuring augmentations;
- forecasting and **planning for the South Australian government**;
- **market and system operations in the WEM**;
- providing **wholesale gas market services** (e.g. overseeing market operations and system security, wholesale metering, settlement, prudential management, and information services) in various gas markets, both in the eastern states and in Western Australia;
- facilitating the **Full Retail Contestability (FRC)** of electricity and gas markets by managing settlement data and supporting customer transfers, business to business processes, and market procedure changes; and
- **pass-through recovery** of funding for Energy Consumers Australia and WA's Economic Regulation Authority (ERA) from market participants.<sup>15</sup>

Our review focuses on AEMO's role in the NEM, rather than in Victoria's electricity transmission, retail markets, and gas markets. AEMO's functions and governance arrangements in the WEM are covered as a separate case study.

### Market and system operation in the NEM

AEMO's market operator role is set out in Chapter 3 of the NER. AEMO operates the **spot market** for wholesale electricity. This entails processing bids and offers,

<sup>9</sup> Australian Energy Market Amendment (AEMO and other measures) Bill 2009.

<sup>10</sup> *Notice of amendment to the Australian Energy Market Agreement*, 2013, 5.1(c).

<sup>11</sup> AEMO (2017), *AEMO Constitution*, Part 2.

<sup>12</sup> With the formation of the National Federation Reform Council, former COAG Councils, including the Energy Council, are under review. As the outcome of this review was not known at the time of writing, we have continued to refer to the 'COAG Energy Council'.

<sup>13</sup> AEMO (2019b), *Corporate Plan 2020-23*, August, p. 7

<sup>14</sup> AEMO (2019c), *2019 Annual Report*, p. 51.

<sup>15</sup> AEMO (2019a), *2019-20 AEMO Final Budget and Fees*, June, p. 25.

managing the centralised dispatch of generation, and determining prices at each regional reference node for each trading interval. AEMO also operates the markets for certain ancillary services and acquires non-market ancillary services.

AEMO is responsible for **financial settlement**, including billing and clearance, of all market trading. As the amount paid by market participants to AEMO for spot market transactions usually differs from the amount paid by AEMO to the other party in the transaction, settlement residues arise in the NEM. To allocate these residues, AEMO runs inter-regional **settlement residue auctions** open to certain types of market participants.<sup>16</sup>

AEMO also maintains a **register of market participants** and administers the NEM's **prudential supervision** process. This includes:

- monitoring the participants' financial liabilities arising from trading to ensure they do not exceed a trading limit inclusive of a prudential margin;
- issuing a call notice when this limit is exceeded to prompt market participants to reduce their exposure by increasing their credit support or making a security deposit; and
- determining the Maximum Credit Limits that, together with the prudential margin, determine the trading limit of each market participant.<sup>17</sup>

Under Chapter 4 of the NER, AEMO manages the **day to day operation of the power system** and may issue power system operating procedures. AEMO is responsible for **maintaining power system security**, ensuring that the system and all equipment are operated within their technical limits, and maintaining power system frequency. To ensure **reliability of supply**, AEMO may enter into contracts to secure the availability of reserves and apply to the AER to trigger the

Retailer Reliability Obligation when it identifies a potential reliability gap in a NEM region in the coming five years (NER 4A.C.1).

### **AEMO's planning and forecasting role**

Section 49(2) of the NEL sets out AEMO's functions as the **National Transmission Planner** (NTP). These include keeping the transmission grid under review, advising on the development of the grid, providing a strategic perspective for transmission planning and coordination, and publishing the National Transmission Network Development Plan (NTNDP), a plan for the development of the national transmission grid.

AEMO's planning and forecasting activities have expanded over time. In 2012, AEMO developed its first independent electricity demand forecasts (as required by NER 5.20.6). In 2014, it launched the Australian Solar Energy Forecasting System (ASEFS) to provide forecasts of solar energy generation. Currently, AEMO produces a broad range of forecasts, including load forecasting for the day-to-day operation of the NEM (such as pre-dispatch forecasts and short term projected assessments of system adequacy (STPASA)) as well as longer-term forecasts such as the Electricity Statement of Opportunities (ESOO), a 10-year forecast of electricity supply, demand, and reliability in the NEM.<sup>18</sup>

To enhance the NEM's security and inform investment decisions, the Finkel review recommended that AEMO develop an integrated grid plan to facilitate the efficient development and connection of renewable energy zones.<sup>19</sup> As a result, in 2018 AEMO published the first Integrated System Plan (ISP) – an engineering optimisation plan, updated every two years, that forecasts the NEM's overall transmission system requirements.<sup>20</sup> As the ISP encompasses the scope and purpose of the NTNDP, AEMO incorporated the 2017 NTNDP into the ISP.<sup>21</sup>

<sup>16</sup> Settlement residue from intra-regional trading is distributed to/recovered from TNSPs.

<sup>17</sup> AEMO (2009), *NEM settlement prudential supervision process*, November, p. 5.

<sup>18</sup> AEMO, <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning>. Accessed July 2020.

<sup>19</sup> Finkel, A., Moses, K., Munro, C., Effenev, T., and O'Kane, M. (2017), *Independent Review into the Future Security of the National Electricity Market*, June.

<sup>20</sup> AEMO (2018), *Integrated System Plan for the National Energy Market*, July, p. 16.

<sup>21</sup> AEMO, <https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/national-transmission-network-development-plan-ntndp>. Accessed July 2020.

## 2.2. AEMO'S COSTS AND FEES

AEMO's internal costs are mainly for labour, IT, forecasting and operating system maintenance, and planning and operating systems and markets. AEMO receives no ongoing government funding and recovers its operating and capital expenses from market participants through approximately 20 different fees. Investment is funded through debt, and fees are set to recover the debt over the life of the assets. AEMO also seeks grant funding for some of its capital investments.<sup>22</sup>

Each of AEMO's functions has its own fees, set on a cost recovery basis. If AEMO under/ over-recovers its costs, it may record a deficit or surplus in its budget and recover it in subsequent financial years.<sup>23</sup> Fees for wholesale markets such as the NEM are mainly driven by energy consumption and levied on generators, market customers, and network service providers. Fees associated with AEMO's role in facilitating retail competition (FRC functions) are driven by connection points and levied on retailers. The NTP function is funded by Transmission Network Service Providers (TNSPs).<sup>24</sup>

AEMO must publish a budget before the start of the financial year, setting out its projected revenue requirements and fees. The NER (2.11.3) list activities that AEMO must separately identify requirements for (e.g. system operation, NTP, metering) but do not specify how the revenue requirement should be calculated. Annual fees are set in accordance with published fee structures developed by AEMO, which set out how revenue requirements are apportioned between different classes of market participants and the basis for the fees (e.g. \$/MWh). The current fee structures for the NEM, FRC, and NTP functions are valid for a period of five years to 2021.<sup>25</sup>

Figure 2.1 shows the evolution of AEMO's budgeted revenue over time: from \$83m in 2014-15 to \$142m in 2020-21. This trend was mainly driven by a steady increase in the revenue requirement for the NEM functions, although a significant increase is also budgeted for the NTP function in 2020-21. AEMO noted that the increase in NTP fees is due to AEMO's work on the ISP.<sup>26</sup>

In its 2020-21 budget and fees document, AEMO notes that its current information architecture is no longer able to meet the sector's changing needs and that the transformation of the energy industry has led to a sharp increase in the number of rule changes in the NEM, all of which affect AEMO's role (as new compliance functions or implementation of rule changes are required) and costs.<sup>27</sup> In addition, to manage the rapid changes in variable renewable and distributed resources, along with the analysis of the operating capabilities of aging thermal resources, AEMO increased personnel and capital investment in forecasting, modelling, and power system operations.

AEMO has indicated that its NEM-related costs will likely continue to increase, associated with the increased complexity of managing the grid. For example, in its 2019-20 Final Budget and Fees document, AEMO projected NEM fee increases of 12 per cent per annum (nominal) over the following three years.<sup>28</sup> To mitigate the impact of these changes on participants, the NEM fee increase for 2020-21 was subsequently reduced to nine per cent. AEMO noted that this would "require AEMO to reduce or cease some activities".<sup>29</sup>

---

<sup>22</sup> AEMO (2020b), *2020-21 AEMO Final Budget and Fees*, June, p. 2 and 5.

<sup>23</sup> NER 2.11.1(b)(2).

<sup>24</sup> AEMO (2019c), p. 51 and AEMO (2020a), p. 26.

<sup>25</sup> AEMO (2016), *Structure of participant fees in AEMO's electricity markets 2016: Final report*, March, p. 4.

<sup>26</sup> AEMO (2020b), p. 5.

<sup>27</sup> AEMO (2020b), p. 2-3.

<sup>28</sup> AEMO (2019d), *2019-20 AEMO Final Budget and Fees*, June 2019.

<sup>29</sup> AEMO (2020b), p. 5).

Figure 2.1. AEMO’s budgeted revenue requirement (\$’000) for electricity market roles – excluding Victorian TNSP, South Australia planning, and WEM functions.



Source: AEMO, budget and fees documents

In addition, AEMO noted that its funding structure appears increasingly incompatible with its functional demands and that it will engage with its Members on fee structures and alternative funding and operating models to lower costs. AEMO is also engaging an external consultant to review its ‘ways of working’ and its planned technology investment.

### 2.3. RECENT DEVELOPMENTS

In its FY2021 Corporate Plan, AEMO outlines a range of new initiatives that aim to respond to concerns regarding the transparency of its decision-making and recent increases in its costs and fees. These include:<sup>30</sup>

- An organisational transformation program.

- A review of the participant fee structure over FY2021 (which has since been launched).<sup>31</sup>
- Engagement with Members on options for alternative business structures.
- Pursuing a requirement for governments and market bodies to detail the cost implications of rule changes for both AEMO and the market.

<sup>30</sup> AEMO (2020b), p. 1-2.

<sup>31</sup> AEMO (2020d), *Electricity Fee Structures – Consultation Paper*, August.

### 3. PRINCIPLES OF GOOD GOVERNANCE

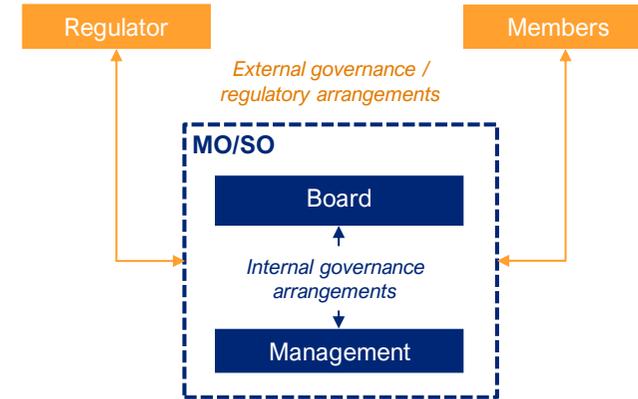
To provide a framework for comparing different models for system and market operator governance, we have considered how ‘good’ governance could be defined and what arrangements might best support this.

As a starting point, we reviewed a range of recognised governance principles. These included the ASX principles of corporate governance, the criteria reflected in the Finkel Review, and other governance reviews that we have identified in our research (for example, the 2013 review of ELEXON’s governance). Our review indicated that the Australian Institute of Company Directors (AICD) not-for-profit (NFP) governance principles were most appropriate, given AEMO’s corporate structure.<sup>32</sup> The AICD NFP principles are intended as a resource to help boards and directors of not-for-profits achieve good governance in their organisation. To this end, the NFP principles also set out ‘supporting practices’ which describe activities or behaviours of organisations that are likely to be meeting the principles.

However, we have needed to make some modifications to these principles to usefully apply them in the context of this project. In line with our terms of reference, our assessment of the different approaches to market and system operator governance is focused on:

- The **design** of governance arrangements, as distinct from an evaluation of how successfully those arrangements have been applied.
- The **external relationships** between the organisation and the entities to whom it is accountable, whether this is members<sup>33</sup>, shareholders, government, a regulator and/or other stakeholders (Figure 3.1). This is necessarily the case, as we do not have visibility of the internal governance arrangements between the board and management.

Figure 3.1: External oversight



Accordingly, our assessment framework does not include the AICD principles that relate to the more internal or ‘operational’ aspects of governance. Specifically, we have excluded Principles 4, 5, 9 and 10, which relate to how the board is run, its risk management and compliance activities, and how it oversees the organisation’s culture. As these aspects of governance are important for the organisation’s performance, it may be appropriate to assess these explicitly if changes to market and system operator governance in the NEM are considered.

We have also replaced the AICD’s ‘supporting practices’ with ‘assessment factors’ that focus on the presence and strength of processes, or mechanisms, that act to ensure that the organisation operates in accordance with these principles. These mechanisms might be governance or regulatory in nature,

<sup>32</sup> AICD (2019), *Not-for-profit governance principles*, second edition, January, p. 4-7.

<sup>33</sup> ‘Members’ are parties who have satisfied the requirements for formal membership of an organisation. Members may have defined rights and obligations under both the *Corporations Act 2001* (or equivalent legislation) and the organisation’s own rules.

depending on the market/system operator in question.<sup>34</sup> Given that our review is concerned with external governance arrangements, we are primarily looking for mechanisms that allow the external parties involved in governance, or regulation, to hold the system or market operator accountable for its performance.

The AICD NFP principles and associated assessment factors that we have considered are outlined in the table below.

Table 3.1: Governance principles

AICD Principle	Assessment factors
<p>Principle 1: Roles and responsibilities</p> <p><i>There is clarity about the roles, responsibilities and relationships of the board.</i></p>	<p>As governance arrangements will involve multiple parties, it is important that there is clarity about who is accountable to whom, and for what. This principle is focused on how clear this aspect of governance is. Other principles then consider how accountability is supported, in line with this definition of roles and responsibilities.</p> <p>We have considered:</p> <ul style="list-style-type: none"> <li>• The documentation of roles, responsibilities and relationships of the parties involved in governance.</li> <li>• Whether there is evidence that these arrangements are clear, or not.</li> </ul>
<p>Principle 2: Board composition and appointment</p> <p><i>The board's structure and composition enable it to fulfil its role effectively</i></p>	<p>Depending on the roles and responsibilities that are defined under Principle 1, the composition of the market or system operator's board may or may not be relevant to understanding how key decisions around the organisation's activities and costs are made. Therefore, the relevance of this principle varies depending on the jurisdiction in question.</p> <p>For those where this principle is relevant, we have considered:</p> <ul style="list-style-type: none"> <li>• Evidence that the processes that determine the board's structure and composition are based on merit and transparent.</li> <li>• Whether processes for the appointment and removal of directors appear to be aligned with the roles and responsibilities defined under Principle 1.</li> </ul>
<p>Principle 3: Purpose and strategy</p> <p><i>The organisation has a clear purpose and a strategy which aligns its activities to its purpose</i></p>	<p>Effective governance requires that the organisation, and the parties involved in holding it accountable, have a clear understanding of its purpose and strategy. Where the market or system operator's purpose is broad or loosely defined, this understanding can be supported by transparent processes for determining and communicating how it will fulfil its purpose.</p> <p>We have considered:</p> <ul style="list-style-type: none"> <li>• Evidence that the organisation's functions and objectives are clearly defined in its governing documents, and that there is a shared understanding of its functions and objectives among relevant stakeholders.</li> <li>• Evidence that there is a robust process through which the organisation's strategy aligns its activities to those functions and objectives.</li> </ul>

<sup>34</sup> For example, governance arrangements might include requirements for the participation of members on board committees, or the rights of members to call a general meeting. An

example of a regulatory arrangement could be the approval of expenditure proposals, or the incentives that are placed on a regulated entity to deliver in line with its obligations.

