

May 2015

REVIEW OF THE INSTITUTIONAL GOVERNANCE ARRANGEMENTS OF THE NATIONAL ELECTRICITY MARKET



Report for the Public Interest Advocacy Centre
Penelope Crossley

CONTENTS

Acronyms and abbreviations.....	2
Scope of the report.....	4
1. The transformation of the energy sector.....	5
1.1 The National Electricity Objective	8
2. The current institutional and governance structure of the National Electricity Market in Australia.....	11
2.1 COAG Energy Council.....	15
2.2 Australian Energy Market Commission	28
2.3 Australian Energy Regulator	39
2.4 Australian Energy Market Operator.....	48
2.5 Energy Consumers Australia.....	54
3. Managing the challenges of federalism	62
4. Consolidated potential reforms.....	68
References	71
Appendices	76

ACRONYMS AND ABBREVIATIONS

AC	alternating current
ACCC	Australian Competition and Consumer Commission
AEMA	Australian Energy Market Agreement (as amended on 13 December 2013)
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CAISO	California Independent System Operator
CEER	Council of European Energy Regulators
COAG	Council of Australian Governments
DSP	demand side participants
ECA	Energy Consumers Australia
FERC	United States Federal Energy Regulatory Commission
GEMA	Gas and Electricity Markets Authority
MCE	Ministerial Council on Energy
NECF	National Energy Customer Framework
NEL	National Electricity Law – Schedule 1 to the <i>National Electricity (South Australia) Act 1996</i> (South Australia) (as amended)
NEM	National Electricity Market
NEMLA	National Electricity Market Legislation Agreement
NEO	National Electricity Objective—section 7 of the NEL
NER	National Electricity Rules
NERL	National Energy Retail Rules
NERR	National Energy Retail Regulations
NGET	United Kingdom National Grid
NSP	network service provider
Ofgem	Office of Gas and Electricity Markets in the United Kingdom
PV	photovoltaic solar
SCER	Standing Council on Energy and Resources
SPP(s)	Statement of Policy Principle(s)

SCO	Standing Council of Officials
SOC	State Owned Corporation
UCA	Utilities Consumer Advocate, Alberta, Canada

SCOPE OF THE REPORT

This Report was commissioned by the Public Interest Advocacy Centre to advise a number of consumer advocacy groups about the institutional and governance arrangements of the National Electricity Market. The purpose of this Report was to review the existing arrangements, compare these arrangements to those in other international jurisdictions and then identify areas of strength and those requiring reform.

Part I of this Report considers the recent transformation of the energy sector and highlights the need for a flexible approach that encourages demand-side management, the deployment of emerging energy sources and technologies, and greater energy efficiency. It also briefly considers whether the narrow drafting and interpretation of the NEO remains fit for purpose when compared to developments in other international jurisdictions. Part II of this Report then considers the existing governance structure adopted within the National Electricity Market. In particular, it examines each of key market institutions – the COAG Energy Council, the Australian Energy Regulator, the Australian Energy Markets Commission, the Australian Energy Markets Operator and Energy Consumers Australia Ltd. The legislative or corporate mandates of each institution are analysed, along with their governance processes, to assess areas of strength and possible areas of reform. This Part also considers the roles and responsibilities of international institutions that act as functional equivalents to the market institutions. In Part III of this Report, the challenges of federalism and how these can be better managed into the future are considered. The Report concludes in Part IV with a consolidated list of potential areas for reform.

1. THE TRANSFORMATION OF THE ENERGY SECTOR

The Australian National Electricity Market (NEM) is a wholesale electricity market through which generators generate, sell, transmit and distribute electricity across six jurisdictions in eastern and southern Australia — namely, Queensland, New South Wales, the Australian Capital Territory (ACT), Victoria, South Australia and Tasmania. It was designed to facilitate interstate trade, to lower barriers to competition, to increase regulatory certainty and to improve productivity within the electricity sector as it transitioned from being dominated by large unbundled state owned monopolies to privatised corporations. The NEM is made up of approximately ‘...200 large generators, five state based transmission networks (linked by cross-border interconnectors) and 13 major distribution networks that supply electricity to end use customers.’¹ These industry players are physically linked to over nine million residential and business customers in participating jurisdictions are physically linked by one of the longest continuous alternating current (AC) transmission networks in the world.

Similar to many overseas jurisdictions, the energy sector in Australia is currently in the process of significant transformation. This has led to a range of recent developments already impacting upon, or likely to impact upon the operation of the NEM in the near future, including:

- Increasing concern among both large-scale and residential consumers about rapidly rising energy prices. Much of these prices increases, which have far exceeded the rate of inflation over the past five years, can be attributed to network prices, which now account for more than half of the cost of residential electricity bills. This has led to the widespread adoption of energy efficiency measures and the gradual increase in demand-side management tools, such as smart meters, to assist consumers to better manage, and ultimately reduce, their overall energy consumption.
- Changes in the fuel sources used to generate electricity, with a shift from carbon intensive fossil fuel sources to less carbon intensive sources, such as natural gas and renewable energy sources. In particular, the advent of larger volumes of intermittent generation from renewable energy sources has implications for the system operation of the NEM, as well as future market development and transmission planning.²

¹ Australian Energy Regulator, *State of the energy market 2014* (AER, 2014).

² Note the scale and likely timeframe of the impact of this change is unpredictable, with this area becoming highly politicised in recent years. With the repeal of the carbon price legislation and uncertainty regarding the Renewable Energy Target undermining future, and in some cases, ongoing, investments in cleaner energy sources. This has led to the pipeline of renewable energy projects being

- The growth in distributed generation, particularly in the form of photovoltaic (PV) solar cells on residential and commercial rooftops. In its 2014 State of the Energy Market Report, the Australian Energy Regulator (AER), stated that in the 2013-2014 financial year alone 'solar PV generation reduced grid consumption by 2.9%.³ This trend is predicted to continue, with the Australian Energy Market Operator (AEMO) projecting growth rates in photovoltaic (PV) solar installations of approximately 24% annually over the next three years.⁴
- Coupled with the growth in PV solar, is the ongoing development and commercialisation of grid-scale and residential energy storage. While energy storage is already cost competitive in some rural and remote areas of Australia,⁵ UBS has predicted that it will be cost competitive for residential electricity consumers by 2018.⁶ Indeed, AGL Energy has stated that its modelling shows that 3 million customers will be either wholly or partially off-grid by 2030.⁷ This is likely to have profound impacts on the NEM and the roles played by the institutions governing it.

The COAG Energy Council has stated that these changes in the production and consumption of electricity 'may have significant implications for the future of the electricity markets and the electricity supply industry.'⁸ As shown in Part II, the structure of the NEM is unique and while Australia has been developing its complex institutional and governance structure, a number of other jurisdictions have been taking positive steps to consolidate their institutional arrangements. In considering the governance and institutional structure of the Australian energy markets, the COAG Energy Council has an opportunity to engage in strategic forward planning to meet the future needs of Australian energy consumers, both large and small. In order to ensure that Australia's energy markets are resilient and can adapt to these changing environments, the governance and regulatory arrangements need to be open to learning and

effectively frozen until there is greater certainty about the future policy direction of the sector, and a reduction in investment in the renewable energy sector back to 2002 levels.

³ Australian Energy Regulator, *State of the energy market 2014* (AER, 2014).

⁴ Australian Energy Market Operator, *National Electricity Forecasting Report* (AEMO, 2014) 2-1.

⁵ Jonathan Gifford, 'Solar plus storage becoming "new normal" in rural and remote Australia', *RenewEconomy* (online), 4 December 2014, <<http://reneweconomy.com.au/2014/solar-plus-storage-becoming-new-normal-rural-remote-australia-59236>>.

⁶ Giles Parkinson, 'UBS: Australian households could go off-grid by 2018', *RenewEconomy* (online), 9 May 2014, <<http://reneweconomy.com.au/2014/ubs-australian-households-go-grid-2018>>.

⁷ Giles Parkinson, 'AGL Energy pick new CEO with eye to solar and storage', *RenewEconomy* (online), 18 November 2014 <<http://reneweconomy.com.au/2014/agl-energy-pick-new-ceo-with-eye-to-solar-and-storage-35344>>.

⁸ COAG Energy Council, 'Meeting Communiqué', 1 May 2014.

not simply adopt a ‘business as usual’ approach.⁹ At the same time, it is an opportunity to take steps to improve stakeholder confidence in the regulatory outcomes through adopting international best practices in performance, transparency and accountability.

There is a lot that Australia can learn from the experiences of international jurisdictions, who are currently facing similar challenges.¹⁰ For example, a recent report on ‘The Evolving Role of the Power Sector Regulator’¹¹ conducted by the National Renewable Energy Laboratory in the United States found that the regulatory priorities in the power sector are also changing. Previously, regulators were concerned with:

- designing and managing electricity tariffs;
- maintaining system reliability, meeting demand growth and expanding access to electricity;
- ensuring the financial health of utilities;
- facilitating private investment;
- protecting the interests of the poor or vulnerable consumers;
- supporting the technical safety and reliability of the power system; and
- enhancing energy security and managing risk.¹²

However, the report notes that a new set of regulatory objectives are currently emerging in the power sector that need to be considered alongside the existing objectives, including:

- reducing the health and environmental impacts of power system operation;
- meeting rapidly growing demand while minimising environmental impacts and risk;
- supporting the procurement of renewable energy;
- integrating renewable and distributed generation resources to the grid;
- incentivising energy efficiency, demand side management and smart grid technologies;
- utilising microgrid technologies;
- facilitating consumer participation in power markets;
- enhancing cyber security and protecting privacy; and
- managing increased interactions with other sectors.¹³

⁹ Andreas Goldthau, ‘Rethinking the governance of energy infrastructure: Scale, decentralization and polycentrism’ (2014) 1 *Energy Research & Social Science* 134, 134.