AICD Principle	Assessment factors
<p>Principle 4: Performance <i>The organisation uses its resources appropriately and evaluates its performance</i></p>	<p>Arrangements to ensure that resources are used appropriately, and that performance is in line with expectations, are important elements of governance.</p> <p>We have considered the presence and strength of mechanisms that ensure the market or system operator uses its resources appropriately to carry out its strategy. Reporting in relation to performance expectations is captured under Principle 5 below. Importantly, this principle does not consider <i>how</i> AEMO, or the other market and system operators, have performed their functions.</p>
<p>Principle 5: Transparency and accountability <i>The board demonstrates accountability by providing information to stakeholders about the organisation and its performance</i></p>	<p>For accountability to be achieved, there must be both answerability (which means providing information and justification that the organisation’s decisions and performance align with expectations) and enforcement (which means being subject to, and accepting the consequences of, failing to meet these expectations).</p> <p>We have therefore considered both:</p> <ul style="list-style-type: none"> <li>• Answerability: the extent to which the external parties who are responsible for holding the organisation to account (see Principle 1) receive the information they need to do so.</li> <li>• Enforcement: The presence and strength of mechanisms that allow accountability to be enforced.</li> </ul>
<p>Principle 6: Stakeholder engagement <i>There is meaningful engagement of stakeholders and their interests are understood and considered by the board</i></p>	<p>Given the focus of this review, we have focused on stakeholder engagement in relation to governance and strategic issues.</p> <p>We have considered:</p> <ul style="list-style-type: none"> <li>• Whether there is evidence that the process for developing the organisation’s strategy provides for meaningful engagement with relevant stakeholders, which allows their needs and expectations to be considered by the board.</li> </ul>

*Source: AICD (2019), adapted by CEPA. While the six principles are drawn directly from AICD (2019), the numbering of each principle is different. The assessment factors were developed by CEPA to describe how we have applied the AICD principles, in the context of this report.*

## 4. OVERVIEW OF GOVERNANCE MODELS

### 4.1. INTRODUCING THE CASE STUDIES

We have selected four jurisdictions – Western Australia, Great Britain, PJM (United States) and New Zealand – that have adopted differing approaches to system and market operator governance. The intention of selecting these jurisdictions was to highlight the breadth of alternative approaches, rather than

providing a sample that is representative of how common particular arrangements are. Table 4.1 provides an overview of the functions that the system or market operator in each jurisdiction undertakes. The following sections provide an overview of the governance or regulatory arrangements adopted in each jurisdiction. This provides context for Section 5, which discusses in more detail how each model supports the governance principles.

Table 4.1: System and market operator functions

	System Operation	Market Operation	Transmission Planning	Other functions
AEMO (NEM)	✓	✓	✓	<ul style="list-style-type: none"> <li>• Long-term forecasting.</li> <li>• Facilitating retail contestability.</li> <li>• State-specific functions (e.g. in Victoria and South Australia).</li> </ul>
AEMO (WEM)	✓	✓	✗	<ul style="list-style-type: none"> <li>• Long-term forecasting.</li> <li>• Clear contributory role in market development.</li> </ul>
NGESO (GB)	✓	✗	✓	<ul style="list-style-type: none"> <li>• Long-term forecasting.</li> <li>• Policy advice and market framework changes.</li> <li>• Overseeing industry codes modifications.</li> </ul>
ELEXON (GB)	✗	✓	✗	<ul style="list-style-type: none"> <li>• Enforcing and reviewing Balancing and Settlement Code.</li> </ul>
PJM (US)	✓	✓	✓	<ul style="list-style-type: none"> <li>• Structuring and collecting transmission tariffs.</li> <li>• Requesting changes to market governing documents.</li> </ul>
Transpower (NZ)	✓	✗*	✗**	<ul style="list-style-type: none"> <li>• * EMS, a division of Transpower, is the market operation service provider (MOSP) contracted for operating the market for Financial Transmission Rights (FTR).</li> <li>• ** The system operator role is a legally separated function within Transpower. Transpower is responsible for transmission planning as part of its broader grid owner role.</li> </ul>
MOSPs (NZ)	✗	✓	✗	<ul style="list-style-type: none"> <li>• Seven market operation functions, separately awarded to various service providers via competitive tenders.</li> </ul>

## 4.2. AEMO (NEM)

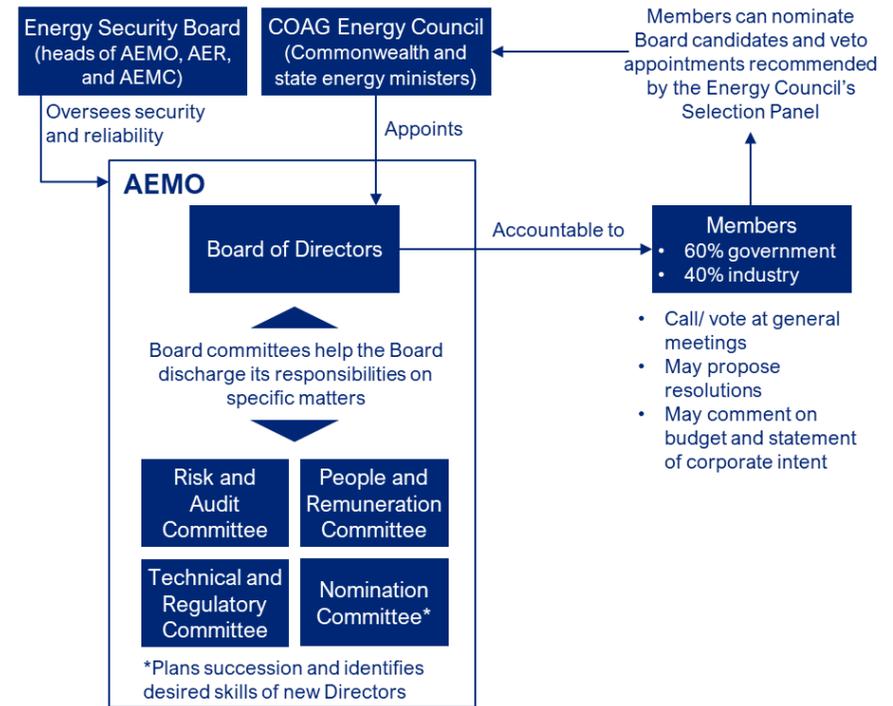
AEMO is a not-for-profit organisation, registered as a public company limited by guarantee. Its membership is split between government and industry. Government Members represent the Commonwealth, States and Territories. Registered market participants can apply to become Industry Members. As at 10 July 2020, AEMO's membership included eight Government Members and 113 Industry Members.<sup>35</sup> Members may call and vote at general meetings. Government and Industry Members are collectively entitled to 60% and 40% of total votes, respectively.

AEMO's Board is accountable to Members for AEMO's overall direction, management and governance. The Board's responsibilities include approving budgets, appointing the Managing Director, and reporting to stakeholders.<sup>36</sup> Directors are appointed for a term of four years and may serve one further consecutive term (two, under special circumstances identified by the COAG Energy Council).

AEMO's costs are not regulated. Under AEMO's Constitution, every year Directors must submit a draft Statement of Corporate Intent and a draft Annual Budget to Members for comments. Directors have discretion over whether Members' comments are reflected in the final approved documents.<sup>37</sup> The NER require AEMO to hold public consultations before making certain decisions.<sup>38</sup> AEMO may also engage stakeholders on specific issues through industry forums, working groups, or ad hoc consultations.

AEMO's Constitution requires AEMO to perform the functions conferred on it by relevant rules and legislation and directions from the COAG Energy Council. Under the NEL (15.1) the AER is responsible for monitoring and enforcing AEMO's compliance with the NER.

Figure 4.1: AEMO's current governance arrangements (NEM functions)



Source: AEMO Constitution and Board Charter, CEPA analysis

<sup>35</sup> AEMO (2016), *AEMO Government Members*, 7 June 2016. AEMO (2020e), *AEMO Industry Members*, 3 August 2020.

<sup>36</sup> AEMO (2012), *Board Charter*, version 2.0, August, p. 3-4.

<sup>37</sup> AEMO (2017), art. 16.

<sup>38</sup> For example, on fee structures. See NER 2.11.1(a).

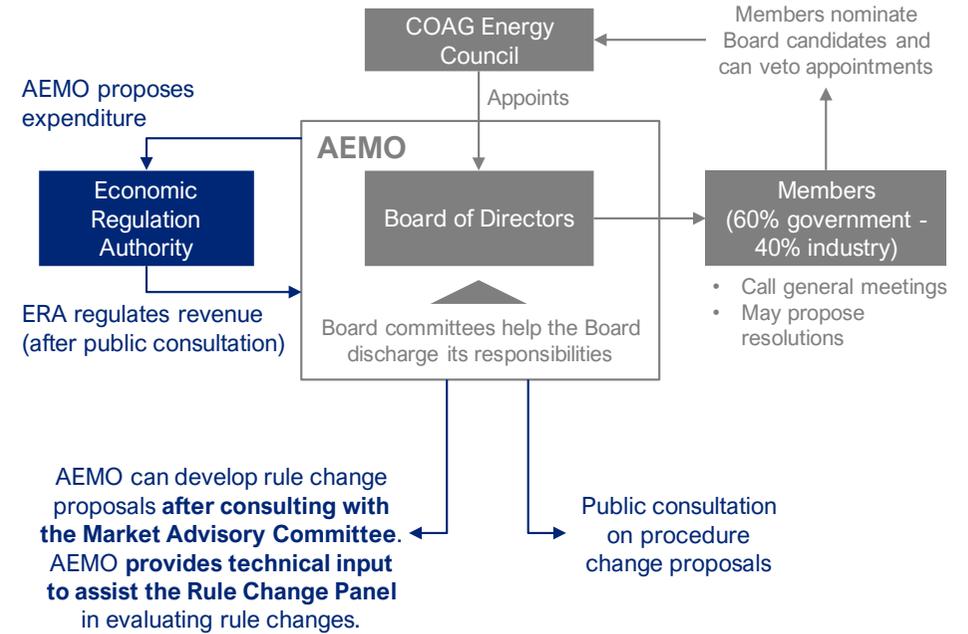
### 4.3. AEMO (WEM)

AEMO assumed responsibility for Western Australia’s electricity market operation and gas information functions in 2015 and power system operations in 2016.<sup>39</sup> Transmission operator Western Power remains responsible for network planning, supported by AEMO analysis.

The corporate structure discussed above applies to AEMO as a whole and is relevant to the WEM as well as to the NEM, but the two markets’ overarching governance arrangements differ. Western Australia’s Economic Regulation Authority (ERA) is responsible not only for monitoring AEMO’s compliance with the WEM rules, but also for determining AEMO’s allowable revenue and capex. This is done every three years, with the current price control (AR5) running from 2019 to 2022.

AEMO recovers allowed revenue through market participant fees published in its annual budget. If AEMO spends more/ less than its revenue, the next year’s budget must adjust for the shortfall/ surplus. If the adjusted budget leads to revenue over the review period being at least 15% greater than initially determined, AEMO must apply to the ERA to reassess allowable revenue.<sup>40</sup>

Figure 4.2: AEMO's WEM-specific arrangements (shown in blue)



Source: WEM Rules, CEPA analysis

<sup>39</sup> AEMO (2019b), p. 7.

<sup>40</sup> WEM Rules 2.22A.7. A similar rule applies to capex.

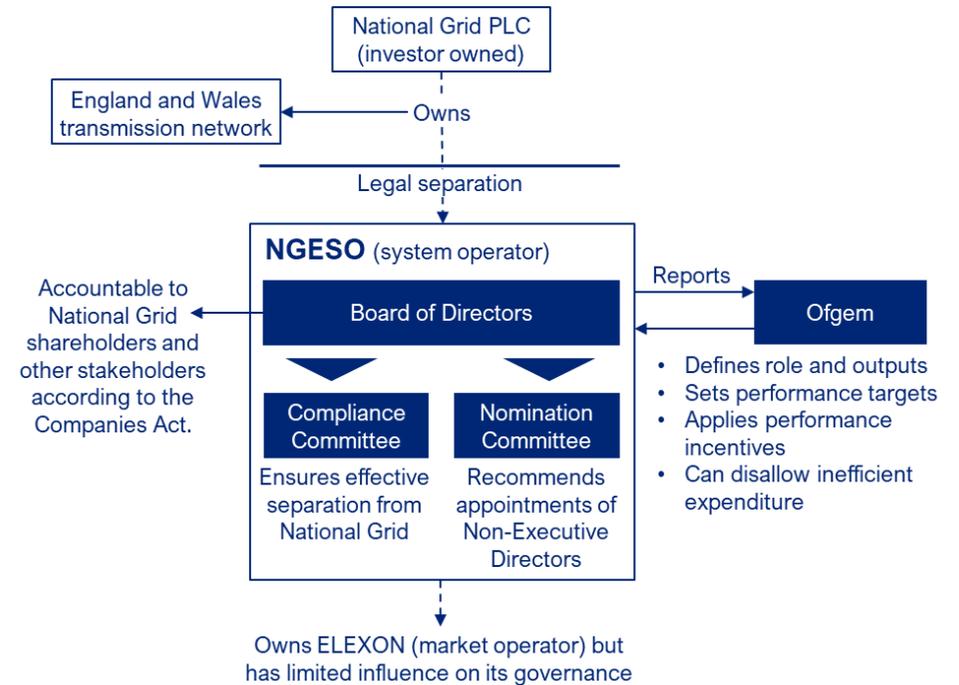
#### 4.4. NGESO (GREAT BRITAIN)

NGESO is the system operator responsible for balancing Great Britain’s electricity market and managing network constraints by contracting (and developing the markets for) ancillary services. Its roles also include long-term planning and forecasting, policy advice, and overseeing market framework and industry codes changes.<sup>41</sup>

NGESO is a wholly-owned subsidiary of National Grid PLC, but is legally and functionally separated and has an independent Board, which does not include any National Grid PLC representatives. The Board is chaired by NGESO’s Managing Director and includes three independent Non-Executive Directors and three additional members appointed from within NGESO’s business. The Board oversees the delivery of NGESO’s business strategy and sets its strategic aims. The Board also ensures that NGESO meets its obligations to shareholders and other stakeholders, in line with Directors’ duties under the Companies Act 2006.<sup>42</sup>

NGESO recovers its costs and allowed return on capital from market participants on a pass-through basis, subject to an incentive scheme administered by Ofgem. Under this model, Ofgem sets upfront performance measures and expectations. This includes an ex-ante benchmark for internal costs, based on Ofgem’s view of the efficient expenditure required to deliver NGESO’s business plan. Every six months, NGESO reports on incurred and expected costs. An external Performance Panel provides NGESO with feedback on its performance. At the end of the incentive period, the Panel rates NGESO’s performance. Ofgem considers the ratings to determine the final reward/ penalty.

Figure 4.3: NGESO’s current governance arrangements



Source: Ofgem, NGESO, CEPA analysis

<sup>41</sup> NGESO’s roles and outputs are defined by Ofgem. See Ofgem (2019), *RIIO-2 financial methodology and roles framework for the Electricity System Operator*, October, p. 33 and NGESO (2019), *ESO RIIO-2 Business Plan: Annex 1 – Supporting information*, December.

<sup>42</sup> NGESO (2020), *National Grid Electricity System Operator business separation compliance annual report 2019-20*, June, p. 8-9.