¹⁰ See e.g. Darryl SJ Jarvis and Benjamin K Sovacool, ‘Conceptualizing and evaluating best practices in electricity and water regulatory governance’ (2011) 36 *Energy* 4340.

¹¹ Owen Zinaman, Mackay Miller and Morgan Bazilian, *The Evolving Role of the Power Sector Regulator* (Alliance for Sustainable Energy, 2014).

¹² Ibid.

¹³ Ibid.

The notion of the changing role of regulators was also raised by the House of Lords in their Report on UK Economic Regulators in 2007 when they stated that ‘the latter increase in the importance within the regulators’ roles of other duties (particularly social and environmental duties) means that there is now a less clear distinction between what policy issues should be dealt with by government and which by regulators.’¹⁴

1.1 THE NATIONAL ELECTRICITY OBJECTIVE

In considering the transformation of the energy sector and the new roles and responsibilities for regulators, it is also time to consider whether the National Electricity Objective (NEO), contained in Section 7 of the National Electricity Law (NEL), is also still fit for purpose. Does its narrow focus on the economic interests of consumers limit the ability of our energy market institutions to adequately plan for the long-term future of the electricity sector? Does it enable proper consideration of the equity impacts of increasing numbers of consumers that are self-generating or going off-grid? Ultimately, does the NEO meet the needs of the modern energy consumer? Appendix 1 provides an international comparison of the legislative objectives of different regulatory schemes.

A study of the objectives of other international regulatory schemes for electricity markets reveals that the Australian NEO is missing several core themes which are found in the objectives of many other jurisdictions. These include:

Consumer issues

- Chile: ‘Energy is an essential material for society. Its availability and supply directly affect social and economic growth and consequently the reduction of poverty. The lack of access to reliable energy sources and networks constitutes a dangerous limitation to sustained social progress, to economic growth and to the wellbeing of the population.’
- Estonia: ‘The [Electricity Market] Act prescribes the principles for the operation of the electricity market based on the need to ensure an effective supply of electricity at reasonable prices and meeting ... the needs of customers...’
- European Union: ‘The internal market in electricity, which has been progressively implemented throughout the Community since 1999, aims to deliver real choice for all

¹⁴ Select Committee on Regulators, *UK Economic Regulators*, House of Lords Report No 1, Session 2006-07 (2007) 24-5.

consumers of the European Union, be they citizens or businesses, new business opportunities and more cross-border trade, so as to achieve efficiency gains, competitive prices, and higher standards of service...

- Hungary: 'ensuring the accessibility of the services and prices affordable to a large group of consumers.'
- Ireland: 'Principal objective and functions of Minister, the Commission and SEM Committee in carrying out their functions in relation to the Single Electricity Market...is to protect the interests of consumers of electricity in the State and Northern Ireland.'
- Russia: '...balancing the economic interests of suppliers and consumers of electricity and heat.'
- Yemen: 'Structure the relationship between consumers, licensees and any other relevant parties to the electricity supply service in a fair and balanced manner.'

Environmental concerns

- China: 'The State encourages and supports the generation of electricity through the use of renewable and clean energy resources.'
- Estonia: 'The [Electricity Market] Act prescribes the principles for the operation of the electricity market based on the need to ensure an effective supply of electricity ... meeting environmental requirements ... and balanced, environmentally clean and long-term use of energy sources.'
- European Union: 'to contribute to ...sustainability.'
- Netherlands: 'the importance of reliable, sustainable, efficient and environmentally sound operation of electricity.'
- Switzerland: 'The secure and sustainable supply of electricity to end users in all parts of the country.'

Energy efficiency and demand-side management

- Hungary: 'The energy policy of the future ... should focus on achieving both a rationalised energy demand and an energy supply (infrastructure and service) encouraging the growth of the Hungarian economy, ensuring the accessibility of the services and prices affordable to a large group of consumers.'

Competitive market structures

- NordReg: 'Increased competition: lower the obstacles for the market players in the competitive part of the electricity market, there should be room for innovation and development of energy services in order to increase the attractiveness of the competitive market.'
- Poland: 'The creation of the conditions for ...[the] development of competition, counteracting negative consequences of natural monopolies ... and balancing the interests of energy enterprises and fuel and energy customers.'

Transparency and accountability

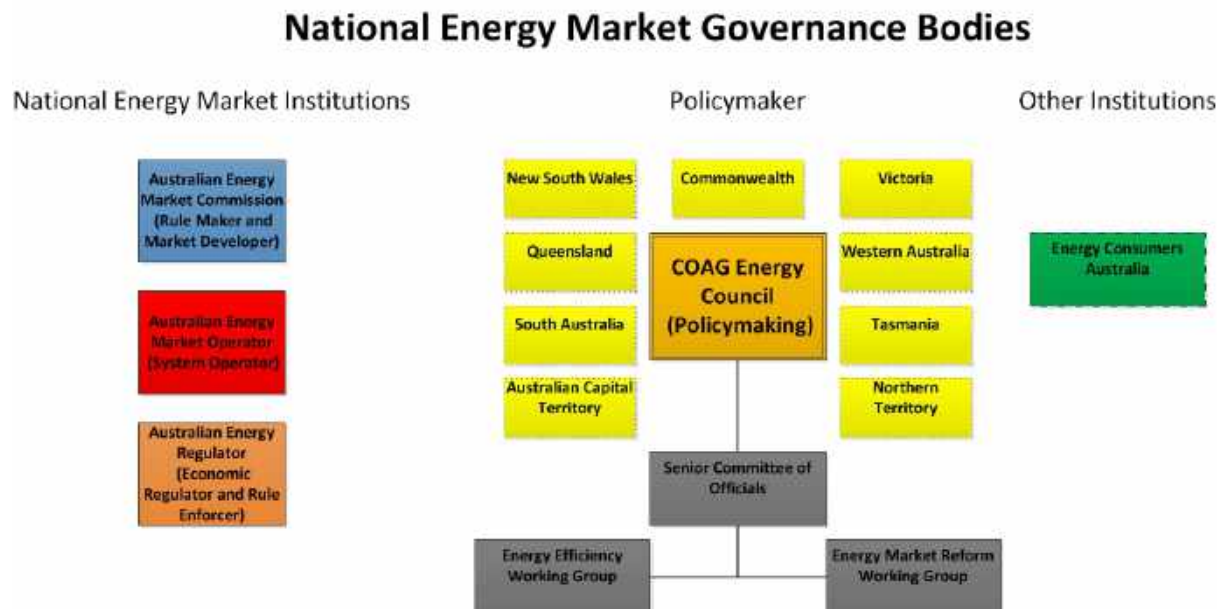
- NordReg: 'The Nordic retail market should have the highest customer service level. It should be easy to be a customer. Relevant information should be easy accessible and there should be efficient processes...'

What this brief study highlights is that many countries no longer adopt a narrow economic interpretation of what is in the 'long-term interests of consumers,' but rather actively use their objectives to enhance the long-term competitiveness of the electricity sector by encouraging competition and innovation. This includes by actively encouraging energy efficiency and demand-side management within their market structures. They further recognise that the interests of consumers include the need for affordable electricity prices and access to information. Environmental concerns also feature prominently in the objectives for the electricity sector in many countries. This reflects a growing international concern about the long-term sustainability of the electricity sector. It is argued that due to its role in decision-making the NEO is an integral component of the governance of the NEM. There is a real need to review whether the NEO is fit for purpose in the context of a transforming energy market.

Throughout this report, the existing energy market institutions and governance have been analysed to consider whether there is:

1. clarity in the roles and objectives of the institutions;
2. sufficient and desirable autonomy from political intervention;
3. transparency of decision-making processes and their outcomes;
4. a requisite degree of accountability of the institution; and
5. a coherent set of structures and regulations to ensure public participation in the regulatory process.

2. THE CURRENT INSTITUTIONAL AND GOVERNANCE STRUCTURE OF THE NATIONAL ELECTRICITY MARKET IN AUSTRALIA



As shown in the above diagram, the institutional and governance structures of the NEM in Australia are highly complex. These arrangements reflect the bargain between the Commonwealth, States and Territories that made up the National Electricity Market Legislation Agreement (NEMLA) and continue to form the basis of the Australian Energy Market Agreement (AEMA). A unique feature of these arrangements is the concern that there should be ‘the bifurcation of economic regulation between a rule-making [Australian Energy Market Commission (AEMC)] and a rule implementing [AER] institution.’¹⁵ The resulting sheer volume of institutions, the complicated distribution of roles and responsibilities between them and differing governance arrangements, coupled with a lack of transparency and accountability in some of the institutions, prompted the Productivity Commission to state that:

The fundamental objective of the National Electricity Market (NEM) – the need for efficient investment in, and operation of, electricity networks in the long-term interests of consumers – has been frustrated by flaws in its (ever more) complex regulatory and institutional arrangements.¹⁶

¹⁵ Bruce Mountain, Submission No 19 to Commonwealth Standing Committee on Environment and Communications References Committee, *Inquiry into electricity network companies*, 18 December 2014, 23.

¹⁶ Productivity Commission, *Electricity Network Regulatory Frameworks*, Report No 62 (2013) 4.

This institutional and governance structure has not been replicated in any other jurisdiction. This is highlighted in the table in Appendix 2, which provides a comparison of the mandates of the international functional equivalents to the institutions in the NEM.

Indeed, over the past decade, while Australia has been developing its complex institutional and governance structure, a number of other jurisdictions have been taking positive steps to consolidate their institutional arrangements. Jurisdictions such as the United Kingdom, the Netherlands, New Zealand, Ontario and Alberta have all taken steps to consolidate some or all of their competition, economic regulation and consumer protection functions into either a single or fewer agencies that are better resourced. For example, market entities in California,¹⁷ the United Kingdom,¹⁸ New Zealand,¹⁹ Ontario²⁰ and Alberta²¹ have comparable regulatory, investigatory and enforcement functions to the AER and AEMC. However, in each of these jurisdictions, the functions are performed by a single entity. Appendix 3 details the legislative mandate, corporate structure, governance mechanisms, vision and source of finance for a selection of these international functional equivalents of the AER and AEMC.