#### 4.5. ELEXON (GREAT BRITAIN)

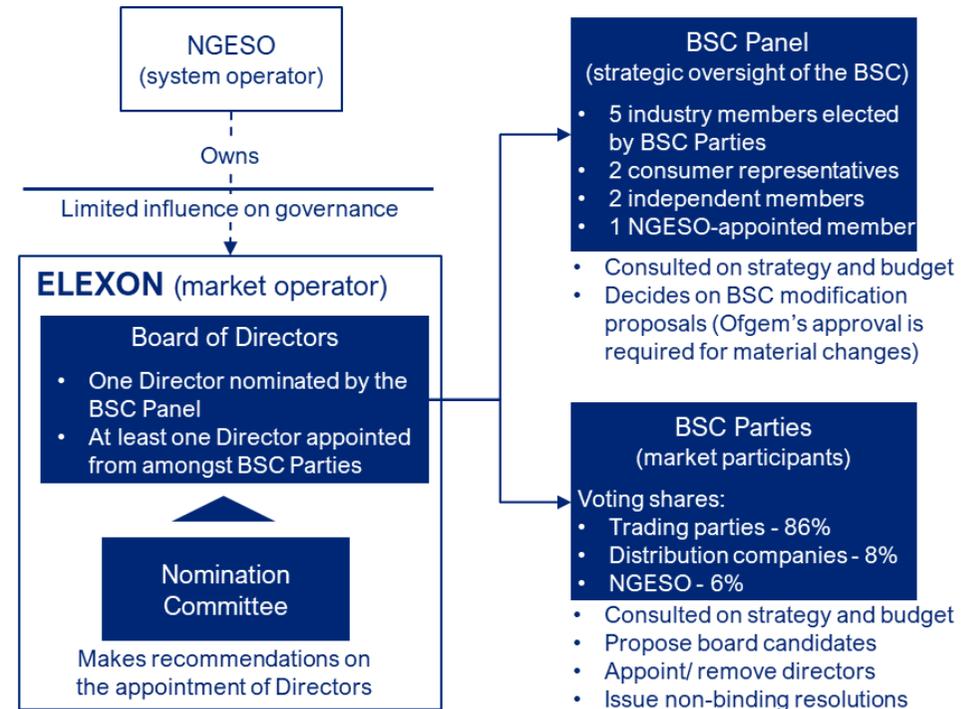
ELEXON is the market operator company tasked with the financial settlement of trade occurring in Great Britain's balancing market run by NGESO. ELEXON's functions are limited to those listed in the Balancing and Settlement Code (BSC), which ELEXON is tasked with implementing.<sup>43</sup>

ELEXON is owned by NGESO but key governance decisions are taken by the BSC Parties, to whom the Board is accountable. At general meetings, the BSC Parties may comment on ELEXON's strategy and budget and issue non-binding resolutions that are advisory in nature to the Board. BSC Parties have the power to appoint and remove Directors. The BSC Panel, a forum acting as the custodian of the BSC and representing various stakeholder groups, is also consulted on ELEXON's budget and strategy.

ELEXON's Board is responsible for approving the annual budget and business strategy and ensuring that ELEXON meets its obligations to stakeholders. The Board must include a majority of Directors with industry experience, the BSC Panel Chair, ELEXON's CEO, and two independent Directors.<sup>44</sup>

ELEXON is a not-for-profit company and recovers its costs, which are not regulated, from trading parties. Budget underspends are returned to trading parties. Most charges are levied in proportion to trading volumes.<sup>45</sup> If ELEXON expects a budget overspend, it must submit a revised budget to the BSC Panel and Parties for comments.<sup>46</sup>

Figure 4.4: ELEXON's current governance arrangements



Source: ELEXON, BSC, CEPA analysis

Note: The 86% voting share is allocated between trading parties based on their contribution to ELEXON's funding, with a 6% cap for any individual party. The 8% voting share is equally divided among DNOs. ELEXON (2017b), Voting arrangements FAQs.

<sup>43</sup> BSC C.1.2.2, C.3.3 and C.3.8.

<sup>44</sup> ELEXON (2017a), ELEXON Nominations Committee terms of reference.

<sup>45</sup> ELEXON (2020), BSCCo Business Plan 2020/2021, March, p. 33 and 40 and ELEXON (2019), BSC funding shares, February, p. 1-3.

<sup>46</sup> BSC C.6.5.

#### 4.6. PJM (US)

PJM Interconnection LLC is a regional transmission organisation (RTO) in the North East of the United States (US). RTOs were established to oversee the efficient organisation of interstate wholesale electricity markets in the US and do not own the transmission network. PJM is the transmission system operator, market operator, and the transmission system planner for the region.

A key feature of PJM’s governance is that it is a membership-based organisation. Industry participants can apply to become members of PJM and participate in decision making. Governments do not participate as PJM members. PJM uses a “two-tiered governance” model, which aims to ensure neutrality and independence in the operation of the electricity grid and markets.<sup>47</sup> The two tiers in the governance structure are the PJM Board and Members Committee. PJM’s Operating Agreement sets out the relevant rights and obligations of the Board and Members Committee.<sup>48</sup> The key powers of the Members Committee are: the election of members of the PJM Board; amending and terminating the Operating Agreement; and providing advice and recommendations to the PJM Board.

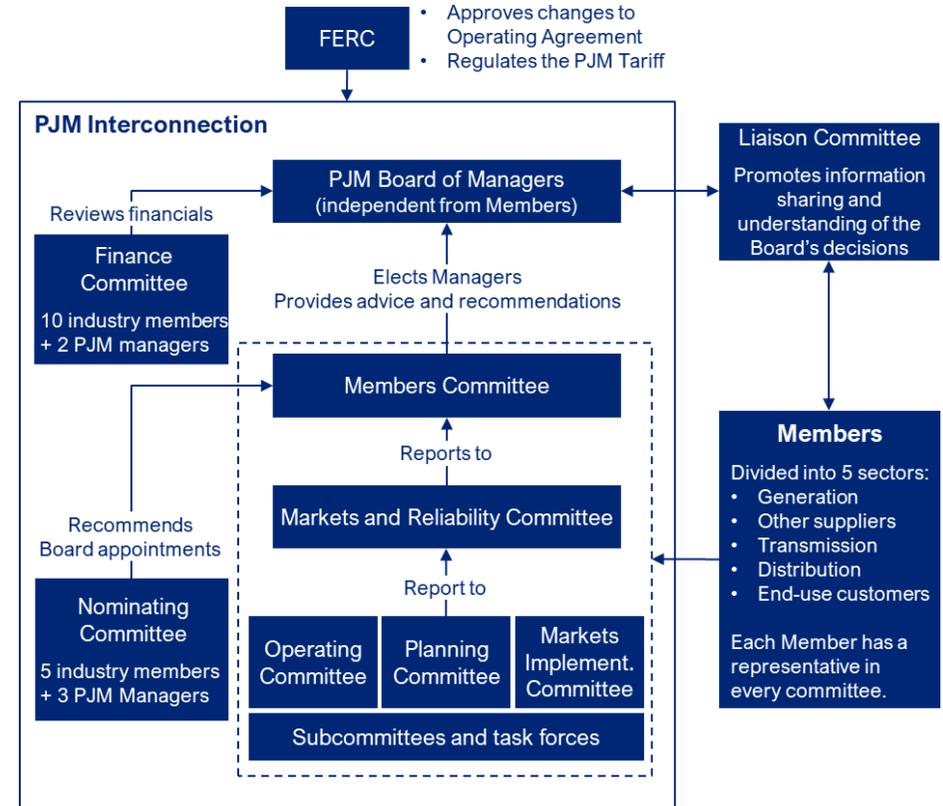
Each member of PJM will have one representative on the Members Committee. A key feature of the Members Committee is the five-sector structure. The five sectors are Electric Distribution, End Use Customer, Generation Owner, Other Supplier and Transmission owner. Members can only belong to one sector. Voting on issues is sector-weighted with each of the five sectors having equal weight in determining the overall outcome.<sup>49</sup>

PJM is a non-profit entity, and recovers its administrative costs through membership fees, directly from some customers for some services, and charges under the PJM Tariff.<sup>50</sup> The PJM Tariff allows rates to be set to fund and maintain reasonable financial reserves.

PJM can request changes to its governing documents, and the fees it collects from market participants, but these must be approved by Federal Energy

Regulatory Commission (FERC). FERC, as the regulator, can also make orders that apply to PJM. FERC follows a legal process of review including a stakeholder submission period.

Figure 4.5: PJM’s current governance arrangements



Source: PJM (2019), *PJM Manual 34: PJM Stakeholder Process*, CEPA analysis

<sup>47</sup> PJM (2017), [Governance](#), December.

<sup>48</sup> PJM (2019), [Operating Agreement of PJM Interconnection L.L.C.](#), Section 7, 8 and 11.

<sup>49</sup> PJM, [Committees & Groups FAQs – What is sector weighted voting?](#)

<sup>50</sup> PJM (2018), [PJM 2018 Annual Report](#).

#### 4.7. TRANSPOWER (NEW ZEALAND)

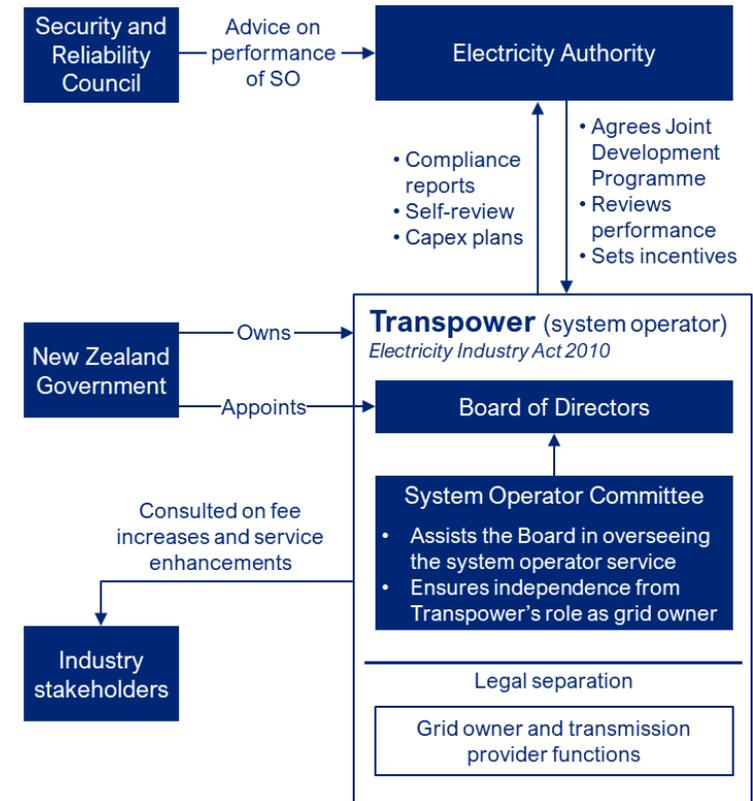
The Electricity Authority (the Authority, an independent Crown entity responsible for the regulation of the New Zealand electricity market) has overall responsibility for ensuring that system and market operations are aligned with its statutory objective, being “to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers”.<sup>51</sup> In support of this objective, the Authority establishes contracts for the provision of system operation services.

The *Electricity Industry Act 2010* mandates that Transpower, a state-owned enterprise that owns the transmission grid and provides transmission services, is the electricity system operator.<sup>52</sup> Transpower is regulated by the Authority in accordance with the *Electricity Industry Participation Code 2010* (the “Code”).

The arrangements set out in the Code include guidance on a contract established between Transpower and the Authority for the provision of system operator services. Under this agreement, Transpower receives a ‘service fee’ for providing the system operator services, negotiated with the Authority. The current agreement came into effect in July 2016 and lasts for five years. Transpower recovers this fee directly from the Authority. The Authority is funded by the New Zealand Government through appropriations, which are recovered by the Government through a levy on industry participants.<sup>53</sup> The Authority consults annually on levy-funded appropriations.

In addition to the service fee, the service provider agreement establishes other governance arrangements related to the performance of the system operator role. These include requirements in relation the Authority’s approval of certain expenditures, the preparation of planning documents, and reporting arrangements.

Figure 4.6: Transpower’s current governance arrangements



Source: *Electricity Industry Act 2010*; *Electricity Industry Participation Code 2010*; *Electricity Authority (2019) ‘Annual review of system operator performance 2018-19’*; *System Operator Service Provider Agreement*; *Transpower, ‘System Operator Committee: Terms of Reference’*; *CEPA analysis*

<sup>51</sup> Electricity Industry Act (2010), Section 15.

<sup>52</sup> Electricity Industry Act (2010), Section 8.

<sup>53</sup> In accordance with the *Electricity Industry (Levy of Industry Participants) Regulations 2010*. Electricity Authority (2019a), *Electricity Authority Appropriations for 2019-2*, July.

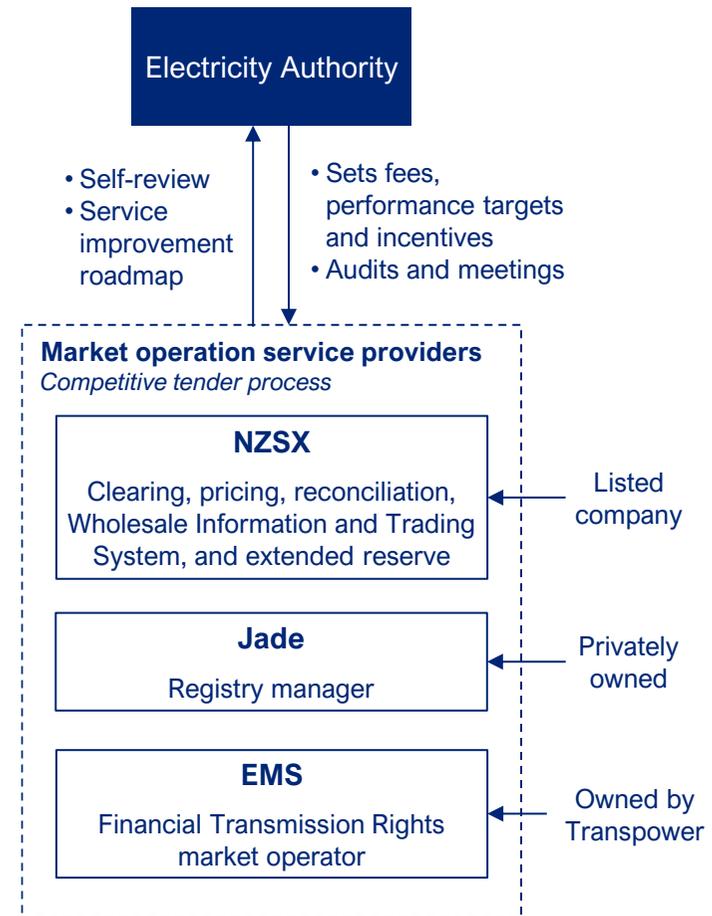
#### 4.8. MARKET OPERATION SERVICE PROVIDERS (NEW ZEALAND)

In line with its statutory objective (outlined above), the Authority also contracts with a range of market operation service providers (MOSPs) that manage different aspects of the wholesale electricity market.

Unlike the Transpower system operator contract, these services are procured through a competitive tender process. The market operations functions are disaggregated into seven separate roles, which can in principle be contracted to different entities. Currently, the MOSP contracts are held by three companies: NZX, Jade Software Corporation (NZ) Limited (Jade), and Energy Market Services (EMS), a division of Transpower – with NZX performing five of the seven roles. Service fees are set through the Authority’s negotiations with the service providers.

The contracts include various mechanisms for the Authority to oversee the service providers’ performance, including setting and monitoring agreed performance standards, requirements to provide the Authority with a roadmap documenting how the services will be improved over the term of the agreement, the right for the Authority to undertake audits, and requirements for regular meetings with the Authority.

Figure 4.7: MOSPs’ current governance arrangements



Source: Electricity Industry Participation Code 2010; CEPA analysis

## 5. COMPARATIVE ASSESSMENT

In this section, we set out how the different market and system operator governance models support each of the governance principles outlined in Section 3. We conclude with an assessment of how the arrangements that are in place for AEMO compare to the approaches taken in other jurisdictions.

### 5.1. PRINCIPLE 1: ROLES AND RESPONSIBILITIES



Principle 1: Roles and responsibilities

*There is clarity about the roles, responsibilities and relationships of the board.*

#### Case studies

The case studies indicate that there is not a single, dominant model for system and market operator governance. Rather, different jurisdictions have adopted arrangements that are tailored to their context and shaped by the historical development of their market. Accordingly, these arrangements define a variety of roles, responsibilities and relationships that hold the system or market operator accountable for its performance.