Commonly, the entity is either an independent government department or agency, though the New Zealand Electricity Authority and Ontario Electricity Board are an independent Crown entity and an independent Crown corporation, respectively. These entities are commonly funded through an industry levy. However, the approach adopted in New Zealand of funding being through government appropriations approved by Parliament and then the government being reimbursed through an industry levy, may be preferable to ensure that the entity is seen as being at arm's length from the industry it sets rules for and regulates. Another feature of this single entity is that their objectives are often much broader than those adopted by the AER and AEMC and include priorities such as:

- 'to promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario, including having regard to the consumer's economic circumstances;'²²

¹⁷ *Federal Power Act*, 16 USCS § 824h (1920).

¹⁸ *Utilities Act 2000* (UK).

¹⁹ *Electricity Industry Act 2010* (Vic) s 16.

²⁰ *Ontario Energy Board Act*, SO 1998, c 15.

²¹ *Alberta Utilities Commission Act*, SA 2007, s 39.

²² *Ontario Energy Board Act*, SO 1998, Part , s 1(3).

- ‘to secure a diverse and viable long-term energy supply, and shall, in carrying out those functions, have regard to the effect on the environment of activities connected with the generation transmission, distribution or supply of electricity;’²³ and
- ‘to promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable generation facilities.’²⁴

The governance structures of these entities also show a degree of similarity, with the Boards commonly being appointed by the Head of State on the recommendation of the Minister, the Senate or the Secretary of State. Board directors are expected to have a wide range of experience and expertise, with the non-executive directors on the Gas and Electricity Markets Authority (GEMA) in the United Kingdom having experience and expertise in:

- industry;
- economics;
- consumer and social policy;
- science and the environment;
- finance and investment; and
- European energy issues.

This institutional arrangement of combining the functions of the AER and the AEMC into a single entity has a number of advantages:

1. Insofar as the regulatory environment is less complex, it is more accessible for consumers seeking to initiate a rule-change, or to challenge the compliance of a network business with a particular rule. Particularly for consumers without significant information, resources or technical and legal understanding, the capacity to negotiate a single entity significantly reduces the barriers to asserting their rights.
2. Combining the enforcement and rule-creation mechanisms ensures that the rules are responsive to the evolution of the energy market. This is achieved in two respects. First, given that the enforcement entities require significant coercive and information-gathering powers to perform their mandate, a unitary structure ensures that such

²³ *Utilities Act 2000* (UK) s.3A(5)(c),

²⁴ *Ontario Energy Board Act*, SO 1998, Part 1 s 1(4).

information contributes to the work of the regulator in considering the future development of regulatory frameworks. Secondly, it ensures that the regulation may be updated to account for novel or complex events of non-compliance or partial compliance by network businesses.

A further feature of the institutional arrangements of the NEM is that no other Federal jurisdiction in the world appears to have an entity with the roles and responsibilities of the COAG Energy Council without any form of parliamentary oversight.

For the remainder of this Part of the Report, each of the key market institutions will be considered in turn:

1. the COAG Energy Council as the entity responsible for national energy policy;
2. the AEMC as the entity responsible for rule-making and market development;
3. the AER as the entity responsible for implementing the rules and ensuring compliance;
4. the AEMO as the system operator and the entity responsible for market development;
and
5. Energy Consumers Australia (ECA) as the entity charged with promoting the long-term interests of consumers and advocating on their behalf.

Potential reforms

1. *Noting that:*
 - a) *the separation of the rule making and investigatory and enforcement functions between the AER and AEMC is unique among international arrangements for energy markets;*
 - b) *internationally, many jurisdictions have consolidated their institutional arrangements over recent years; and*
 - c) *internationally, several jurisdictions have developed new or amended regulatory objectives appropriate to transforming energy markets:*

That similar to the approaches in other international jurisdictions, the regulatory, investigatory and enforcement functions of the AER and AEMC should be consolidated into a single agency.

2.1 COAG ENERGY COUNCIL

The original form of the COAG Energy Council was the Ministerial Council on Energy (MCE), which was established on 8 June 2001. It was designed to be the forum through which the Commonwealth, State and Territory Ministers having primary responsibility for energy matters could meet to formulate national energy policy. The role of the MCE is described in cl 4 of the AEMA (as amended on 9 December 2013):

4. MINISTERIAL COUNCIL ON ENERGY

Role of the MCE

- 4.1 The Parties agree that the MCE is the national policy and governance body for the Australian energy market including for electricity and gas.
- 4.2 The MCE will report to COAG on the operation of this agreement and any proposed amendments.
- 4.3 The Parties agree that the MCE has responsibility for:
 - (a) the national energy policy framework;
 - (b) policy oversight of, and future strategic directions for the Australian energy market;
 - (c) governance and institutional arrangements for the Australian energy market;
 - (d) the legislative and regulatory framework within which the market operates and natural monopolies are regulated;
 - (e) longer-term, systemic and structural energy issues that affect the public interest; and
 - (f) such other energy related responsibilities as are conferred by Commonwealth, State or Territory legislation and unanimously agreed by the MCE consistent with this agreement.

In order to carry out this role, the AEMA provides the MCE with a range of powers in cl 4.4:

- 4.4 The Parties agree that the MCE has:
 - (a) power to issue statements of policy principles to the AEMC with respect to rulemaking or electricity, gas or retail market reviews;
 - (b) power to recommend appointments of commissioners to the AEMC in accordance with this agreement and the Australian Energy Market Commission Establishment Act 2004 (SA);
 - (c) power to recommend certain appointments of members to the AER in accordance with this agreement and the Competition and Consumer Act 2010 (Cth); and

(d) any other energy related power conferred on it by agreement between the Parties or by legislation.

4.5 The Parties agree that the MCE will not be engaged directly in the day-to-day operation of the energy markets or the conduct of regulators.

Over the past fourteen years, three institutions have held these legally enduring roles and powers:

1. the MCE from 8 June 2001 – 16 September 2011;
2. the Standing Council on Energy and Resources (SCER) from 17 September 2011 – 12 December 2013; and
3. the COAG Energy Council from 13 December 2013 to present.

The COAG Energy Council

The COAG Energy Council has been in existence since 13 December 2013. It is made up of the ‘ministers from the Commonwealth, each state and territory, and New Zealand, with portfolio responsibility for energy and resources.’²⁵ The current representatives on the Council are as follows:

Jurisdiction	Representative
Commonwealth (Chair)	The Hon Ian Macfarlane MP Minister for Industry and Science
New South Wales	The Hon Anthony Roberts MP Minister for Industry, Resources and Energy
Victoria	The Hon Lily D’Ambrosio MP Minister for Energy and Resources
Queensland	The Hon Dr Anthony Lynham MP Minister for Natural Resources and Mines
	The Hon Mark Bailey MP Minister for Energy and Water Supply
Western Australia	The Hon William Marmion MLA Minister for Mines and Petroleum
	The Hon Dr Michael Nahan MLA Minister for Energy
South Australia	The Hon Tom Koutsantonis MP Minister for Mineral Resources and Energy

²⁵ Council of Australian Governments, *About COAG* (2015) <https://www.coag.gov.au/about_coag>.

Jurisdiction	Representative
Tasmania	The Hon Matthew Groom MP Minister for Energy
	The Hon Paul Harriss MP Minister for Resources
Australian Capital Territory	Mr Simon Corbell MLA Minister for Environment and Sustainable Development
Northern Territory	The Hon David Tollner MLA Minister for Mines and Energy
New Zealand	Hon Simon Bridges Minister of Energy and Resources

Operation and voting

Under cl 4.3 of the AEMA, there is broad procedural discretion placed upon the COAG Energy Council to establish its own

rules concerning its operation as it considers appropriate, including rules concerning frequency of meetings, chairing, and making of decisions.

The definition of ‘decisions’ for the purposes of cls 4.3-4.9, is defined in cl 4.10 as including:

a decision, resolution, direction, recommendation, appointment or other matter to be determined by the MCE.

There are a number of exceptions to this broad procedural discretion. These exceptions generally operate such that only MCE Ministers representing those Parties that are NEM jurisdictions, or NERL jurisdictions or those that have committed to apply the NERL, are eligible to participate in the decision-making with respect to the NEM and the NERL respectively. With respect to the NEM, under cl 4.7(b) the Northern Territory and Western Australia are permitted to participate as observers in decision-making relating to the NEM. With respect to the NERL, under cl 4.9(b), ‘any other Party can participate as an observer in decision-making relating to the Retail Energy Markets,’ with ‘Party’ being defined in cl 1.6(ff) to mean any one party to the AEMA.

It is noted that the COAG Energy Council website lists that the Minister of Energy and Resources for New Zealand is a member of the Council. Despite this, there is no mention made of New

Zealand in the AEMA. It would thus appear that New Zealand may not participate as an observer in either NEM or NERL decisions.

Assuming that the decision-making conventions for the COAG Energy Council are similar to those of SCER, the Council will:

make decisions on the basis of consensus wherever possible, unless specific voting rules are included in relevant governing instrument(s). Where necessary, the principle of one vote per jurisdiction would apply.²⁶

There is a similar provision contained in cls 6.7 and 6.8 of the AEMA, which state that:

- 6.7 A Party will not take any action that would limit, vary or alter the effect, scope or operation of the Australian Energy Market Legislation without the agreement of the MCE.
- 6.8 A regulation, rule, order, declaration or other instrument which confers functions or powers or imposes duties on the AER may only be made or amended under the legislation of a Party that applies, implements or otherwise gives effect to the Australian Energy Market Legislation with the unanimous agreement of the MCE.

One of the challenges associated with this consensus-based model of decision-making is that it is likely to result in a 'lowest common denominator' approach to policy-making, which is often a slow process.²⁷ It also means that where one of the participating jurisdictions in either the NEM or the Retail Energy Market holds out on accepting a decision, they may be able to exercise a disproportionate level of power. As a result, it may be appropriate to consider whether an approach such as that adopted by the Voting Protocol of the Transport and Infrastructure Council,²⁸ where different types of decisions are assigned different voting majorities in order to pass, such as a two-third majority of jurisdictions, or even a simple majority may be a more appropriate voting model for some decisions. This is particularly relevant given that it is arguable that some states currently have a conflict of interest in respect of their public ownership of assets, which may lead to their decision-making at the Council favouring the interests of the citizens of their states to the detriment of the long-term consumer interest in the broader market. This issue is discussed in greater detail in Part 3 below.

²⁶ COAG Standing Council on Energy and Resources, *Terms of Reference* (SCER, 2013).

²⁷ Productivity Commission, above n 16, 491-2.

²⁸ COAG Standing Council on Transport and Infrastructure, *Decision Making (Voting) Protocol* (SCTI, 2014).

It is further noted that the implications of the consensus-based decision-making model are difficult to assess, given that the votes of each participating jurisdiction are not publicly available through Meeting Communiqués or any other document.

The Scope of the COAG Energy Council and its Terms of Reference

According to their website, the COAG Energy Council's Terms of Reference are currently under development, though their first meeting communiqué in respect of the meeting of 1 May 2014 notes that:

The first meeting gave Ministers the opportunity to consider the draft Terms of Reference for the COAG Energy Council which are to be action oriented and focus on national priorities for the Council over the next 18 months. The final Terms of Reference for the COAG Energy Council are to be agreed by COAG later this year.²⁹

It has now been almost seventeen months since the inception of the COAG Energy Council and the final Terms of Reference appear to have still not been agreed by the Council. The draft Terms of Reference considered by the Ministers at their meeting of 1 May 2014 have also not been made publicly available. What has been made available, though no reference is made to it on the entirety of the COAG Energy Council website or in any other COAG Energy Council document that is publicly available, is the overarching scope of the COAG Energy Council:

A4. The Energy Council will provide a forum for collaboration on developing an integrated and coherent national energy policy and any implications from the Commonwealth's abolition of the carbon tax.³⁰

This represents a significant departure from the scope of SCER, which was that:

The Council will seek to ensure the safe, prudent and competitive development of the nation's mineral and energy resources and markets to optimise long-term economic, social and environmental benefits to the community. The Council will do this by:

- facilitating national oversight and coordination of governance, policy development and program management to address the opportunities and challenges facing Australia's energy and resources sectors into the future;
- providing national leadership on key strategic issues and effectively integrating these strategic priorities into Government decision-making in relation to the energy and resources sectors; and

²⁹ COAG Energy Council, above n 8, 1.

³⁰ Council of Australian Governments, *Description of COAG Councils Agreed by COAG on 13 December 2013* (Department of Prime Minister and Cabinet, 2014).

- enhancing national consistency between regulatory frameworks to reduce costs and improve the operation of the energy and resources sectors.

The Council has particular policy responsibilities for:

- oversight of Australian energy markets, including for electricity and gas, particularly in terms of enhancing the efficiency of energy supply. This covers joint energy efficiency measures which act directly on the generation, distribution, transmission, retail or delivery of energy, or require changes to the National Electricity or Gas rules and associated laws and regulations;
- energy security and emergency management of national liquid fuels emergencies;
- progressing constructive and compatible changes to the basic legislative and policy framework for the sustainable development of resources; and
- facilitating the economically competitive development of Australia's resources.

The Council's work program will focus on the following broad themes:

- Governance and regulatory frameworks;
- Developing secure and competitive markets;
- Ensuring the efficient provision of monopoly network services;
- Safety and community engagement;
- Technology innovation;
- Market access and demand;
- Environmental sustainability, including monitoring the impacts of climate change policies (such as national carbon pricing) on the energy sector; and
- Energy affordability.

The Council will work actively with the Select Council on Climate Change and other Standing Councils on matters of mutual interest, including national standards for energy efficiency.

This change to the scope of the COAG Energy Council took place as part of a reform of the COAG Council system to reduce the number of Councils from 21 Councils down to 8 Councils. It is unclear what consultation, if any, was undertaken with the Parties to the AEMA, industry participants or other key stakeholders about this change in the scope of the COAG Energy Council. Given that this is likely to have significant implications for the future development of the national energy policy, it is argued that in future, broad consultation with the full range of stakeholders should be considered.

The publication of the Terms of Reference, whether in their draft or final form, is also critically important for both transparency and accountability. It is clear that COAG has envisaged that the COAG Energy Council will play a different role to that previously undertaken by SCER. This is indicated by the statement on the COAG website that 'under the new COAG council system each

Council's Terms of Reference are to be action orientated and reflect current COAG priorities,'³¹ and also by the omission of the word 'resources' from the title of the COAG Energy Council and from its overarching scope. At the first meeting of the COAG Energy Council, the Ministers agreed that the Ministers responsible for resources should continue to sit as members of the COAG Energy Council and it continues to have resources as a recurring topic of discussion in its meetings,³² providing conflicting messages about what the scope of the COAG Energy Council's activities actually are.

Indeed, it is remarkable that a review commissioned by the COAG Energy Council into the governance and institutional structure of the National Energy Market could take place without their own Terms of Reference being made publicly available. This is especially important given its role in formulating national energy policy and the questions asked by this review as to whether the COAG Energy Council's agenda is relevant to contemporary market challenges, or its role in areas outside its direct policy remit or beyond its AEMA coverage.

Agenda and work program

The forward agenda of the COAG Energy Council is not publicly available. However, in the Meeting Communiqué reporting on the 11 December 2014 meeting of the Council it was stated that the Council has adopted a new format to its meetings 'to improve the strategic focus of the Council.'³³ This format considered emerging challenges under six themes:

1. Generation – reducing investment uncertainty
2. Networks – securing benefits of technological change
3. Retail – enhancing a national approach
4. Energy productivity – improving energy use decisions
5. Natural gas – accelerating market transformation
6. Resources – productivity and development.³⁴

It appears that this is likely to represent the broad themes that will be considered in each meeting, with the COAG Energy Council to 'align its strategic priorities and work program around these themes and intends to publish regular reports on its progress.'³⁵

³¹ COAG Energy Council, *Terms of Reference* (COAG, 2015) <<http://www.scer.gov.au/about-us/terms-of-reference/>>.

³² COAG Energy Council, above n 8.

³³ COAG Energy Council, 'Meeting Communiqué', 11 December 2014.

³⁴ Ibid.

³⁵ Ibid.

In terms of the content of the agenda, the Australian energy markets are going through a period of significant transformation. It is advocated that given that one of the central elements of the National Electricity Objective is that decisions must be made in the 'long-term interests of consumers,' one of the missing recurring themes of the agenda appears to be energy consumers. According to the SCER Terms of Reference, the Council 'will also provide a draft work plan for the following financial year annually by 31 May.'³⁶ Aside from the fact that the draft work program appears to be produced after the first face to face meeting of the COAG Energy Council each year, meaning that it can only be discussed through other less formal channels or at the December meeting, there does not appear to have been a publicly available work plan for the 2014/2015 financial year. This should be publicly published once it is finalised to provide industry participants and other stakeholders with advance notice of the strategic priorities for the Council in the coming year.

In light of the above, it is a difficult task to assess how effective the COAG Energy Council is in providing oversight of the three market institutions. Following concerns about the adequacy of the oversight being provided, on 31 May 2013, SCER agreed to establish an accountability and performance framework for the AER and AEMC. To this end, on 13 December 2013, SCER agreed on the Statements of Expectations for the AER and AEMC covering their roles and responsibilities, relationship with SCER, other stakeholder engagement and communications and financial reporting requirements.³⁷ Every year, the AER and the AEMC are required to publish their response to the Statement of Expectations in the form of a Statement of Intent, which will include key performance indicators (KPIs) against which they must report in their annual report.³⁸ The AER published their Statement of Intent on 30 June 2014 for the 2014-2015 financial year.³⁹ The AEMC published their Statement of Intent on 10 July 2014 for the 2014-2015 financial year.⁴⁰ Both the AER and the AEMC then reported against these KPIs in their 2014 annual reports,⁴¹ however, it is not clear what action has been taken by the COAG Energy Council regarding the KPIs that were not met or to ensure that appropriate KPIs are set for this year. This may become clearer following the publication of the May 2015 Communiqué

³⁶ COAG Standing Council on Energy and Resources, above n 26.

³⁷ COAG Energy Council, *AER and AEMC Enhanced Budget and Performance Reporting* (2015) <<http://www.scer.gov.au/workstreams/energy-market-reform/aer-and-aemc-enhanced-budget-and-performance-reporting/>>.

³⁸ Ibid.

³⁹ Australian Energy Regulator, *AER Statement of Intent in response to the COAG Energy Council's Statement of Expectations* (2015) <<http://www.aer.gov.au/node/26301>>.

⁴⁰ Australian Energy Market Commission, *Statement of Intent of the Australian Energy Market Commission for the Financial year 2014/15* (2014) <<http://www.aemc.gov.au/getattachment/51d50777-9999-4c37-af83-71d65812f511/Statement-of-Intent-of-the-Australian-Energy-Market.aspx>>.

⁴¹ See, Australian Energy Regulator, *Annual Report 2013-14* (AER, 2014).

from the COAG Energy Council or alternatively in the AER's and AEMC's 2015-2016 Statements of Intent.