The board-member or board-shareholder relationship is not always relevant for understanding the governance arrangements (Table 5.1). In some of the case studies, the key accountability relationship is between the system or market operator and an economic regulator. This includes the arrangements for AEMO in the WEM and for NGESO in Great Britain. In New Zealand, service provider agreements govern the relationship between the Electricity Authority and Transpower/the MOSPs. Given the Electricity Authority's role in negotiating these agreements, this could be described as a quasi-regulatory arrangement. The industry members of PJM and ELEXON are involved in holding the board of each organisation accountable for its performance, although the mechanisms that support them in this role vary in nature and strength (see Principles 2, 4 and 5). In

the case of PJM, there is overall accountability to FERC, as the regulatory authority with responsibility for approving changes to PJM's Tariff.

Table 5.1: Overview of governance relationships

Jurisdiction	Key governance relationships
AEMO (WEM)	<ul style="list-style-type: none"> <li>• Board-Government/Industry Members</li> <li>• Company-Regulator (ERA)</li> </ul>
NGESO (GB)	<ul style="list-style-type: none"> <li>• Company-Regulator (Ofgem)</li> </ul>
ELEXON (GB)	<ul style="list-style-type: none"> <li>• Board-Industry Members</li> </ul>
PJM (US)	<ul style="list-style-type: none"> <li>• Board-Industry Members</li> <li>• Company-Regulator (FERC)</li> </ul>
Transpower (NZ)	<ul style="list-style-type: none"> <li>• Company-Regulator (Electricity Authority)</li> </ul>
MOSPs (NZ)	<ul style="list-style-type: none"> <li>• Company-Regulator (Electricity Authority)</li> </ul>

#### AEMO

AEMO's Government and Industry Members have a key role within the governance framework. The Board Charter states that "[t]he Board acts in the best interests of the Company as a whole and is accountable to the Members for the overall direction, management and corporate governance of the Company."<sup>54</sup> Therefore, these roles are clearly defined in AEMO's governing documents.

Unlike most of the case studies, outside AEMO's operations in the WEM, there is currently no oversight role for an independent regulatory authority in relation to AEMO's business plan, costs and/or fees. Nonetheless, the presence of Government Members within AEMO's governance framework provides for representation of the broader public interest. Therefore, given that there is no single model for system and market operator governance, the roles and responsibilities defined under AEMO's framework do not appear out of step with the arrangements observed in other jurisdictions.

<sup>54</sup> AEMO (2012), *Board Charter*, August, p. 3.

However, our research and informal conversations with several of AEMO's Members indicate that, in practice, the Board-Member relationship may not be operating as described.

AEMO's Constitution and the *Corporations Act 2001* set out the rights that AEMO's Government and Industry Members can exercise. These include the ability to call general meetings, propose resolutions to be moved, and vote on resolutions moved, in accordance with the Act.<sup>55</sup> We have not found evidence that Members play an active role at general meetings. For example, our conversations with Members indicate that general meetings are typically brief and viewed as a 'formality'. This is consistent with the minutes of AEMO's 2017 and 2018 Annual General Meetings (AGM), which indicate that Members have not proposed or debated resolutions.<sup>56</sup>

AEMO's Constitution also provides Members with the right to comment on a draft Statement of Corporate Intent and Annual Budget, which must be submitted to Members not later than one month before the start of each financial year. Principles 3 and 4 provide a more detailed discussion on the *design* of strategic planning and budgeting within the governance framework. However, in relation to Principle 1, we observe that in practice, the role of Members in these processes appears to have been relatively limited.

AEMO's most recent draft budget was published for consultation on 12 June 2020, with submissions requested by 22 June (i.e. a consultation period of six business days). Three submissions were received, from the Australian Energy Council, Energy Networks Australia and the Queensland Electricity Users Network (i.e. there were no submissions directly from Government or Industry Members, although the Australian Energy Council and Energy Networks Australia collectively represent the bulk of AEMO's Industry Members). From our

discussions with Members, we understand that AEMO has also consulted informally on its budget with some Members (e.g. presentations).

While we have not identified a Statement of Corporate Intent for the most recent financial year,<sup>57</sup> AEMO has published a Corporate Plan. Unlike the annual budget, we have not identified a formal consultation process being undertaken in relation to the Corporate Plan (i.e. publication of a draft and invitation of submissions). Some, but not all, of the Members we have spoken to indicated that AEMO met with them to present the Corporate Plan and received additional feedback from them through these channels. These Members welcomed this consultation as an improvement, but indicated that there was no formal response to their feedback.

Overall, we have found limited evidence of AEMO demonstrating accountability to its Members, or being held to account by its Members, through the mechanisms defined in AEMO's Constitution and the *Corporations Act 2001*. In practice, the rights of Members in relation to general meetings, budgets, and strategic plans, do not currently appear to be actively used to provide oversight.

It is also important to consider the roles of the COAG Energy Council and ESB. The COAG Energy Council plays a key role in defining performance expectations and priorities for AEMO (Section 5.3) and also in relation to Director appointments (Section 5.2). In addition, the ESB plays a role in coordinating the work of the market bodies.<sup>58</sup> From a governance perspective, it is important that there is clarity in relation to the roles of the COAG Energy Council, the ESB and AEMO's Members in ensuring AEMO is accountable for the performance of its functions. One interpretation of these roles could be that while the COAG Energy Council (and to a lesser degree the ESB) have responsibility for setting expectations, AEMO's Board is ultimately accountable to its Members for how it meets these expectations. While this would be consistent with the language in AEMO's Board Charter, different interpretations are possible. Accordingly, there

---

<sup>55</sup> AEMO (2017), art 5.1. For example, the Act specifies that members holding at least 5% of the votes may give the company notice of a resolution that they propose to move at a general meeting.

<sup>56</sup> While minutes of AGMs are not on the public record, AEMO has provided CEPA with the minutes of these two meetings to inform this report.

<sup>57</sup> Previous annual reports reference earlier Statements of Corporate Intent, although they no longer appear to be published on AEMO's website.

<sup>58</sup> COAG Energy Council (2017), *Energy Security Board Terms of Reference*, November.

appears to be a relatively complex set of roles and responsibilities. This may also contribute to a lack of clarity around to whom AEMO's Board is accountable, for what, and how.

#### **Summary: Roles and responsibilities**

- AEMO's Board is formally accountable to its Government and Industry Members. While AEMO's model is different from the arrangements in other jurisdictions, there is no single model that has been universally adopted as good practice.
- Governance roles, responsibilities, and relationships are clearly defined in AEMO's governing documents, but may not be operating as described. This may be contributing to a lack of clarity around who AEMO's Board is accountable to, for what, and how.

## **5.2. PRINCIPLE 2: BOARD COMPOSITION**



### Principle 2: Board composition

*The board's structure and composition enable it to fulfil its role effectively.*

### **Case studies**

Depending on how roles and responsibilities are defined, the composition of the market/system operator's board may not always be highly relevant for understanding their external governance arrangements. In New Zealand, for example, governance arrangements are essentially determined by the law and contractual arrangements between market/system operators and the Electricity Authority, while the board composition merely reflects the market/system operator's ownership (public in Transpower's case, private in the MOSPs' case).

However, within the other jurisdictions that we have reviewed, board composition and appointment processes tend to reflect and complement the overall governance arrangements:

- Where the entity is regulated or industry members have a strong voice in decision making (e.g. NGEN and PJM), the board itself tends to be 'skills-based' and not to include industry members (although PJM members are involved in the appointment process).
- If the regulator/ members do not have direct influence on decision making (e.g. ELEXON), industry members may be given a greater role in the board composition and appointment.

Examples of these arrangements are summarised in Table 5.2.

Table 5.2: Board composition

Jurisdiction	Board composition	Member involvement
PJM (US)	<b>Independent board</b> – Directors must provide a mix of skills and experience and have no association with or financial stake in any market participant. Directors are in office for three years with a limit of five terms.	<b>Strong involvement</b> of industry members – Members control the Nomination Committee and confirm board appointments, in line with their influence on decision making.
NGESO (GB)	<b>Mix of independent and executive directors</b> – To ensure effective separation from the rest of National Grid Group and align board incentives with performance, the majority of directors are from NGESO’s management. We have not identified the arrangements regarding NGESO directors’ appointment and tenure.	Industry members are <b>not involved</b> in the Board and its appointment – Board composition is agreed with Ofgem, reflecting NGESO’s nature as a regulated entity.
ELEXON (GB)	<b>Representative board</b> – Includes ELEXON’s CEO, BSC Parties and BSC Panel representatives, different classes of industry participants, and independent directors. Directors are in office for three years and in theory there are no limits to the possibility of reappointment.	<b>Strong involvement</b> of industry members – BSC Parties appoint and remove directors.

<sup>59</sup> AEMO (2017), art. 7.1 and 7.2, and Schedule 2.

<sup>60</sup> The Selection Panel provides recommendations on appointments to the AEMC, AER, and ECA Boards, as well as AEMO’s. It consists of six members including: a Chair

## AEMO

AEMO’s Board may include between five and 10 Directors, including the Managing Director. At least three, but not more than six, Directors must have industry experience. A majority of Directors must be independent, i.e. must not have been employed by AEMO or associated with AEMO’s membership in the six months prior to the appointment.<sup>59</sup>

Directors are appointed for a term of four years and may serve one further consecutive term (two, under special circumstances identified by the COAG Energy Council). While the Corporations Act 2001 (art. 203D) indicates that a company director may be removed by members’ resolution, AEMO’s constitution does not set out a procedure to remove Directors.

Compared to other case studies, the processes that determine the composition of AEMO’s Board appear to be reasonably transparent and merit-based. The appointment process is clearly stated in AEMO’s governing documents, and the Board as a whole must possess an appropriate mix of skills and experience.

AEMO’s Constitution requires that a majority of Directors, including the Chair, must be independent of AEMO’s management and membership. Therefore, Directors do not directly represent the interests of Members. As indicated by the case studies, this is not necessarily unusual.

There are some limitations to the Members’ role – particularly Industry Members – in the Board appointment process. While Members can nominate candidates, the COAG Energy Council’s Selection Panel is responsible for shortlisting potential appointees and making a recommendation on appointments.<sup>60</sup> Members can veto the Panel’s recommendation, referring the matter back to the Panel for further consideration. When Members approve the Panel’s recommendation, this is submitted to the COAG Energy Council for approval. As Government Members collectively hold the majority of the voting power within AEMO (Box 1) and their

nominated by the governments, three ministerial members nominated by the governments, and two industrial members nominated by the industry. See: <https://prod->

views are also represented through the Selection Panel and the COAG Energy Council, this indicates a much stronger influence over the composition of the Board, relative to the Industry Members.

#### Box 1: Voting shares of AEMO Members

AEMO's Members may vote on resolutions at general meetings, including in relation to Director appointments. Government and Industry Members are collectively entitled to 60% and 40% of total votes respectively.

We understand that prior to AEMO's establishment in 2009, the weighting of voting rights was an issue of contention. While some parties considered that a stronger industry membership would make AEMO more accountable to those who use and pay for AEMO's services, others considered that government membership provided greater protection to end users and independence from any particular market participant. The current 60-40 split reflects the outcome of those discussions.<sup>61</sup>

Based on discussions with Members, and our own analysis, our perception is that the 60-40 split does not appear to be a key governance issue. This is particularly the case currently, where Members vote on a limited range of issues. Further, it is not apparent to us that a different weighting would clearly be more appropriate, or would result in better (or even different) outcomes, given that Government and Industry Members may hold diverse views. This observation is broadly in line with the conclusions of the 2015 Vertigan review, which noted that the ownership structure was "*at best, ... a second order issue*".<sup>62</sup>

While we do not see voting shares as a significant issue, we note that changes to these arrangements could potentially be considered alongside other potential reforms. For example, there may be value in re-assessing whether it would be appropriate for end consumers (or their representatives) to have a direct role in AEMO's governance arrangements, in line with the increasing emphasis on customer engagement in other parts of the sector.

As indicated by the case studies (e.g. NGESO), the limited role of Industry Members is not necessarily unusual. However, it may reinforce the perception of gaps within the governance framework.

#### Summary: Board composition

- The arrangements around AEMO's Board, including the limited role and representation of Industry Members, are not unusual in themselves.
- These arrangements may be perceived by some members to reinforce gaps in accountability and stakeholder engagement. However, we consider that this indicates a need to review these aspects of the overall governance framework, rather than the Board arrangements.

[energycouncil.energy.slicedtech.com.au/publications/coag-independent-energy-appointments-selection-panel](http://energycouncil.energy.slicedtech.com.au/publications/coag-independent-energy-appointments-selection-panel). Accessed July 2020.

<sup>60</sup> AEMO (2017), art. 7.3.

<sup>61</sup> AEMO (2013), *AEMO governance review*, August, p. 15-17.

<sup>62</sup> Vertigan, M., Yarrow, G., and Morton, E. (2015), *Review of governance arrangements for Australian energy markets: Final report*, October, p. 87.

### 5.3. PRINCIPLE 3: PURPOSE AND STRATEGY



#### Principle 3: Purpose and strategy

*The organisation has a clear purpose and a strategy which aligns its activities to its purpose.*

#### Case studies

As described in Section 3, our focus for this principle is on the *process* for defining the system or market operator's purpose and strategy, rather than the substantive content. As indicated in Table 5.3, market and system operators are commonly required by regulation to prepare a strategic plan. In some cases, this plan is subject to review and approval by an independent third party. This is the approach adopted for NGENSO in Great Britain and Transpower in New Zealand.

For example, in Great Britain, Ofgem determines the outputs that NGENSO should deliver, based on a review of its two-year business plan. Ofgem has four tools to regulate outputs:

- Licence obligations – Set the minimum standards NGENSO must achieve. Ofgem can update the licence to align with NGENSO's business plan.
- Roles framework guidance – Ofgem sets NGENSO's roles for the purpose of the regulatory assessment and sets out its expectations in relation to each role.
- Delivery schedule – A document that details the outputs that NGENSO will be accountable to deliver and by when.
- Performance measures – Set by Ofgem as part of the incentive scheme (see Principles 4 and 5 for more details).<sup>63</sup>

In addition to the two-year business plan, NGENSO must also develop an annual forward plan with stakeholders.

While AEMO is not required to prepare a strategic plan that specifically relates to its WEM role, it does set out its functions and services in its revenue proposal that is approved by the ERA. Rule changes have also provided opportunities to clarify specific aspects of AEMO's role. For example, in 2017 AEMO submitted a rule change proposal seeking to clarify and extend its market development functions. The new rules came into effect in March 2018, and establish an explicit function for AEMO to contribute to the development of the WEM by: developing rule change proposals or assisting other parties to do so; providing information to the Rule Change Panel in relation to rule change proposals; and providing information to the ERA to support its periodic review of the market rules.<sup>64</sup> This process provided an opportunity for discussion over the appropriate scope of AEMO's role in the development of the WEM. The rule change decision emphasised a contributory role for AEMO in development of the WEM design. In line with this conclusion, the new rules require that before developing a rule change proposal (or assisting other parties in developing one) AEMO must consult with the Market Advisory Committee on certain matters.

The requirements for the standalone market operators (ELEXON in GB and MOSPs in New Zealand) appear to be less stringent. These lighter touch arrangements potentially reflect that the market operator functions (for example, market settlement, management of prudential requirement) are more amenable to being precisely specified in regulation and/or contract, relative to the system operator role. For example, while ELEXON is required to prepare a three-year plan, the board has the ultimate authority to determine its contents. At the same time, ELEXON is expressly prohibited from undertaking activities that are not provided for in the BSC, allowing less room for debate over the appropriate scope of its role. In the case of the MOSPs in New Zealand, there appear to be no specific requirements for regular strategic plans to be developed. However, their

<sup>63</sup> Ofgem (2020), p. 32.

<sup>64</sup> Rule Change Panel (2017), [Final Rule Change Report: AEMO Role in Market Development \(RC 2017 05\)](#), December, p. 4.

responsibilities are tightly specified in the Service Provider Agreements with the Electricity Authority.

Table 5.3: Summary of processes for defining purpose and strategy

Jurisdiction	Summary
AEMO (WEM)	<ul style="list-style-type: none"> <li>Revenue proposal to ERA outlines AEMO’s plans over the determination period. Consultation occurs through the ERA determination process.</li> </ul>
NGESO (GB)	<ul style="list-style-type: none"> <li>Defined roles framework set through extensive consultation.</li> <li>Ofgem approves a two-year business plan, again with an extensive consultation process.</li> </ul>
ELEXON (GB)	<ul style="list-style-type: none"> <li>The BSC specifically prohibits ELEXON from undertaking any activity outside the BSC.</li> <li>BSC requires ELEXON to publish a 3-year business strategy and an annual budget. Process for BSC parties to comment in an advisory capacity.</li> </ul>
PJM (US)	<ul style="list-style-type: none"> <li>PJM’s functions were established in FERC Order 2000.</li> </ul>
Transpower (NZ)	<p>Role described in the Electricity Code. Code requires Transpower and the Authority to agree an annual joint development program which coordinates and prioritises projects and Transpower’s capex plan.</p> <ul style="list-style-type: none"> <li>The Service Provider Agreement also requires Transpower to provide various planning documents (e.g. market design investigations it will undertake, five-year strategy, annual business plan), for the Authority’s approval.</li> </ul>
MOSPs (NZ)	<ul style="list-style-type: none"> <li>The Service Provider Agreements include requirements for strategic oversight by the Authority, including requirements to provide the Authority with a roadmap documenting how services will be provided.</li> </ul>

## AEMO

AEMO’s overarching role in the NEM is described in the Australian Energy Market Agreement. Alongside this, the NEL sets out statutory functions for AEMO, while the NER also introduce specific activities and obligations (see Section 2.1).

There appears to be a long-standing debate around the appropriate boundaries of AEMO’s role, particularly in relation to policy and market development. For example, the expert panel of the 2015 Vertigan Review noted a lack of consensus about whether AEMO had a policy and market development mandate and identified a potential source of confusion in one of the statutory functions described in the NEL which requires AEMO to “*promote the development and improve the effectiveness of the operation and administration of the wholesale exchange*”.<sup>65</sup>

The review concluded that AEMO should be focused on operating the market and system, while contributing to policy development/ market design through the AEMC’s strategic process. In relation to roles other than market and system operations, the panel considered that AEMO should only undertake tasks outside of its core responsibilities where they do not conflict with those responsibilities and are undertaken on a contractual basis. To this end, the panel recommended that the COAG Energy Council issued a ‘statement of role’ clearly specifying AEMO’s core role, processes for accessing AEMO’s expertise in market and systems operations, and the arrangements under which AEMO would be able to undertake other activities. This recommendation was restated in the 2017 Finkel Review, which tasked the ESB with issuing a statement of role for AEMO containing a set of outcomes-based performance indicators.<sup>66</sup>

The recently published review of the ESB notes that while developing AEMO’s statement of role is included in the ESB’s terms of reference, it has not yet been completed.<sup>67</sup> This review recommended that the statement of role should be developed, that it should specifically address the issue of AEMO’s role in the

<sup>65</sup> Vertigan, M., Yarrow, G., and Morton, E. (2015), p. 80-81.

<sup>66</sup> Finkel et al. (2017), p. 26, recommendation 7.5.

<sup>67</sup> Rhys Edwards RMDE Consulting (2020).

provision of policy or market development advice. This recommendation has been agreed by the Energy Ministers.<sup>68</sup> In January 2020, the COAG Energy Council published a Strategic Energy Plan (SEP) for the NEM.<sup>69</sup> The SEP is intended to provide a foundation for setting the three-year strategic direction and performance expectations for the market bodies (AEMC, AER and AEMO). The SEP noted that for AEMO, these expectations would be captured in the statement of role.

We note that the other statutory functions that AEMO is required to fulfil could also be subject to interpretation. At the same time, there appears to be limited guidance as to how AEMO should decide what is required to meet these obligations. For example, the NEL states that AEMO is required to “*maintain and improve power system security*”. The NER (4.3.1) go on to describe specific responsibilities for AEMO in relation to power system security, including the responsibility to “*maintain power system security*”. However, the NER appear to be silent on improvements to power system security, and neither the NEL or the NER describe under what circumstances improvements should be pursued.

It is not uncommon for system operators to have broadly defined functions or roles. However, the case studies indicate that it is relatively unusual that there are no clearly defined processes for AEMO to elaborate how it will perform its statutory functions, and the expectations set through the SEP. As noted in Section 5.1, AEMO’s Constitution requires it to prepare a Statement of Corporate Intent. Beyond stating that this must be provided to Members one month before the start of each financial year, the Constitution contains no requirements for how this consultation should take place. We have not identified evidence that a formal consultation and submission process was undertaken in relation to AEMO’s recent Corporate Plan.

Corporate plans are a relatively new development in relation to AEMO reporting on its strategy. Unlike the annual report, the corporate plan is a forward-looking document which identifies the challenges AEMO will be faced with over the

planning horizon and the actions that will be taken to achieve specified outcomes. In 2019, AEMO published its first three-year corporate plan for the period between 2020 and 2023. The goals and priorities set out in the three-year plan are updated every year through an annual corporate plan.<sup>70</sup> AEMO indicated that in the future, its annual reports will outline progress made in relation to the outcomes set out in the corporate plan.<sup>71</sup>

Overall, the case studies suggest that in AEMO’s current governance framework, there is a relative absence of formal requirements in relation to the development of its strategy.

#### **Summary: Purpose and strategy**

- AEMO’s NEM role is defined in relatively broad terms in the NEL/NER, and there appears to be ongoing debate around the interpretation of certain aspects.
- This may have been compounded by an absence of formal processes for external discussion and/or approval of AEMO’s approach to fulfilling this role. The case studies indicate that an absence of formal requirements to guide the development of AEMO’s strategy is relatively unusual.

<sup>68</sup> *ESB Review – Energy Ministers response*, August 2020.

<sup>69</sup> COAG Energy Council (2019), *Strategic Energy Plan*, November.

<sup>70</sup> AEMO (2020a).

<sup>71</sup> AEMO (2019c), p. 28-29.

## 5.4. PRINCIPLE 4: PERFORMANCE



### Principle 4: Performance

*The organisation uses its resources appropriately and evaluates its performance.*

### Case studies

As described in Section 3, this principle does not consider *how* AEMO, or the other market and system operators, have performed their functions. Rather, the focus is on what arrangements are in place to ensure that resources are used appropriately in performing these functions.

The jurisdictions that we reviewed have put in place different mechanisms that aim to ensure that the market and/or system operator makes appropriate use of resources in performing its functions. In all the case studies, there is some form of mechanism for external scrutiny of budgets and costs. The arrangements for each jurisdiction are summarised in Table 5.4 below.

Unlike in other sectors regulated by Ofgem, NGENSO's costs are recovered on a pass-through basis, without a formal expenditure allowance.<sup>72</sup> Instead, NGENSO's internal costs are regulated by Ofgem using an incentive framework, based on NGENSO's overall performance in delivering its two-year business plan (see Principle 3). Through the incentive scheme, Ofgem sets upfront performance measures, expectations of performance, and evaluation criteria and decides on a reward/ penalty at the end of the incentive scheme period. Within the incentive framework, internal and external costs are treated differently.<sup>73</sup> In particular, internal costs are regulated through a value for money criterion. The criterion measures whether NGENSO has delivered value for money, based on its outturn

spend against an ex-ante internal cost benchmark that reflects Ofgem's view of the efficient expenditure that NGENSO requires to deliver its business plan.<sup>74</sup>

Table 5.4: Summary of budget and fee-setting arrangements

Jurisdiction	External approval of budget / fees?
AEMO (WEM)	✓ • ERA approves AEMO's revenue allowance.
NGESO (GB)	✓ • Ofgem regulates NGENSO's costs through an incentive framework.
ELEXON (GB)	✗ • BSC Parties and BSC Panel may comment on ELEXON's draft budget, but the board has the ultimate responsibility for approval.
PJM (US)	✓ • Finance Committee (with member representation) recommends budget for board approval. • PJM's fees (to recover its costs) are subject to FERC approval. • FERC allows PJM to build up a financial reserve for unexpected expenses.
Transpower (NZ)	✓ • Electricity Authority periodically negotiates service provider agreement with Transpower, specifying fees and performance standards.
MOSPs (NZ)	✓ • Electricity Authority negotiates service provider agreement with each MOSP and the contracts are subject to competitive procurement.

In the WEM, the ERA is responsible for determining AEMO's allowable revenue and capex. This is done every three years, with the current price control (AR5) running from 2019 to 2022. The allowable revenue must cover the forward-

<sup>72</sup> Ofgem retains the ability to disallow expenses that are 'demonstrably inefficient'.

<sup>73</sup> Internal costs refer to direct costs, such as staff, while external costs are mainly payments made for balancing (ancillary) services. While the value for money criterion does not apply to external costs, balancing services are subject to other evaluation criteria

<sup>74</sup> Under/ over-spending relative to this benchmark is not necessarily associated with good/ poor value for money. For example, if NGENSO exceeds the benchmark while delivering a highly rated business plan and/ or is able to justify any additional costs, or has delivered additional beneficial outputs, then Ofgem may consider that NGENSO is exceeding value for money expectations. Ofgem (2020), p. 52-54.

looking costs of providing AEMO's WEM statutory functions, which must include only costs which would be incurred by a prudent provider of the services, acting efficiently, seeking to achieve the lowest practicably sustainable cost of delivering the services in accordance with the market rules, while effectively promoting the Wholesale Market Objectives.<sup>75</sup> In AR5, the ERA considered expenditure prudent when necessary for AEMO to meet its obligations under the market rules. To assess efficiency, the ERA examined AEMO's project management and procurement processes; compared estimated costs against actual costs of similar projects; and considered whether AEMO was optimising its resources. The ERA holds public consultations when determining AEMO's budget, publishing and inviting comments on an initial issues paper and then on its draft decision.<sup>76</sup> If AEMO spends more/ less than its revenue, the next year's budget must adjust for the shortfall/ surplus. If the adjusted budget leads to revenue over the review period being at least 15% greater than initially determined, AEMO must apply to the ERA to reassess allowable revenue.<sup>77</sup> AEMO is also required to allocate costs between its WEM and non-WEM functions on a fair and reasonable basis.<sup>78</sup>

In the case of PJM, a Finance Committee is required to submit recommendations for the annual budget for approval by PJM's board. The Finance Committee is composed of two members from each sector of the Members Committee, one representative of the Office of the Interconnection (the body that administers PJM's Tariff and the Operating Agreement) and two members of the PJM Board. The extent to which PJM can recover its budgeted costs depends on fees that are subject to approval by FERC. PJM may request revisions of the PJM Tariff from FERC. FERC applies a general principle of "*just and reasonable*" when

evaluating tariffs and will apply this principle to any requested revisions. FERC could also find that current tariffs are no longer just and reasonable and order PJM to make changes.<sup>79</sup> There have been several revisions in the last ten years.

A different approach is adopted in New Zealand, where the fees levied by the system operator and the MOSPs are negotiated with the Electricity Authority. Transpower's system operator revenues include a fixed fee covering operating expenditure, such as staff costs. This is subject to an annual 'CPI minus X' adjustment to provide for ongoing cost savings. There is a separate fee component relating to capital expenditure. While Transpower consults with the Authority on the capital expenditure plan that this fee component is based on, it is Transpower who ultimately determines the final plan. One exception to this is the different treatment of service enhancement projects, which require Transpower to seek the Authority's agreement.<sup>80, 81</sup>

MOSP revenues are set through their service provider agreements, which are let through a competitive tender process. The current MOSP contracts have an eight-year term with the option for a three-year extension. A 2014 review of the MOSP arrangements indicated that although incumbent service providers have tended to retain their roles, there had been credible competition through the tender process.<sup>82</sup>

Unlike the approval processes administered by the ERA, Ofgem and FERC, it does not appear that the Electricity Authority consults on the content of the service provider agreements (i.e. it operates more as a commercial negotiation). The Electricity Authority is required to consult when seeking an annual

---

<sup>75</sup> WEM Rules 2.22A.11(b). The rules also require ERA to benchmark AEMO's costs against those of similar providers. ERA commissioned a benchmarking analysis in AR5 but noted that differences between the WEM and other jurisdictions made it difficult to assess AEMO's efficiency relative to other market and system operators. See ERA (2019), [Australian Energy Market Operator Allowable Revenue and Forecast Capital Expenditure 2019/20 to 2021/22 – Final Determination](#), p. 14-16.

<sup>76</sup> ERA (2019), p. 10-11 and 17.

<sup>77</sup> WEM Rules 2.22A.7. A similar rule applies to capex.

<sup>78</sup> WEM Rules 2.22A.11(c).

<sup>79</sup> PJM (2020), [Federal Law Guides Changes on PJM Governing Documents](#), June.

<sup>80</sup> These are defined in the SOSPA as projects that are primarily "*to change, enhance or introduce new services, market system tools and/or interfaces*". SOSPA (2016), Schedule 2, section 7. The Authority may challenge Transpower's classification of capex projects, if it considers that a project meets the definition of service enhancement (and is therefore subject to approval).

<sup>81</sup> Transpower (2016) "Information Paper from the System Operator" (available [online](#))

<sup>82</sup> PA Consulting (2014), *Review of the market operation service provider roles undertaken by NZX and Jade Software Corporation*, May, p. 83.

appropriation for its own budget, which includes payments to the system and market operators under the service provider agreements. However, the level of detail provided through the appropriations process appears to be less extensive compared to the regulatory determinations described above. More detailed cost information may be made available through other channels, for example for specific service enhancement capex projects.

Of the case studies, the arrangements for ELEXON represent the lowest degree of external scrutiny. ELEXON's costs are not regulated. The company recovers its costs from trading parties through monthly charges. As ELEXON is a not-for-profit company, the amount charged to the parties exactly matches ELEXON's costs in each financial year. Budget underspends are returned to trading parties.<sup>83</sup> The BSC requires ELEXON to prepare an annual budget setting out the expenditure that ELEXON considers necessary to carry out its business strategy.<sup>84</sup> ELEXON's annual budget provides a high-level breakdown of costs by charge type and by function (i.e. operational costs, costs for BSC modifications, renewal of the digital platform, etc.) and some justification for cost variations compared to the previous year.<sup>85</sup> ELEXON's Board approves the annual budget after the business strategy is finalised and the budget must be revised if the strategy is modified.<sup>86</sup> In case of an expected budget overspend, ELEXON must submit a revised budget to the BSC Panel and Parties for comments.<sup>87</sup>

The case studies indicate that while it is common for an external party to have a role in either approving or agreeing the organisation's budget or fees, different approaches are taken. Notably, while the costs of many of the system and market operators are subject to considerable scrutiny, there is also flexibility to account for unexpected costs and changes in their role.

---

<sup>83</sup> ELEXON (2020), *BSCCo Business Plan 2020/2021*, March, p. 33.

<sup>84</sup> BSC C.6.

<sup>85</sup> See for example ELEXON (2020), p. 33-40.

<sup>86</sup> BSC C.6.4.

## AEMO

As noted in Section 5.1, AEMO's Government and Industry Members have the right to comment on the organisation's draft budget. AEMO's Constitution requires Directors to take Members' comments into account, with the discretion to reflect their views as it considers appropriate. The NER (2.11.3) list activities for which AEMO must separately identify revenue requirements (e.g. system operation, NTP, metering) but do not specify how the revenue requirement should be calculated. In contrast, the NER (2.11) do set out principles to guide the development of AEMO's participant fee structure.