Ability to issue a Statement of Policy Principles

Under cl 4.4 of the AEMA and s 8 of the NEL, COAG Energy Council is empowered as the MCE to issue a statement of policy principles (SPP) in relation to the exercise and performance by the AEMC of its functions and powers in making a Rule or in conducting a review of the Rules. Prior to issuing a SPP, the COAG Energy Council must ensure that it is consistent with the NEO.⁴² According to the AEMC website, only one SPP has previously been issued in respect of the roll-out of smart meters.⁴³ There are no current SPPs,⁴⁴ which means that the COAG Energy Council is not providing the AEMC with direction as to how they make Rules. This is particularly problematic given that the AEMC has determined that it only will interpret the 'long-term interests of consumers' from an economic perspective which focuses on facilitating investment in the sector. Given the emergence of a number of disruptive elements in the electricity market such as distributed generation and storage, and combined with a greater emphasis on energy efficiency, this business as usual approach is arguably no longer fit for purpose.

Delegation of roles to officials such as the Standing Council of Officials

The Standing Council of Officials is not an officially recognised body in either the AEMA or in the NEL. It is not clear who these officials are, what delegations they have been provided or under whose supervision they operate. Without the provision of this information, it is impossible to contribute meaningfully to an understanding of the implications of their potential decisions for consumers.

Australian Energy Markets Agreement

The objectives of the AEMA are as follows:

2. OBJECTIVES

2.1 The objectives of this agreement are:

- (a) the promotion of the long term interests of consumers with regard to the price, quality and reliability of electricity and gas services; and
- (b) the establishment of a framework for further reform to:

⁴² *National Electricity (South Australia) Act 1996 (SA)* sch 1 s 8(2).

⁴³ Australian Energy Market Commission, *Ministerial Council on Energy Statement of Policy Principles* (2015) <<http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/MCE-statements-of-policy-principles/MCE-Statement-of-Policy-Principles>>.

⁴⁴ *Ibid.*

- (i) strengthen the quality, timeliness and national character of governance of the energy markets, to improve the climate of investment;
- (ii) streamline and improve the quality of economic regulation across energy markets to lower the cost and complexity of regulation facing investors, enhance regulatory certainty, and lower barriers to competition;
- (iii) improve the planning and development of electricity transmission networks, to create a stable framework for efficient investment in new (including distributed) generation and transmission capacity;
- (iv) enhance the participation of energy users in the markets including through demand side management and the further introduction of retail competition, to increase the value of energy services to households and businesses;
- (v) further increase the penetration of natural gas, to lower energy costs and improve energy services, particularly to regional Australia, and reduce greenhouse emissions; and
- (vi) address greenhouse emissions from the energy sector, in light of the concerns about climate change and the need for a stable long-term framework for investment in energy supplies.⁴⁵

The AEMA provides an important role in facilitating the cooperation between the Commonwealth, state and territory governments. Unfortunately, it appears that inconsistencies have emerged between the objectives contained in the AEMA (and possibly also how these objectives then filter down into national energy policy) and the National Electricity Objective under s 7 of the NEL,⁴⁶ the scope of the COAG Energy Council as per the Description of the COAG Councils as agreed by COAG on 13 December 2013,⁴⁷ and the Australian Government's priorities for the future development of the energy sector as contained in the 2015 Energy White Paper.⁴⁸ In addition, there are a number of provisions in the AEMA which appear to have lapsed and thus should be deleted (or, where necessary, replaced). In particular, cls 12.2 and 13.4 should be deleted. If cl 13.10 has now been fully achieved, it too should be deleted; alternatively, if it is still yet to be achieved, an updated clause may be required.

Consideration of areas outside the Energy Council's direct policy remit or beyond its AEMA coverage

It is interesting that the Review Panel makes a distinction between those areas that it considers to be outside the direct policy remit of the COAG Energy Council, i.e. financial markets,

⁴⁵ Council of Australian Governments, *Australian Energy Market Agreement*, 9 December 2013.

⁴⁶ *National Electricity (South Australia) Act 1996* (SA) sch 1.

⁴⁷ Council of Australian Governments, *Description of COAG Councils Agreed by COAG*, above n 30.

⁴⁸ Department of Industry and Science, *Energy White Paper* (Commonwealth of Australia, 2015) 6.

sustainability and climate change issues, and social policy, and those that it believes are beyond its AEMA coverage, i.e. retail price regulation and technical and safety matters. It is a frequent refrain that changing national energy policy with regard to environmental sustainability and social issues is a political decision that should be left to government. However, there appears to have been a conscious effort to avoid dealing with these issues, especially given the likely difficulties in reaching a consensus on them through COAG given the different political orientations and policy priorities of the Ministers involved. These issues are in the long-term interests of consumers and must be dealt with as a considered part of long-term strategy for national energy policy. For all of these areas, COAG should establish a high level strategic approach to national energy policy, which can then be incorporated into the AEMC's Rule making through the issuance of Statements of Policy Principles and the AER's implementation of the Rules.

Transparency, accessibility of information and accountability

An obvious issue that becomes apparent from a study of the other COAG Council websites is that the COAG Energy Council is one of the least publicly transparent Councils in terms of publishing their governance structure; names, titles and contact details for their SCO, operational guidelines and advance meeting dates. Indeed, as shown in Appendix 4, their lack of transparency in terms of publicly available information is only matched by the Federal Financial Relations Council and the Industry and Skills Council. Examples of best practices adopted by other Councils include publishing their Operating Guidelines on their website, identifying and providing contact details for the SCO, publishing advance meeting dates for both the Council and the SCO and publishing a governance structure with reporting lines and responsibilities.

There is also a serious problem with the COAG Energy Council website. Both the pages on 'Governance' and 'Legislation' are still under construction. Further, the Council's 'Terms of Reference,' 'Priority issues of National Significance,' delegations to the Standing Council of Officials (SCO), forward agendas and work plans are also not publicly available. The address of the website is also potentially confusing with the current address being: <http://www.scer.gov.au/>. A number of items posted by officials on the website are being posted under the name 'scer.' This may be confusing for some consumers and is easily rectified.

Reporting to COAG

Under the Guidance for COAG Councils issued in May 2014, all COAG Councils are accountable to COAG. COAG is also responsible for reviewing the COAG Energy Council annually to:

- ‘ensure the Terms of Reference remain consistent with COAG’s priorities;
- review progress made by the Council on issues referred to them by COAG;
- check progress against the Council’s responsibilities under Commonwealth and State legislation and funding agreements (National Agreements and National Partnerships).’⁴⁹

It appears that no Council Reviews were conducted in 2014, so it is not clear how efficient and effective this red tape reduction measure of only reviewing the COAG Energy Council on very limited grounds will be. This lack of an annual Council Review is compounded by the so-called ‘accountability provisions’ of the Guidance, which state that the COAG Energy Council is not required to provide a formal report to COAG (cl 2.3.2) and is only required to ‘raise issues with COAG which they consider genuinely require First Ministers’ attention.’⁵⁰ Further under cl 2.3.3, the ‘assumption is that all priorities of the Council as set out in the agreed Terms of Reference will be progressed satisfactorily and, only if there is significant divergence or unresolved issues, should Councils escalate this to COAG.’ While the COAG Energy Council is still encouraged to develop a work plan to guide their work under clause 2.3.4, this no longer appears to be mandatory and nor does the work plan require the agreement of COAG. Thus, COAG does not currently appear to be providing any real oversight to the vast bulk of the work carried out by the COAG Energy Council.

Potential reforms

1. *That similar to some other COAG Councils, the consensus-based approach to decision-making be reconsidered for some decisions of the COAG Energy Council, with other voting models such as consensus minus one, a two-thirds majority or a simple majority being possible replacements.*
1. *That given the importance of the role played by the COAG Energy Council in setting the future direction of national energy policy, in future, changes to its scope and work plan should be subject to consultation stakeholders, including consumers and industry.*
2. *That the COAG Energy Council finalise their Terms of Reference as a matter of urgency. This would provide greater transparency in respect of their role and would enable them to be held accountable for their actions.*
3. *That in the interim period prior to the conclusion of negotiations on the Terms of Reference, that the Council’s draft Terms of Reference be made publicly available to enable*

⁴⁹ Department of Prime Minister and Cabinet, Commonwealth of Australia, *Guidance on COAG Councils* (2015) 2.

⁵⁰ Ibid.

stakeholders, including consumers, to assess how their role has changed since the shift from SCER.

- 4. That AEMA be amended to reflect recent market developments and to ensure consistency with its Objectives.*
- 5. That similar to the approach of other COAG Councils, the identity of the SCO, any delegations made to them, and their governance structure be made public so that these delegations are transparent and appropriate accountability mechanisms can be put in place.*
- 6. That the forward agendas and work plans of the COAG Energy Council be made publicly available for reasons of transparency and accountability.*
- 7. That the COAG Energy Council website be updated to provide up to date and meaningful information to the public, especially on the legislation that the Council is currently responsible for and its governance.*
- 8. That COAG take a more active role in ensuring that the COAG Energy Council is transparent, accountable and meeting their Terms of Reference.*

2.2 AUSTRALIAN ENERGY MARKET COMMISSION

The Australian Energy Market Commission is the market institution responsible for developing changes to the National Electricity Rules, the statutory framework under the National Electricity Law. The AEMC has to date considered 180 applications to amend the National Electricity Rules and National Electricity Retail Rules, of which 152 have resulted in some alteration to the Rules.⁵¹

While ostensibly this appears to be a mundane regulatory function, the reality of the operations of the AEMC has been as chief policymaker in relation to electricity in the NEM. The economic regulation of network services has significant implications given the changing nature of the market. Some of the policy decisions made by the AEMC in the last twelve months have included in relation to governance arrangements for the implementation of the reliability standard,⁵² the disclosure of corporate information by demand side participants (DSPs) to the AEMO,⁵³ and the access of customers to information about their energy consumption.⁵⁴ Each of these decisions reflects the significant discretion afforded to the AEMC to determine the participation of different actors within the NEM.