The NER also provide some guidance in relation to certain external costs of operating the power system. For example, NER 3.11.7 requires AEMO to use reasonable endeavours to acquire system restart ancillary services (SRAS) to meet the system restart standard at the lowest possible cost.

Submissions to AEMO's 2020-21 draft budget<sup>88</sup> highlighted stakeholder concerns around rising internal costs and the fact that AEMO's expenses are not subject to independent regulatory scrutiny. Some also noted that stakeholders were not given enough time to comment on the draft and argued that the level of detail in the document was not enough to meaningfully assess the assumptions and forecasts that underpin AEMO's budget.

Our review of the available documentation indicates that from a process perspective, the arrangements that guide AEMO's budgeting do not appear to support the Government and Industry Members in holding AEMO accountable for budgetary decisions. As described in Section 5.1, for the 2020-21 budget, interested parties were provided with six working days to comment.

Further, the level of detail provided in the published documents does not appear sufficient to allow external parties to provide specific input on the proposed

<sup>87</sup> BSC C.6.5.

<sup>88</sup> Available at <https://aemo.com.au/consultations/current-and-closed-consultations/2020-21-aemo-draft-budget-and-fees-consultation>. Accessed July 2020.

expenditure levels. For example, the budget document does not provide a detailed breakdown of the costs associated with fulfilling particular functions. No commentary is put forward on areas where alternative approaches could potentially be considered, or to assist Members in understanding to what extent certain costs increases might be unavoidable (for example, to respond to new rules requirements or responsibilities).

Crucially, the budget documents do not articulate the link between AEMO's direct costs, and the value it creates through its management of the power system and wholesale market. The implications of AEMO's operational decisions on system costs, and value for system users, are orders of magnitude larger than its internal costs.<sup>89</sup> Accordingly, a full understanding of AEMO's budgetary proposals for internal costs requires an appreciation of how it proposes to manage the (much larger) impacts on system costs.

In the final 2020-21 Budget and Fee statement, AEMO noted that:

*“In considering stakeholder feedback and the pressure on all elements of the energy supply chain caused by COVID-19, AEMO recognises that the previous guidance of a projected fee increase of*

*12% in NEM fees is challenging for members AEMO will be reducing the NEM fee increase from a projected 12% down to 9% for the financial year 2021. Options are being considered internally as to how this decrease can best be managed, while minimising the impact on most of the services we provide.”<sup>90</sup>*

The final NEM fee reduction proposal does respond to stakeholder feedback, and appears to be within the boundaries of the fee setting principles established in the NER.<sup>91</sup> However, this suggests that Government and Industry Members were not able to understand or comment on the implications of the fee reduction for service levels, future fees and AEMO's financial sustainability more broadly.

#### **Summary: Performance**

- Compared to the other system and market operators that we have reviewed, the mechanisms for external scrutiny of AEMO's internal and external costs appear to be relatively limited.
- This raises concerns that there may not be sufficient oversight to ensure that costs are efficient and adequate, taking into account both internal costs and AEMO's (much more significant) impact on overall system costs.

<sup>89</sup> Noting that particular aspects of these decisions are guided by the NER (e.g. in relation to RERT procurement).

<sup>90</sup> AEMO (2020b), p. 3.

<sup>91</sup> For example, NER 2.11.1(b)(2)(i)(C) permits AEMO to “take any other action it considers desirable to smooth the impact of actual or anticipated cost variations on the users of a service provided by AEMO”.

## 5.5. PRINCIPLE 5: TRANSPARENCY AND ACCOUNTABILITY



### Principle 5: Transparency and accountability

*The board demonstrates accountability by providing information to stakeholders about the organisation and its performance.*

### Case studies

As described in Section 3, accountability is supported by both:

- **Answerability** – providing information and justification that the organisation’s decisions align with expectations.
- **Enforcement** – there are consequences for failing to meet these expectations.

Other jurisdictions provide for **answerability** primarily through formal reporting obligations. The extent of these obligations varies. For example, in Great Britain the regulatory framework for NGENSO includes extensive reporting, on both business strategy and past performance. The business strategy is set out in a two-year business plan, which sets out specific deliverables, key milestones and associated metrics and costs, informing Ofgem’s view of NGENSO’s outputs.<sup>92</sup>

Other reporting requirements include:

- Regulatory Reporting Packs (RRPs), annual reports on the NGENSO’s revenues, financial performance, costs, and outputs.
- Various activity-specific reports, for example on Electricity Market Reform (EMR) obligations and performance, and innovation activity.<sup>93</sup>
- Reports published at six months interval during the business plan period, where NGENSO sets out costs incurred to date and expected for the rest

of the period, providing also justifications for any material deviations from the cost benchmark set by Ofgem.

These reporting arrangements support the incentive-based regulatory framework applied by Ofgem.

In other jurisdictions, reporting requirements in relation to financial performance appear to be less detailed. Nonetheless, reporting performance against the annual budget appears to be a common minimum requirement. For example, this is the case in the WEM, where AEMO is required to publish a financial report showing its actual financial performance against the budget set by the ERA. In PJM, member participation in the Finance Committee provides for external scrutiny of PJM financial performance.

The market and system operators are also subject to obligations and reporting in relation to their operational performance. In some cases, this is overseen by independent panels. For example, Ofgem’s decision on NGENSO’s financial incentives is based on an ongoing assessment of the system operator’s performance. An external Performance Panel provides NGENSO with feedback on its performance every six months. At the end of the scheme period, the Performance Panel evaluates NGENSO’s performance against the evaluation criteria, producing scores for each of NGENSO’s three roles, which translate into a recommended payment or penalty.

In New Zealand, the Electricity Authority is required to review Transpower’s performance at least annually and Transpower is also required to submit an annual self-review and provide quarterly and monthly performance reporting. This information is published by the Authority on its website. In addition, a Security and Reliability Council (SRC) – established in legislation – provides independent advice to the Electricity Authority on the system operator’s performance.

<sup>92</sup> See NGENSO (2019a), *Facilitating the transition to a flexible, low carbon energy system: The Electricity System Operator RIIIO-2 Business Plan 2021-23*, December; and NGENSO (2019b).

<sup>93</sup> Ofgem (2020), p. 105.

Approaches to the **enforcement** element of accountability are more varied and appear to be closely linked to the organisation's corporate structure and funding model. For the entities that operate on a for-profit basis, incentive mechanisms are in place that establish financial consequences for performance outcomes. For example, financial incentives form part of Ofgem's framework for regulating NGENSO and are also applied by the Electricity Authority in its system operator service provider agreement with Transpower.

## **AEMO**

In relation to **answerability**, the formal mechanisms through which Members can understand AEMO's financial performance are:

- AEMO's annual report, which provides an overview of the company's performance, financial accounts, and governance.
- General meetings, which (at least in principle) provide a forum for Members to pose questions to Directors on the company's performance.

The NER also require AEMO to publish annual reporting in relation to certain external costs associated with operating the power system. For example, this includes system restart ancillary services (NER 3.11.10) and costs associated with Reliability and Emergency Reserve Trader (RERT) procurement of reserves (NER 3.20.2). We have not, however, identified reporting requirements in relation to AEMO's performance on its internal cost budget. AEMO's FY2021 Corporate Plan identifies high-level targets in relation to the achievement of its budget, targeting actuals that are 3-5% lower than budgeted. At this stage, it is not clear what reporting will be published to support Members, or broader stakeholders, in understanding the performance outcomes.

In relation to operational performance, AEMO prepares a range of publications that provide information on the operation of the power system. For example, the Q2 2020 Quarterly Energy Dynamics report reports on power system management costs. AEMO also intends to report against a set of high-level key performance indicators (KPIs) set out in its Corporate Plan. As required by NER 3.13.10, AEMO appoints an independent market auditor to assess internal control procedures in relation to NER compliance. However, we understand that AEMO is

not subject to the same oversights as other the market bodies (e.g. performance audits conducted by the Australian National Audit Office).

In relation to the **enforcement** dimension of accountability, there are limited consequences that Government and Industry Members can impose (in their capacity as Members) in the event that performance, particularly financial performance, is not in line with expectations. In principle, the formal options available to Members are:

- Veto rights in relation to Director appointment (see Principle 2).
- The Corporations Act 2001 (art. 203D) indicates that a company director may be removed by members' resolution, although AEMO's constitution does not set out a procedure to remove Directors.
- As noted in Principle 2, Members have the option to propose to move resolutions at general meetings.

Consequently, the enforcement mechanisms available to Members appear to be primarily reputational. Reputational incentives may be appropriate for a not-for-profit entity, such as AEMO. However, weaknesses in how expectations are set (see Principle 3) and answerability (see above) will tend to impact how effective this is in practice.

There are enforcement options available to other parties. Particularly in relation to operational performance, the AER is responsible for assessing AEMO's compliance with the requirements of the NER. In addition, the COAG Energy Council has oversight of the legislative framework that defines AEMO's mandate. However, as noted in Section 5.1, AEMO's board is not formally accountable to the COAG Energy Council in the current governance framework.

**Summary: Transparency and accountability**

- Formal mechanisms for accountability to AEMO's Government and Industry Members appear to be relatively limited, particularly in relation to financial performance. For example, we have not identified reporting requirements in relation to AEMO's actual internal costs relative to its budget.
- This could limit the scope for Members to play an effective role in AEMO's governance framework.

**5.6. PRINCIPLE 6: STAKEHOLDER ENGAGEMENT**



**Principle 6: Stakeholder engagement**

*There is meaningful engagement of stakeholders and their interests are understood and considered by the board.*

**Case studies**

A number of the system and market operators have formal requirements to consult with stakeholders on the development of their business plan and budget. Where these companies are subject to regulation, there is typically an additional layer of stakeholder engagement by the regulator in relation to its determinations.

For example, in Western Australia, the market rules set out a process of public consultation that ERA must follow when determining AEMO's budget.<sup>94</sup> ERA is required to publish and invite submissions from interested persons on an issues paper first, and then on its draft determination. Submissions are discussed in ERA's final decision. While this is not a requirement for AEMO to consult, it is an opportunity for stakeholders to provide comment on AEMO's priorities and expenditure proposals.

In Great Britain, NGESO's business planning is subject to stakeholder input and scrutiny from various channels:

- NGESO's own engagement initiatives, such as workshops and bilateral meetings, constitute an opportunity for a broad range of stakeholders (including industry, government, and wider interest groups)<sup>95</sup> to provide input into the development of the business plan and for NGESO to demonstrate that its strategy is aligned with stakeholder priorities.
- For the RIIO-2 price control, Ofgem required NGESO to establish the ESO RIIO-2 Stakeholder Group (ERSG), a body tasked with monitoring and providing input into NGESO's stakeholder engagement, challenging

<sup>94</sup> [Wholesale Electricity Market Rules](#), Rule 2.22A.2 and [Gas Services Information Rules](#), Rule 108A.

<sup>95</sup> NGESO (2019), p. 18.

and making recommendations on NGESO's business plan, and reporting to Ofgem on both these aspects. The membership of the ERSG was selected by NGESO with input from Ofgem and includes a majority of representatives from different areas of the electricity industry, consumer representatives, and persons from academia and public interest groups.<sup>96</sup>

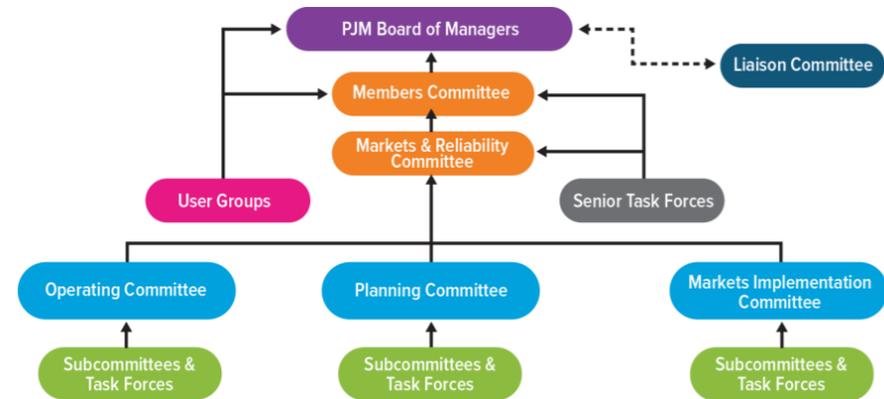
- Ofgem also established the RIIO-2 Challenge Group to challenge business plans as well as Ofgem's regulatory determinations in a variety of regulated sectors (NGESO, electricity and gas transmission, and gas distribution companies) from the perspective of existing and future consumers.<sup>97</sup>

In addition to their interactions with NGESO, stakeholders are engaged by Ofgem as part of the regulatory process that determines NGESO's outputs and revenue. For example, Ofgem will consider stakeholder comments on its draft determinations on NGESO before it finalises its regulatory approach to the system operator. Ofgem will also hold consultations on NGESO's licence, role framework, and reporting and incentive arrangements.<sup>98</sup> Stakeholder satisfaction, measured through surveys, is also one of the evaluation criteria used to rate NGESO's performance as part of the incentive mechanism Ofgem uses to regulate NGESO's internal costs.

In PJM, consultation with industry stakeholders is structurally embedded through the formal role of members in PJM's governance arrangements. PJM uses a "two-tiered governance" model, which aims to ensure neutrality and independence in the operation of the electricity grid and markets.<sup>99</sup> The two tiers in the governance structure are the PJM Board and Members Committee. PJM's Operating Agreement sets out the relevant rights and obligations of the Board and Members Committee.<sup>100</sup> The Operating Agreement also requires the establishment of a Finance Committee, a Markets and Reliability Committee and an 'Office of the Interconnection' (the latter being the staff of PJM, who are

subject to the supervision and oversight of the PJM Board). In addition, there is a range of specialised standing committees supported by ad-hoc sub-committees and task forces (Figure 5.1). Like the Members Committee, the Markets and Reliability Committee and other standing committees include representatives from all industry members and are characterised by sector weighted voting (i.e. each sector collectively holds the same voting power within a committee). In addition to the committees involved in PJM's decision making, a Liaison Committee promotes the exchange of information between industry members and PJM's Board and the members' understanding of Board's decisions.

Figure 5.1: PJM's committee structure



Source: PJM (2019), *PJM Manual 34: PJM Stakeholder Process*

## AEMO

In certain cases, the NER impose consultation requirements in relation to specific responsibilities. For example, AEMO is required to follow the Rules Consultation Procedures when developing fee structures (NER 2.11.1) or determining

<sup>96</sup> ERSG (2019), *The Electricity RIIO2 Stakeholder Group's (ERSG) report on National Grid ESO's business plan*, December, p. 4-5.

<sup>97</sup> Ofgem (2018), *RIIO-2 Challenge Group terms of reference*, November.

<sup>98</sup> Ofgem (2020), p. 12.

<sup>99</sup> PJM (2017), *Governance*, December.

<sup>100</sup> PJM (2019), *Operating Agreement of PJM Interconnection L.L.C.*, Section 7, 8 and 11.

interregional loss factor equations (NER 3.6.1). The Rules Consultation Procedures are set out in Section 8.9 of the NER. They are a requirement to call for a public consultation, hold a meeting if interested parties request it, publish a draft determination that addresses the issues raised by interested parties, and call for submissions on a draft decision before making a final decision. There are differences between the NER Rules Consultation Procedures, and the general requirements in the WEM. For example, the WEM Rules require AEMO to conduct its consultation processes in good faith, and ensure that these processes allow a reasonable opportunity for relevant stakeholders to present their views.<sup>101</sup>

The NER also specify some general consultation requirements, where the manner of consultation is not specified. For example, in relation to AEMO’s market operation responsibilities, the NER require AEMO to “*establish procedures for consultation with Registered Participants in respect of the manner in which AEMO fulfils its functions and obligations under the Rules*”.<sup>102</sup>

We have not identified NER requirements for consultation in relation to strategic issues, such as AEMO’s corporate plan or budget. There are references to engagement with Members in AEMO’s governing documents. For example, the Board Charter states that the Board will “*develop and adopt a communications strategy to facilitate and promote effective communication with Members and encourage participation at general meetings*”. AEMO’s Constitution requires the Board to submit a draft annual budget and Statement of Corporate Intent to Members for comment. As noted under Principle 1, we have not identified evidence of formal consultation on the Statement of Corporate Intent (or more recently, AEMO’s Corporate Plan).

AEMO consults with its stakeholders on specific issues through a variety of technical working groups and forums. While some of these meet NER requirements, others have been established on AEMO’s initiative. Responding to feedback on these arrangements, AEMO has commenced consultation on a new engagement model that is intended to “*deliver a material shift in both:*

- *The level of transparency market participants, consumers, and other stakeholders enjoy regarding AEMO’s understanding of current and emerging challenges, and*
- *A more two-way, collaborative experience for stakeholders, in both defining problems and identifying solutions.*<sup>103</sup>

The options being canvassed by AEMO include a potential role for stakeholders on strategic matters. For example, the third option would introduce a new CEO Roundtable and four Executive Advisory Panels, covering planning, operations, markets, and Western Australia. AEMO proposes that “[t]hese bodies would be a place for strategic discussions, prioritisation, and collaboration, rather than decision-making forums”.<sup>104</sup> The third option would also provide for periodic information updates to AEMO’s Members and other interested stakeholders.

We note that consultation on an appropriate engagement model is a positive development, that aims to respond to feedback from stakeholders. From a governance perspective, we note that there are no formal requirements or guidance, within the NER or AEMO’s Constitution, to inform expectations of how AEMO should engage with stakeholders. This means that the extent and nature of engagement with stakeholders is discretionary.

#### **Summary: Stakeholder engagement**

- Responding to feedback from market participants, AEMO has commenced consultation on a new engagement model. While this is a positive development, there are no requirements or guidance to inform expectations of how AEMO should engage with stakeholders on strategic issues. That is, the extent and nature of engagement with stakeholders is discretionary.
- This contrasts with other jurisdictions, where system operators and/or the entities that regulate them, have formal requirements to engage with stakeholders.

<sup>101</sup> WEM Rules 2.21.6.

<sup>102</sup> NER 3.2.1(c)(1).

<sup>103</sup> AEMO (2020c), *Renewing AEMO’s engagement model*, July, p.1.

<sup>104</sup> AEMO (2020c), p. 8.

## 5.7. SUMMARY

The table below summarises our main observations in relation to how AEMO's existing governance framework compares to the arrangements that have been put in place in other jurisdictions. We provide a qualitative 'traffic lights' assessment based on this comparison:

- **Green:** The design of AEMO's governance framework appears to be in line with good practice in other jurisdictions.
- **Amber:** The design of AEMO's governance framework appears to be weaker than arrangements observed in other jurisdictions.
- **Red:** The design of AEMO's governance framework appears to be substantially weaker than arrangements observed in other jurisdictions.

This comparison indicates that within the current governance framework, there appear to be limited formal requirements to guide:

- How decisions are made in relation to AEMO's priorities and plans (Principle 3).
- How AEMO's performance against expectations is incentivised and measured (Principles 4 and 5).

Given AEMO's crucial, and growing, role in the NEM, we suggest it is timely to revisit the existing governance framework. We consider that:

- there is a case for reconsidering the strength of the accountability mechanisms that apply to AEMO, consistent with the level of scrutiny that is applied to system and market operators in other markets; and
- there is scope to set out more formal and explicit obligations in relation to the areas identified above.

To fulfil its statutory functions, it is important that the AEMO is able to respond effectively and promptly to changes in the markets and systems it operates and as is deemed appropriate, contribute its expertise to the development of these markets. Clarifying and strengthening AEMO's governance framework need not

hamper its flexibility in this regard. Rather, as AEMO's responsibilities are expected to increase, clear lines of accountability will support, rather than hinder, its role in the NEM.

As noted in Section 2, in its 2021 Corporate Plan, AEMO outlines a range of new initiatives that respond to concerns regarding the transparency of its decision-making and recent increases in its costs and fees. We have limited visibility of the substance of AEMO's proposals. Nonetheless, this indicates an increased responsiveness to stakeholders. While commendable, in our view these efforts are not a substitute for a well-defined governance framework. Indeed, these efforts could indicate that the current governance arrangements have not assisted AEMO in developing fit-for-purpose models for engaging with and reporting to its Members (and stakeholders more broadly). From this perspective, strengthening the existing governance arrangements could complement these efforts by providing clear and transparent expectations.

Table 5.5: Summary

Principle	Summary of observations	Assessment
1. Roles and responsibilities	<ul style="list-style-type: none"> <li>• While AEMO’s model is different from the arrangements in other jurisdictions, there is no single model that has been universally adopted as good practice.</li> <li>• Governance roles, responsibilities, and relationships are clearly defined in AEMO’s governing documents, but may not be operating as described. This may be contributing to a lack of clarity around who AEMO’s board is accountable to, for what, and how.</li> </ul>	
2. Board composition	<ul style="list-style-type: none"> <li>• The arrangements around AEMO’s board, including the limited role and representation of Industry Members, are not unusual in themselves.</li> <li>• These arrangements may be perceived by some Members to reinforce gaps in accountability and stakeholder engagement. However, we consider that this indicates a need to review these aspects of the overall governance framework, rather than the board arrangements.</li> </ul>	
3. Purpose and strategy	<ul style="list-style-type: none"> <li>• AEMO’s NEM role is defined in relatively broad terms in the NEL/NER, and there appears to be ongoing debate around the interpretation of certain aspects.</li> <li>• This may have been compounded by an absence of formal processes for external discussion and/or approval of AEMO’s approach to fulfilling this role. The case studies indicate that an absence of formal requirements to guide the development of AEMO’s strategy is relatively unusual.</li> </ul>	
4. Performance	<ul style="list-style-type: none"> <li>• Compared to the other system and market operators that we have reviewed, the mechanisms for external scrutiny of AEMO’s internal and external costs appear to be relatively limited.</li> <li>• This raises concerns that there may not be sufficient oversight to ensure that costs are efficient and adequate, taking into account both internal costs and AEMO’s (much more significant) impact on overall system costs.</li> </ul>	
5. Transparency and accountability	<ul style="list-style-type: none"> <li>• Formal mechanisms for accountability to AEMO’s Government and Industry Members appear to be relatively limited, particularly in relation to financial performance. For example, we have not identified reporting requirements in relation to AEMO’s actual internal costs relative to its budget.</li> <li>• This could limit the scope for Members to play an effective role in AEMO’s governance framework.</li> </ul>	
6. Stakeholder engagement	<ul style="list-style-type: none"> <li>• Responding to feedback from market participants, AEMO has commenced consultation on a new engagement model.</li> <li>• While this is a positive development, there are no requirements or guidance to inform expectations of how AEMO should engage with stakeholders on strategic issues. That is, the extent and nature of engagement with stakeholders is discretionary.</li> <li>• This contrasts with other jurisdictions, where system operators and/or the entities that regulate them, have formal requirements to engage with stakeholders.</li> </ul>	

## 6. ALTERNATIVE MODELS

The functions and responsibilities of AEMO differ from the other system and market operators that we have reviewed. In addition, AEMO's corporate structure, the overall institutional arrangements and market context are also different. Therefore, we do not consider that it would be appropriate to adopt, in its entirety, any one model from the case studies. Rather, the case studies can most usefully be used to highlight particular elements of AEMO's governance arrangements that may require further consideration.

Based on the focus areas identified in Section 5, we have developed three alternative 'strawperson' models, as a starting point for further debate and discussion. These models are intended to illustrate a spectrum of potential approaches, which range from relatively minimal changes to the current 'light touch' arrangements, through to a more comprehensive model based on independent economic regulation. There are advantages and disadvantages associated with approaches located at all points along the spectrum, which we highlight below. These governance models are sketched out at a relatively high level to illustrate the structure of possible alternatives; within each of the models further detailed design is needed prior to implementation.

The models differ primarily in relation to their **accountability mechanisms**. That is, mechanisms through which AEMO's board can be held accountable for its decision-making and the company's performance.

None of the models propose changes in relation to the corporate structure of AEMO, the composition of its membership, or the composition and appointment of its board. This is because our assessment is that these are not obviously out of step with the arrangements adopted in other jurisdictions. Our analysis suggests that when supported by appropriate accountability mechanisms, it is reasonable to expect that these aspects of AEMO's governance arrangements could continue to provide effective governance.

However, modifications to these arrangements could potentially be considered. Indeed, if either Model 1 or Model 2 were to be pursued, the impact of Members within AEMO's governance arrangements would increase. This means that it could be appropriate to reconsider membership arrangements as part of either of

these models. The question would appear less pertinent under Model 3, where the role of Members is a less critical element of AEMO's governance.

In developing these stylised models, we have considered the current arrangements that are in place and focused on changes that appear most practical in this context. For this reason, our options do not include a 'contract' style model, with the potential for competitive procurement of certain functions, as has been adopted in New Zealand. While a plausible option on a standalone basis, we are inclined to think that in the context of the NEM, the disadvantages of this type of approach (primarily, a potential lack of flexibility) would likely outweigh the costs.

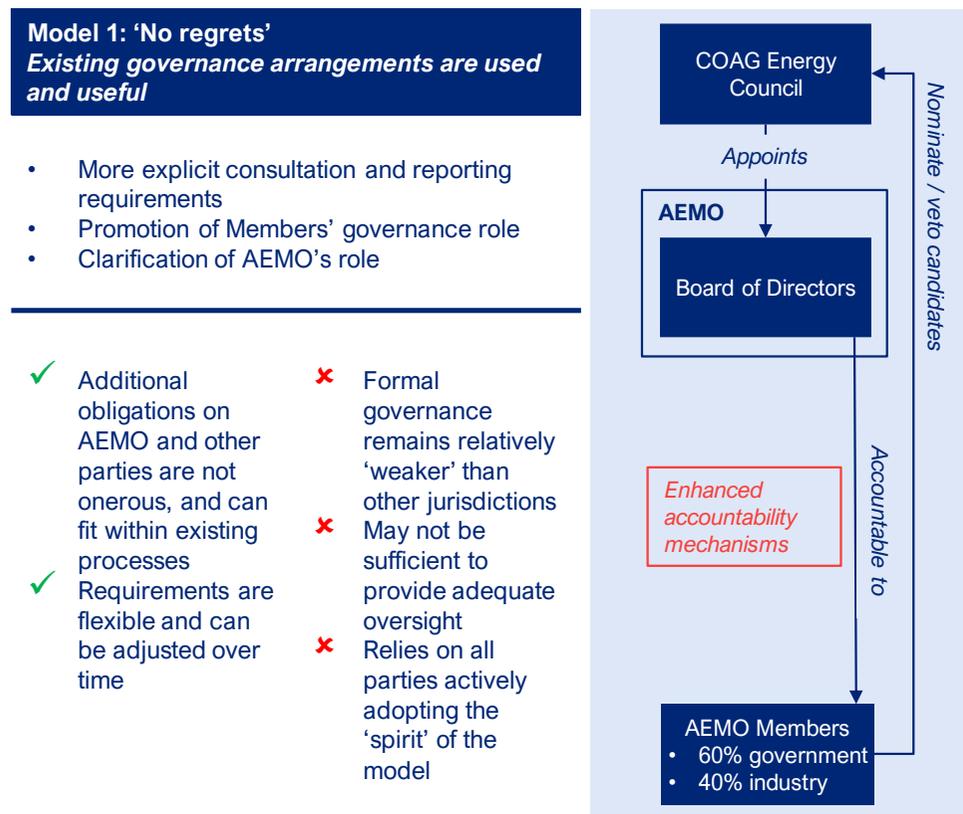
### 6.1. MODEL 1: 'NO REGRETS'

The first model retains the existing governance structure, in which AEMO's board is accountable to its Government and Industry Members. However, more explicit obligations are introduced to increase the degree of accountability. As described in Section 0, accountability involves two aspects: answerability and enforcement. The obligations introduced by Model 1 are focused on **answerability**, or how AEMO explains its decision making and performance to its Members. The intent is to provide greater clarity in relation to the existing rights and roles of Members, so that they are better able to effectively perform their role within the governance framework, as currently described. Put differently, Model 1 aims to increase the likelihood that the existing governance arrangements are used and useful.

This model could be viewed as a 'no regrets' option, in that the changes it proposes are relatively straightforward, work within the existing framework, and are aligned with a minimum standard of good practice observed in other jurisdictions. These modest proposals would complement changes that are already being considered by AEMO and would support these processes by providing a clear and transparent statement of expectations.

The key features of this model are summarised in Figure 6.1 and explained below.

Figure 6.1: Model 1 - 'No regrets'



## Formalise requirements for consultation and reporting to Members

A key aspect of this model would be the introduction of more detailed and explicit requirements to guide how AEMO explains its decisions on strategic matters and reports on its performance to its Members.

In relation to planning, this would involve specific obligations in relation to:

- The principles that AEMO should follow in developing its budget and corporate plan. For example, this could include:

- That AEMO must have regard to certain objectives (for example, the NEO).
- Guidance in relation to content. For example, this might involve a minimum level of detail to support scrutiny of budget proposals.
- The consultation process with Members in relation to these documents. For example, this could include:
  - Definition of adequate timeframes for comment.
  - Requirements to explain how comments from Members have been considered.

In relation to performance, obligations could include, for example, requirements to report on performance against the annual budget and explain variances.

It may be appropriate for elements of these enhanced requirements to be reflected in the NER. As described in Section 5.4, while the NER currently contain principles in relation to the structure of participant fees, there are no equivalent principles to guide development of AEMO's revenue requirement.

## Promote a more active governance role for Members

In addition, Model 1 would involve changes that aim to promote a more active role for AEMO's Members within the governance framework. In particular, this would focus on ensuring that there are clear channels for Members to put questions to AEMO's Board on the company's performance, and that these are used. We envisage that this would involve:

- Raising the profile of the general meeting process. For example, minutes of general meetings, including records of attendance and of how Members voted on resolutions would be made public.
- AEMO developing, and publishing, a policy or process to guide communication between the Board and Members. Board communication with Members is referenced in AEMO's Board Charter, but we have not identified evidence that the process has been specified (or if it has, that Members are aware of this).

In this model, the relationship between AEMO's Board and its Members would be closer to that observed between for-profit companies and their shareholders. The Board would be holding management to account, and reporting to Members on how they were doing it. Active engagement between the Board and Members would be required, because the Board would need to persuade Members to approve resolutions.

### **Clarify AEMO's strategy and purpose**

As highlighted in Section 5.1, two previous reviews of governance in the NEM (Vertigan – 2015, Finkel – 2017) have recommended that a Statement of Role for AEMO is prepared. While this appears in the ESB's Terms of Reference for completion by mid-2018, we understand that this is still outstanding.

We concur with the findings of these reviews, which noted that AEMO's statutory functions are described in broad terms, which allows scope for disagreement. Further, there is relatively limited guidance on how it should decide what its priorities to fulfil these functions should be. Accordingly, the Statement of Role should be progressed, in line with the recommendations of the Vertigan, Finkel and now ESB Reviews. It is not, at this stage, clear how detailed the Statement of Role will be and what process the ESB will follow to develop it. We suggest it is important that the Statement of Role should:

- Contain a level of detail that is sufficient to set clear expectations on the priorities that should form the basis of AEMO's strategy and planning.
- Be consulted on through a transparent process.
- Be a 'live' document, that is subject to periodic review as the sector, and AEMO's role within it, evolve.

An example of this kind of process is the roles framework for NGENSO, facilitated by Ofgem through a consultative process (see Section 5.6).