This section considers the extent to which the Rule-making process of the AEMC remains relevant considering the future development of the NEM. In particular this section will consider:

- the structure of the AEMC;
- the various Rule-making processes available to the AEMC;
- the efficiency of these Rule-making processes, and the potential implications of delays or consumers;
- the genuine capacity for consumers to participate in the Rule-making process; and
- the weakening of parliamentary sovereignty in light of the AEMC Rule-making process.

⁵¹ Australian Energy Market Commission, *Rule Changes* (2015) <<http://www.aemc.gov.au/Rule-Changes>>.

⁵² Australian Energy Market Commission, *Governance Arrangements and Implementation of the Reliability Standard and Settings* (2015) <<http://www.aemc.gov.au/Rule-Changes/Governance-of-the-Reliability-Standard-and-Setting>>.

⁵³ Australian Energy Market Commission, *Improving demand side participation information provided to AEMO by registered participants* (2015) <<http://www.aemc.gov.au/Rule-Changes/Improving-Demand-Side-Participation-information-pr>>.

⁵⁴ Australian Energy Market Commission, *Customer access to information about their energy consumption* (2015) <<http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>>.

The AEMC is empowered to make rules in relation to the electricity market in general under both the NEL, and specifically with respect to retail energy, under the National Energy Retail Law (NERL). The functions and processes established for the AEMC under both laws are substantially similar. This section will consider the powers of the AEMC by reference to the NEL, but it should be noted that specific powers in relation to retail regulations also exist.

Structure of the AEMC

The AEMC is an independent body corporate that is not subject to direction by State or Territory Ministers.⁵⁵ The AEMC consists of three Commissioners who are appointed by the Governor-in-Council of South Australia on the recommendation of the relevant MCE Ministers for five-year terms.⁵⁶ Two of the Commissioners are appointed by the MCE (States and Territories), one of whom shall be appointed as the Chairperson of the AEMC.⁵⁷ The Commonwealth Minister appoints the third Commissioner.⁵⁸ The Commissioners are tasked with the appointment and oversight of the Chief Executive, four Senior Directors, General Counsel and one Human Resources and Business Manager, who comprise the Senior Management Team.⁵⁹

The Rule-Change Process

The NEL prescribes the process by which the AEMC must undertake the Rule-making process. The process is measured against the National Energy Objective (NEO) established in s 7 of the NEL:

The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of energy with respect to–

- a) price, quality, safety, reliability and security of supply of electricity; and
- b) the reliability, safety and security of the national electricity system.⁶⁰

A complete list of the AEMC's rule change determinations to date is contained within Appendix 7 to this Report.

⁵⁵ *Australian Energy Market Commission Act 2004* (SA) s 9(1).

⁵⁶ Council of Australian Governments, *Australian Energy Market Agreement*, 9 December 2013, cl 7.1; *Australian Energy Markets Commission Establishment Act 2004* (SA) s 12.

⁵⁷ The appointment of the Chairperson requires the agreement of at least six States and Territories: Council of Australian Governments, *Australian Energy Market Agreement*, 9 December 2013, cl 7.2. *Australian Energy Markets Commission Establishment Act 2004* (SA) s 12.

⁵⁸ *Australian Energy Markets Commission Establishment Act 2004* (SA) s 12.

⁵⁹ Australian Energy Market Commission, *Annual Report 2013-14* (AEMC, 2014) 16.

⁶⁰ *National Electricity (South Australia) Act 1996* sch 1 s 7.

This section will explain the operation of the NEL with respect to the Rule-change process. To that end, it will consider:

- making an application;
- consideration and consultation; and
- Rule-change and review.

Applications under the Rule Change Process

Generally speaking, any person may request the making of a rule by the AEMC.⁶¹ In the ordinary course of its work, the AEMC makes changes to the National Electricity Rules upon receipt of an application by a market body, government entity, corporation or community group.⁶² **Figure 1** below indicates that the largest proportion of Rule-change applications are made by NEM market entities.⁶³ Of the NEM market entities, the Australian Electricity Market Operator has contributed the greatest number, submitting 36 applications between June 2009 and July 2014. The AEMC may only initiate a Rule-making process without request from a third party in circumstances where the Rule-change corrects a minor error or makes a non-material change to the Rules.⁶⁴

Entity Type	Applications	% Total Applications ⁶⁵
Individual	1	0.5%
Mixed (Public/Private)	3	1.7%
Community	5	2.8%
AER	12	6.7%
AEMC	20	11.1%
NEMMCO	21	11.7%
Government ⁶⁶	30	16.7%
AEMO	36	20.0%
Corporate	52	28.9%
Total	180	100%

FIGURE 1 - RULE CHANGE REQUESTS BY ENTITY TYPE

⁶¹ Australian Energy Market Commission, *Stage 1: Initial consideration of a request for the making of a Rule* (2015) <<http://www.aemc.gov.au/Energy-Rules/Retail-energy-rules/Rule-making-process/Stage-1>>.

⁶² *National Electricity (South Australia) Act 1996* sch 1 s 91.

⁶³ Australian Energy Market Commission, *Rule Changes*, above n 51.

⁶⁴ *National Electricity (South Australia) Act 1996* sch 1 s 91(2).

⁶⁵ Note these numbers have been rounded to one decimal place.

⁶⁶ Note the make-up of Government applications is as follows: 15 applications from the MCE; 2 applications from SCER; 4 applications from the COAG Energy Council; 5 applications from the Minister for Energy and Resources (Victoria); 1 application from the Department of Infrastructure (Victoria); 1 application from the Tasmanian Government; 1 application from the South Australian Minister for Energy; and 1 application from the Queensland Government.

All Rule-change applications must include information including:

- a description of the Rule that the proponent proposes be made;
- a statement of the nature and scope of the issue(s) concerning the existing Rules that is to be addressed by the proposed Rule, and an explanation of how the proposed Rule addresses the issue(s);
- an explanation of how the proposed Rule will or is likely to contribute to the achievement of the National Energy Objective (NEO);
- an explanation of the expected benefits and costs of the proposed change to the Rules and the potential impacts of the change on those likely to be affected.⁶⁷

Consideration and Consultation

There are three iterations of the Rule-making process under the NEL:

- a standard process;
- a fast-track process for circumstances in which the consultation requirements may reasonably be circumvented for a number of prescribed reasons; and
- an expedited process for ‘non-controversial’ or ‘urgent’ Rules.⁶⁸

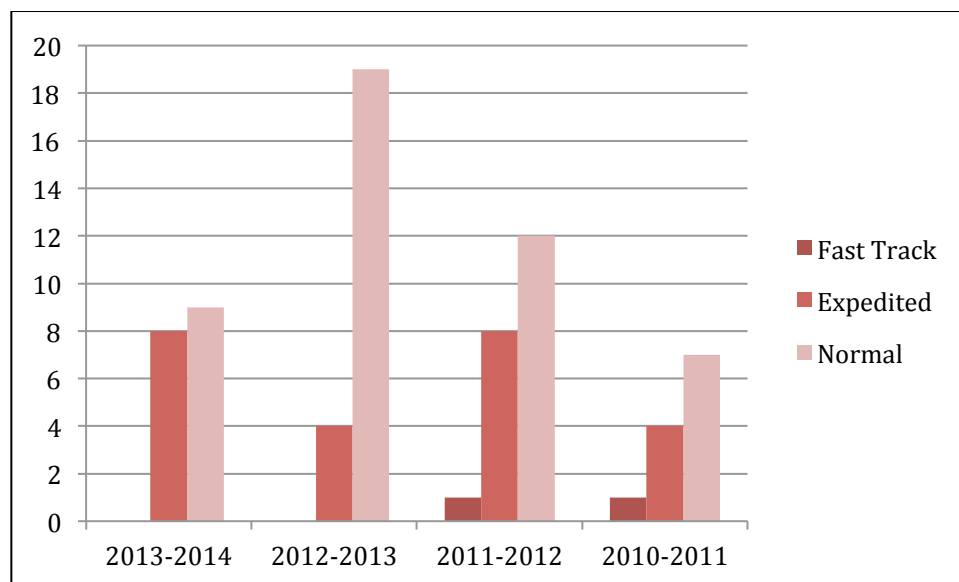


FIGURE 2 - AEMC DETERMINATIONS BY PROCESS TYPE

⁶⁷ Australian Energy Market Commission, *Guidelines for Proponents: Preparing a Rule change request – National Electricity Rules* (AEMC, 2013).

⁶⁸ Productivity Commission, above n 16, 798.

The provisions for a Rule-change under **standard process** are established in Div 3 of the NEL. The process involves two rounds of public consultation and a draft determination, which may be completed within 26 weeks of initiating the process. In practice, this can take up to one year to complete.⁶⁹ The average time taken for a claim to progress to a determination is 29.55 weeks.⁷⁰ There were 86 determinations (49.14%) that took the AEMC in excess of six months to finalise, and 26 determinations (14.86%) that took more than twelve months.⁷¹ These delays may primarily be understood to be the result of extended consultation with relevant stakeholders, including the use of the AEMC's power to hold public hearings in respect of particular Rule-change proposals.