### **Assessment of Model 1**

We see the main advantages of Model 1 as:

- The additional obligations on AEMO and other parties are not onerous and can fit within existing processes.
- The requirements are flexible and can be amended over time.

Disadvantages include that:

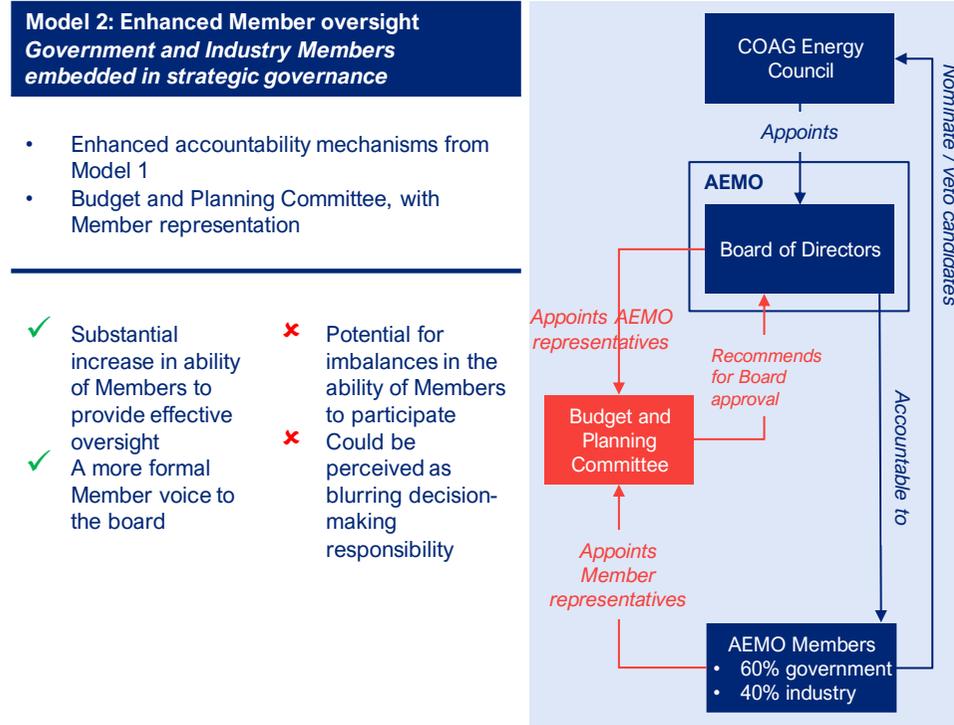
- Governance arrangements would remain relatively 'weaker' than those of other jurisdictions, which may not be appropriate given the importance of AEMO's role.
- Without additional enforcement measures, increasing the answerability of the board may not be sufficient to provide adequate oversight of decision-making and performance.
- It relies on all parties – AEMO, the Government and Industry Members – adopting the 'spirit' of this model through active engagement. This may not be successful, given how the current model appears to have operated in practice.

## **6.2. MODEL 2: ENHANCED MEMBER OVERSIGHT**

This model would incorporate the 'no regrets' proposals from Model 1. In addition, it would involve an enhanced, formal role for AEMO's Government and Industry Members in the company's strategic decision-making process, through participation in a standing committee. In this way, Model 2 is intended to strengthen both the answerability and enforcement aspects of accountability, by broadening the rights of Members. In particular, Members would have sufficient information, and power to request additional information, to be able better to scrutinise the way that AEMO fulfils its roles.

The key features of this model are summarised in Figure 6.2 and explained below.

Figure 6.2: Model 2 - Enhanced Member oversight



## Budget and Planning Committee

This model would establish Government and Industry Member representation on a standing committee, that would have responsibility for:

- Developing, and recommending to the Board, AEMO's Corporate Plan and annual budget.
- Overseeing performance reporting, to the Board and membership, in relation to these documents.

The Board would continue to have decision-making authority over the approval of the final budget and Corporate Plan. This would be in line with the existing provision of the Constitution that:

*"Where the Company is required to satisfy any requirement or discharge any duty under the National Gas Law, National Electricity Law or any other law or legislative instrument, such requires or duties are to be the responsibility of the Directors who are accordingly empowered (to the exclusion of the Company in general meeting) to do and to cause to be done everything necessary to cause those requirements or duties to be satisfied".*<sup>105</sup>

The committee would have formal standing through inclusion in AEMO's Constitution. The strength of Member oversight provided by this model would depend substantially on how the committee would be formed. Consideration would need to be given to:

- The composition of the committee. For example, representation of Government Members, Industry Members, AEMO staff, and Board members.
- The process for appointments to the committee.
- Decision-making processes within the committee. For example, how its recommendations to the Board are determined, how disagreements are managed.

There are other variants that could be considered under the 'spirit' of this high-level model. For example, we have suggested that the focus is on strategic documents, consistent with the role of Members in governance. Consideration could be given to a different, or broader scope (for example, Member decision making in relation to the development and submission of rule change proposals). Alternatively, a variant of this approach could involve Government and Industry Member *approval* on strategic issues. We have not proposed this as part of the

<sup>105</sup> AEMO (2017), *AEMO Constitution*, art. 8.3.

base model, as it represents a more complex division of decision-making authority between the Board and Members.

It is important to highlight that there are key differences between this model and the more collaborative approach to stakeholder engagement that AEMO is currently consulting on. In particular:

- These arrangements would involve Government and Industry Members, as part of their role within the governance framework, rather than stakeholders more broadly.
- The committee would have standing in AEMO's Constitution. That is, it would be a binding feature of AEMO's governance arrangements.
- The committee would have decision-making powers, in that it would decide, for the matters within its remit, what is put to the Board for approval.
- The process for appointments to the committee (at least the Members' representatives) would not be controlled by AEMO, but by Members.

This model would, at a high level, reflect certain features of the approaches taken in other jurisdictions. For example, a role for Members as participants in a standing committee reflects aspects of the arrangement in PJM. However, unlike PJM, Members would not have a role in voting to *approve* strategic decisions; rather, these would be reserved for AEMO's Board, as is currently the case. This model also does not involve a proposal for regulatory oversight of AEMO's fees, as is undertaken by FERC for PJM (see Model 3).

In some respects, this model also reflects the character of the customer advisory panels and/or negotiating forums that have been established in regulatory processes. For example, in the UK water industry, companies are required to establish customer challenge groups which scrutinise business plans and company strategic directions. These groups challenge the companies to help ensure that stakeholders' priorities and concerns are reflected in the company's decisions.

## Assessment of Model 2

The main advantages of this model would include:

- It represents a substantial increase in the ability of Government and Industry Members to provide effective oversight (through, for example, greater access to detailed supporting information, the ability to ask detailed questions, and powers to recommend documents for approval by the Board).
- It provides the Government and Industry members with a more formal voice to the Board.

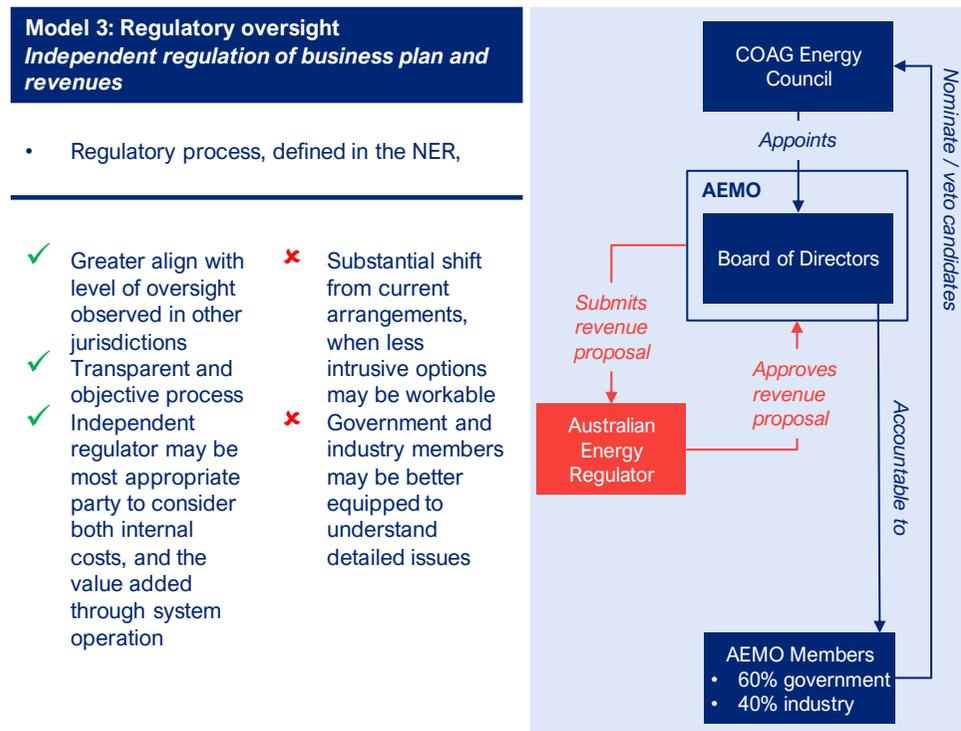
The key disadvantages associated with this model are that:

- There is a potential for imbalances in the ability of particular Members to contribute and participate.
- The role of the committee could be perceived as blurring responsibility for decision making between the Board and Members. However, the Board retains responsibility, and would be accountable to Members in the event that its decisions do not reflect advice from the committee.

### 6.3. MODEL 3: REGULATORY OVERSIGHT

As with Model 2, Model 3 would introduce new mechanisms for scrutiny of AEMO's role and functions, but rather than these being exercised by Members, additional accountability would be to an independent economic regulator. Under Model 3, AEMO's revenues would be subject to economic regulation, and it would therefore involve substantial changes to the existing arrangements. This model is summarised in Figure 6.3, and explained below.

Figure 6.3: Model 3 - Regulatory oversight



### Regulatory process, defined in the NER

This model would establish a role for a regulator – most likely for the AER – to approve the revenues that AEMO can recover through market participant fees. Broadly, we would expect this to be based on an assessment of the revenues required by AEMO to fulfil its statutory functions, in a way that best meets the interests of consumers (i.e. to achieve the National Electricity Objective).

There are numerous details of these arrangements that would need to be developed. For example, the regulatory arrangements might need to consider both the setting of required revenues (i.e., what are appropriate services levels and what revenue requirement is needed to meet these efficiently) and recovery through fees (i.e., what is an appropriate fee structure).

A potentially efficient approach could involve mapping the WEM arrangements and processes to AEMO’s NEM functions.<sup>106</sup> There are, however, a range of regulatory models that could be drawn on, each with their own strengths and weaknesses. The regulatory model would need to take account of AEMO’s not-for-profit status. For example, the financial incentive arrangements that apply to some for-profit market and system operators would not be appropriate.

It is worth noting that, in other jurisdictions with regulatory oversight of system and market operator revenues, relatively flexible approaches have been adopted. For example:

- Ofgem allows NGESO to recover its actual costs on a pass-through basis (subject to the operation of its incentive scheme), with only ‘demonstrably inefficient’ costs subject to disallowance.
- In the case of PJM, FERC allows fees to be used to build up a reasonable financial reserve, that provides a buffer for unexpected increases in costs.
- In the WEM, if AEMO’s revenue recovery over the review period is likely to be 15% greater than the allowable revenue initially determined by the ERA, AEMO must apply to the ERA to reassess the allowable revenue. Similarly, if the budget for a financial year is likely to result in capital expenditure over the review period being at least 10% greater than the forecast capital expenditure approved by the ERA, AEMO must apply for an adjusted forecast of capital expenditure.

<sup>106</sup> We have focused on AEMO’s NEM functions in line with our terms of reference. However, further development of Model 3 might also consider AEMO’s other functions, for example under the National Gas Law/ National Gas Rules.

Accordingly, there is scope to develop a proportionate approach, that strikes a balance between providing sufficient oversight and ensuring that the system operator is adequately funded to respond to unexpected events.

If AEMO's revenues were to be regulated, the interaction between arrangements in the NEM and WEM would need to be considered. For example, there would be practical arrangements to be resolved in relation to AER and ERA's treatment of costs are shared between the two markets. This may not overly complex, particularly given that ring-fencing is already required for AEMO's revenues associated with different functions, and that the ERA's determinations for AEMO are already required to take shared costs into account.

### **Assessment of Model 3**

The main advantages of this model include:

- Greater alignment (in a broad sense) with other jurisdictions that provide for regulatory oversight of the system and market operator's costs and/or fees (WEM, NGENSO, PJM, New Zealand).
- Establishes a transparent and objective process, that could provide visibility to a greater range of stakeholders (compared to Models 1 and 2).
- Consideration of AEMO's internal costs and activities in the context of its broader impact on the system may, potentially, sit more appropriately with an independent regulator, rather than Members. Consumers, Members and other stakeholders would be involved through regulatory consultation processes

The main disadvantages include:

- This model represents a substantial shift from the current arrangements.
- AEMO's Government and Industry Members may have more detailed technical knowledge that would mean that they are better equipped than a regulator to understand the detail of AEMO's activities and associated

revenue requirements. However, this could potentially be accessed through the regulatory consultation process.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

AEMO has a crucial role in the operation of energy markets in Australia, and this role continues to evolve in response to the ongoing technological transformation of the sector. Given the central role that AEMO plays in energy markets, it is vital that the scope of its activities, and the way that it performs those activities, is subject to appropriate scrutiny. Our review of the governance arrangements identifies gaps in the way that the current approaches allow this to happen. The current arrangement is that AEMO is formally accountable to its Members. However, we do not observe associated processes which allow Members both to be sufficiently informed, or to impose enforcement measures should AEMO fail to meet the expectations of its Members. It is possible that oversight by government, either directly or through the COAG Energy Council, has replaced the formal governance processes established in the design of AEMO. If this is so, the operation of this scrutiny of AEMO is not transparent, and, while performing a useful function, it may not be the most effective way of holding AEMO to account. The arrangements are weaker than those we observe in other similar bodies in other jurisdictions.

We have identified three models for consideration to remedy this. These are stylised, “strawperson” models to illustrate the type of improvement that could be considered. Our first model sets out improvements in the formal accountability

mechanisms available to Members. In our second proposed model, we have suggested the introduction of a Budget and Planning Committee. This would comprise a combination of AEMO and Member representation, and would recommend budget and corporate plans for consideration and approval by the Board. This echoes approaches used in the PJM RTO reviewed in this report. Finally, we consider the model of formal regulation of relevant revenues and fees, most likely by the AER.

These models represent a spectrum of approaches that could be considered. Our first “no regrets” model would involve the least intrusive legislative and rule changes, but there is a risk that in practice there may be little improvement. Our second model is designed to strongly reduce information barriers between AEMO and its Members, but it may blur the control of the organisation. Our third model, economic regulation, may improve confidence of parties in the scrutiny of AEMO, but it may reduce AEMO’s flexibility to respond to the evolution of the market.

We consider that each of the models would represent an improvement over the current arrangement for scrutinising AEMO. With Models 2 and 3, the improvements in transparency and scrutiny need to be balanced with the impact on decision making and flexibility. We suggest that careful consideration is given to determine the appropriate approach to moving forward.

**UK**

Queens House  
55-56 Lincoln's Inn Fields  
London WC2A 3LJ

T. **+44 (0)20 7269 0210**

E. [info@cepa.co.uk](mailto:info@cepa.co.uk)

[www.cepa.co.uk](http://www.cepa.co.uk)

 [cepa-ltd](https://www.linkedin.com/company/cepa-ltd)  [@cepaltd](https://twitter.com/cepaltd)

**Australia**

Level 20, Tower 2 Darling Park  
201 Sussex Street  
Sydney NSW 2000

T. **+61 2 9006 1307**

E. [info@cepa.net.au](mailto:info@cepa.net.au)

[www.cepa.net.au](http://www.cepa.net.au)