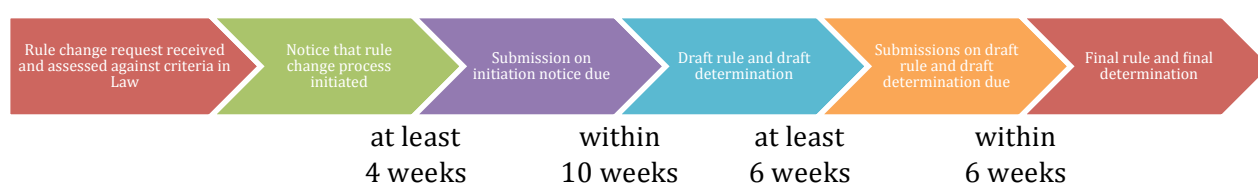


FIGURE 3 - STANDARD RULE CHANGE PROCESS

A **fast-track process** is established in s 96A of the NEL. This process waives the requirement for first-round consultation in prescribed circumstances where another review has already been conducted. Not all reviews that recommend Rule-changes will be sufficient to initiate this process. Such reviews that satisfy these requirements for a fast-track process are only where another electricity market regulatory body has undertaken the first-round consultation in lieu of the AEMC, or where the Rule request is predicated on an AEMC-initiated review or a COAG-directed review during which there was adequate consultation. Reviews of other kinds (for example, a Senate Inquiry or Productivity Commission Report) do not satisfy this requirement. Among other recommendations, the Productivity Commission recommended that a larger number of reviews satisfy the requirements to initiate the fast track process.⁷² This process takes 21 weeks from initiation. However, this process has rarely been used.⁷³ As **Figure 2** indicates, since the 2010-2011 Annual Report of the AEMC, only two of the 73 determinations made have been through a fast-track process.⁷⁴

⁶⁹ Ibid.

⁷⁰ Statistics compiled from Australian Energy Market Commission, *Rule Changes*, above n 51.

⁷¹ Ibid.

⁷² Productivity Commission, above n 16.

⁷³ Ibid 798.

⁷⁴ Australian Energy Market Commission, *Annual Report 2010-2011* (AEMC, 2011).

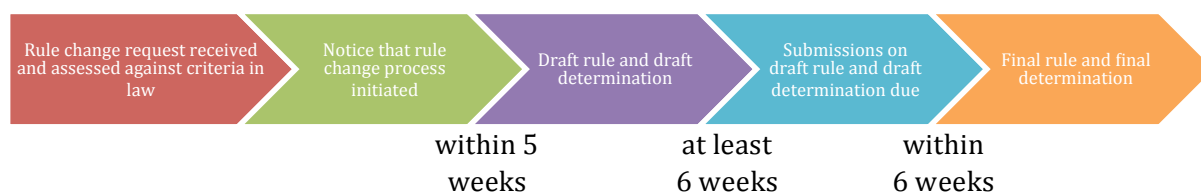


FIGURE 4 - FAST TRACK RULE CHANGE PROCESS

An **expedited process** is established in s 96 of the NEL. This process may be used only for ‘non-controversial’ or ‘urgent’ Rule-making. This process involves one round of public consultation only, which may be completed within six weeks of initiating the process.⁷⁵ This process allows technical changes to be implemented expeditiously without onerous consultation processes.⁷⁶ As can be seen **Figure 2** in above, this process was used 24 times since the 2010-2011 AEMC reporting period.⁷⁷ Most often, this process was used in respect of applications initiated by the AEMC itself.

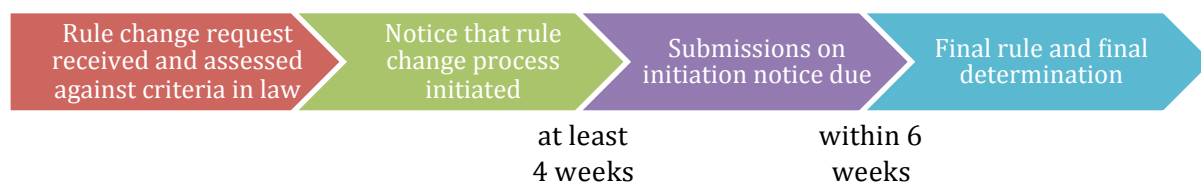


FIGURE 5 - EXPEDITED RULE CHANGE PROCESS

Rule Change and Review

Once a Rule-making process has been completed and the AEMC has so decided, the Rule will be incorporated into the National Electricity Rules. Rules do not require subsequent endorsement by COAG, the Minister, the government or parliament in order to become effective. This is unlike other comparable regulatory bodies such as Food Standards Australia and New Zealand and the National Transport Commission.⁷⁸ This anomaly may be explained by the inertia associated with the difficulties of obtaining consensus from the COAG bodies in light of the historically parochial nature of energy policy in Australia.⁷⁹

A person aggrieved by a decision or determination of the AEMC may apply to the Court for a judicial review of the decision or determination.⁸⁰

⁷⁵ Ibid.

⁷⁶ Productivity Commission, above n 16, 800.

⁷⁷ Statistics compiled from Australian Energy Market Commission, *Rule Changes*, above n 51.

⁷⁸ Productivity Commission, above n 16, 800.

⁷⁹ Ibid. Please refer to the report of Associate Professor Gabrielle Appleby for further details on this issue.

⁸⁰ *National Electricity (South Australia) Act 1996* sch 1 s 70.

Issues Arising from this Process

There are undoubtedly a number of beneficial components of the Rule-making process outlined above. In particular, we may say that the system beneficially operates to:

- maximise the consultation of relevant stakeholders (including both industry and consumer groups) in the process of changing the National Electricity Rules;
- mediate between the competing interests of national standardisation, and the significance of recognising and regulating with respect to jurisdictional differences in local energy markets;
- recognise the significance of industry-based expertise in the design of appropriate regulatory controls;
- preserve the independence of the Rule-making body from industry groups, market entities and governments; as well as the regulator.

Nevertheless, there are a number of shortcomings that have emerged from the operation of the Rule-making process outlined in this section. In particular, when one considers the genuine capacity of consumers to participate in these regulatory processes, it becomes clear that the system suffers both from a bureaucratic inefficiency and an industry bias at the expense of the consumer's interests. This section will consider the shortcomings evident in the operation of this system.

First, participation in all stages of this Rule-making process requires a significant degree of industry knowledge and information. To a large extent, consumers lack the requisite knowledge of the market in order to meaningfully engage in this process as their access to information is limited to their personal energy arrangements, and information that is made publically available by corporations, market entities, and governments. Further, even where consumers may have access to sufficient information, they may lack the technical sophistication to make meaningful submissions to the AEMC.

Even where a consumer is supported by the expertise of a community organisation, they may nonetheless lack access to sufficient information to make credible submissions to the AEMC. Moreover, smaller advocacy groups that focus on residential consumers or smaller businesses often do not have the resources available to those groups that represent generators, networks, retailers or major energy users. This has led such groups to doubt the extent to which their

submissions are taken into real consideration, and to complain of being made to feel unwelcome in the reform process.⁸¹

In particular, the application requirement presents a significant research-burden to parties seeking to alter the National Electricity Rules. Consider that an individual seeking to make a Rule-change application is required to detail the implications of the proposed change for all stakeholders affected, or likely to be affected, by the proposal. To date, only one individual consumer has made an application for a Rule-change under this process, and the application was dismissed prior to any consultation phase.⁸²

Secondly, the overriding criticism provided of the AEMC's operations in a number of public reviews is that of the timeliness of their decision-making processes.⁸³ The recently released interim report of the Senate Environment and Communications References Committee into the Performance and Management of Electricity Network Companies concluded that '[t]he process appears drawn out at every step.'⁸⁴ Significant issues arise from the time-delays experienced by NEM participants seeking rule changes in this process. The Productivity Commission variously described the AEMC Rule-making process as 'a graveyard for reform proposals'⁸⁵ and 'paralysis by analysis.'⁸⁶ As previously identified, the average time taken for a claim to progress to a determination is 29.55 weeks.⁸⁷ The time taken to implementation is even longer. Given the requirement to provide significant notice to the NEM prior to the implementation of a rule change, the average time between application and commencement of a successful Rule-change is 35.34 weeks.⁸⁸ One application by COAG, in relation to inter-regional transmission charging, has taken over five years to implement.⁸⁹

For consumers, these delays represent something of a double-edged sword. On the one hand, a desirable feature of any Rule-change system in the NEM involves robust market and consumer consultation and transparent deliberation. On the other hand, this involves a trade-off in

⁸¹ Stephen Orr, Submission No 36 to Commonwealth Productivity Commission, *Electricity Network Regulation*, 16 April 2012, 6-7.

⁸² Australian Energy Market Commission, *Rule Changes*, above n 51.

⁸³ Senate Environment and Communications References Committee, Parliament of Australia, *Interim report on the performance and management of electricity network companies* (2015) 7.3.

⁸⁴ *Ibid* 7.53.

⁸⁵ Productivity Commission, above n 16, 9.

⁸⁶ *Ibid* 36.

⁸⁷ Statistics compiled from Australian Energy Market Commission, *Rule Changes*, above n 51.

⁸⁸ *Ibid*.

⁸⁹ Australian Energy Market Commission, *Inter-regional Transmission Charging* (2015) <<http://www.aemc.gov.au/Rule-Changes/Inter-regional-Transmission-Charging>>.

relation to the potential for the expeditious resolution of rule-change proposals. Delays in the process can lengthen the impact of regulatory inefficiencies or stall the development of new technologies. The Productivity Commission was very clear in their conclusion that delays in the Rule-making process could be directly calculated in increased electricity costs for consumers.⁹⁰

Thirdly, we may also question the extent to which different NEM participants are empowered during the consultation periods. Notionally, mandated public consultation empowers consumers and other entities within the NEM to take an active role within the Rule-making process. Submissions from individual consumers during the consultation phases of AEMC Rule-change proposals are incredibly rare. Furthermore, it is clear from **Figure 6** below that both market entities and corporate institutions are significantly more likely to apply for a Rule-change than those from community bodies or individuals.

These facts raise questions as to the extent to which individual consumers may be seen to be genuine, active and equal participants in the process of National Electricity Rule reform.

Entity Type	Approved	Approved %
Individual	0	0.00%
Corporate	31	59.62%
Government	27	90.00%
AEMO	34	94.44%
AEMC	19	95.00%
Mixed (Public/Private)	3	100.00%
Community	5	100.00%
AER	12	100.00%
NEMMCO	21	100.00%
Total	152	84.4%

FIGURE 6 - APPROVAL RATE OF RULE-CHANGE APPLICATIONS BY ENTITY

⁹⁰ Productivity Commission, above n 16.

A final possible criticism of the AEMC Rule-making procedure relates to the implications for this process on the sovereignty of parliamentary decision-making, both at Commonwealth and State levels. To a great extent, the structure and mandate of the AEMC is designed to abrogate the capacity of legislatures to intervene in electricity market policy. To some extent, this is reasonable corollary of the relative inertia and parochialism inherent in the approach of state and territory legislatures to national energy policy within COAG. This parochialism is amplified by the significant role various state governments play as asset owners and operators. However, there is similarly good reason to regard the limitation of the capacity of democratically elected legislatures to shape the NEM with some apprehension.

Governments have a limited capacity to affect electricity policy through this framework in their ability to submit Rule-change proposals to the AEMC. However, this power is significantly limited in two respects. First, even rule change proposals made by or on behalf of governments are not dealt with expeditiously by the AEMC.⁹¹ In relation to the Rule-change proposals submitted by government entities to the AEMC, the average deliberation period is 41.06 weeks.⁹² In fact, during the time of the AEMC deliberation of the COAG application for a Rule-change in relation to inter-regional transmission charging, there were three changes in the relevant Commonwealth minister.⁹³ This is a substantially greater delay than would be likely if various parliaments had legislative competence in this area. Second, rule change proposals are assessed against the NEO. Thus, to the extent that a government wished to add additional considerations to the assessment of a potential Rule-change proposal (for example, environmental, social fairness or equity considerations or regional development incentives), the AEMC would be unable to apply these rationales to the Rule-change proposal. Any change to the NEO would need to be approved through COAG. Therefore, accepting that these interests may differ between states, or between particular parties of government, there is no capacity within this framework to give expression to these different objectives through the AEMC.

Reviews by the AEMC into the operation and effectiveness of the Rules

Under s 45 of the NEL, the AEMC has the power to conduct a review into any matter relating to the Rules, including their operation and effectiveness. Under s 45(2) of the NEL, the review may 'be conducted in such a manner as the AEMC considers appropriate,'⁹⁴ but need not involve public hearings. In conducting the review, the AEMC also has broad discretion to consult with

⁹¹ Senate Environment and Communications References Committee, above n 59, 7.53.

⁹² Statistics compiled from Australian Energy Market Commission, *Rule Changes*, above n 51.

⁹³ *Ibid.*

⁹⁴ *National Electricity (South Australia) Act 1996* (SA) sch 1 s 45(2)(a).

any person or body it considers appropriate, establish working groups, commission reports, and publish discussion papers.⁹⁵ At the conclusion of such a review, the AEMC must provide a copy of the report to the COAG Energy Council and publish a version of the report with the confidential information omitted.⁹⁶

There are a number of problems with this process. First, the Productivity Commission has indicated that it believes that in conducting some of these reviews, the AEMC is effectively usurping some of the role of the COAG Energy Council.⁹⁷ They further note that several network businesses have claimed that the separation of powers between the SCER and the AEMC is indistinct.⁹⁸ Secondly, by giving the AEMC broad discretion to elect whether or not they hold public hearings and to choose who they believes is appropriate to consult with, there is no inbuilt protection within the legislation to ensure that consumers will be consulted during the review process.

Potential reforms

1. *That, in the event that any element of the AEMC and the AER are to be merged, the capacity of the regulatory entity to initiate the Rule-change process ought to be revisited.*
2. *That, for the purposes of the fast-track process, reviews by additional agencies and entities ought to satisfy the consultation requirements where they include thorough stakeholder engagement.*
3. *That the AEMC should institute mechanisms to ensure the engagement of consumers in the consultation stages of the Rule-change process and in any review of the Rule-change process.*
4. *That the AEMC ought to publish, in addition to applications for Rule-changes, sufficient information to enable consumers to participate meaningfully in the process.*
5. *That the AEMC should better prioritise the staffing of Rule-changes and policy reviews to ensure the efficiency of decision-making processes.*

⁹⁵ Ibid s 45(3).

⁹⁶ Ibid s 45(4).

⁹⁷ Productivity Commission, above n 16, 801.

⁹⁸ Ibid.

2.3 AUSTRALIAN ENERGY REGULATOR

Regulation of the NEM falls to the Australian Energy Regulator. Under the National Energy Law, the AER has a range of network-related functions, including:

- the economic regulation of electricity transmission and distribution network providers (including revenue and price determinations);
- monitoring the wholesale and retail electricity markets (including investigating breaches and taking enforcement action); and
- preparing and publishing reports.

The AER is constituted as an independent entity under Part IIIAA of the *Competition and Consumer Act 2010*. The AER has an independent Board made up of one Commonwealth member and two state/territory members, each appointed by the Governor-General for terms of up to five years.⁹⁹ The Board is incredibly active compared to other NEM institutions, holding 50 meetings in the period 2013-2014.¹⁰⁰

This section considers the extent to which the monitoring and enforcement processes of the AER continue to achieve the desired outcomes, and operate in the best interests of consumers. In particular, this section will consider:

- the functions and powers of the AER;
- the structure of the AER; and
- the structural accommodation of the role of consumers in the AER.

Functions and Powers of the AER

The function of the AER is to monitor and enforce the compliance of all participants in the NEM with the NEL, NERL, NER and NERR. The AER achieves this objective by:

- monitoring the compliance by registered participants, persons, network service providers and the AEMO with relevant regulatory provisions;¹⁰¹
 - investigating breaches or possible breaches of the relevant regulatory provisions;¹⁰²
 - instituting proceedings against registered participants, persons, network service providers and the AEMO in respect of breaches of the relevant regulatory provisions;¹⁰³
- and

⁹⁹ Australian Energy Regulator, *The Board* (2015) <<https://www.aer.gov.au/about-us/the-board>>.

¹⁰⁰ Australian Energy Regulator, above n 41.

¹⁰¹ *National Electricity (South Australia) Act 1996* (SA) sch 1 s 15(1)(a).

¹⁰² *Ibid* s 15(1)(b).

- conducting reviews and inquiries regarding the performance of the NEM.

The AER performs this function broadly in relation to all elements of the energy market. The AER classifies the subject matter of its regulatory purview as comprising:

- wholesale energy market regulation;
- energy networks regulation; and
- retail energy market regulation.¹⁰⁴

Monitoring and enforcement actions undertaken by the AER must be in support of the NEO. As noted previously, this implies that the regulatory investigations and enforcement actions carried out by the AER must reflect the obligation of network businesses to act in the advancement of the efficient operation and use of electricity services for the long term interests of consumers. The Objective is narrowed by reference to price, quality, safety, reliability, security of supply of electricity. Compared to international jurisdictions, this focus on the economic efficiency of electricity supply to consumers is a narrow regulatory remit. By way of comparison, the United States Federal Energy Regulatory Commission (FERC) extends to ensuring that the operation of network businesses is 'in the public interest.'¹⁰⁵ This broader scope would empower regulatory investigations regarding environmental standards, regional development and efficiency of access of demand-side participants.

The AER has a number of coercive powers designed to enable it to gather and analyse information appropriate to its regulatory and oversight functions. It should be noted that these powers are comparable to those exercised by the ACCC in their general market regulatory functions. Coercive powers available to the AER under the NEL include the power to:

- apply to a magistrate for the issue of a search warrant;¹⁰⁶
- issue notices requiring the provision of information;¹⁰⁷
- issue notices requiring the production of documentary evidence;¹⁰⁸
- issue a regulatory information order requiring regulated network service providers or related providers, either of a specified class¹⁰⁹ or individually,¹¹⁰ to provide, prepare, maintain or keep information;

¹⁰³ Ibid s 15(1)(c).

¹⁰⁴ Australian Energy Regulator, *Our role* (2015) <<https://www.aer.gov.au/about-us/our-role>>.

¹⁰⁵ *Federal Power Act*, 16 USCS § 824 (1920).

¹⁰⁶ *National Electricity (South Australia) Act 1996* (SA) sch 1 s 21.

¹⁰⁷ Ibid s 28(2)(a).

¹⁰⁸ Ibid s 28(2)(b).

- compel the production of information notwithstanding a duty of commercial confidence;¹¹¹ and
- disclose confidential information produced to it where it considers that the detriment of such a disclosure is outweighed by the public benefit.¹¹²

These broad coercive powers are justified by the necessity of ensuring the accuracy and completeness of information provided in anticipation of regulatory decisions. In practice, they also ensure that effective ongoing oversight of the market guards against the risk of non-compliance by market businesses. Further, the capacity to compel the production, maintenance and retention of particular information in a specified form ensures that comparison between market entities is possible. However, the volume of information required to be reviewed to effectively use these coercive powers across the NEM amplifies the efficiency and capacity concerns in relation to the AER, which will be discussed in the following section.

The AER's enforcement role is important in the context of ensuring compliance with the NEL and the NERL and the ongoing competitive functioning of the NEM. In the past five years, there have only been four enforcement matters affecting retail markets. In one matter, civil proceedings were instituted against EnergyAustralia in the Federal Court in respect of a breach of s.38 the NERL, alleging that they failed to receive explicit consent before entering them into contracts or changing their supplier. The Federal Court ordered EnergyAustralia pay a civil penalty of \$500,000, maintain a compliance program for a period of two years and contribute to the AER's costs. In the three other retail matters, which all related to the loss of life support operations, infringement notices were issued by the AER following an investigation, with fines for the three matters being \$60,000, \$100,000 and \$40,000.¹¹³

Similarly, in the past ten years there have only been eight enforcement matters affecting the wholesale markets. Six of these matters were for breaches of the NER, with fines being imposed for each matter ranging from \$20,000 to \$60,000. The other two matters led to proceedings being instigated in the Federal Court. The first matter, against Stanwell, was ultimately dismissed. However, the more recent proceedings against SnowyHydro were successful with

¹⁰⁹ Ibid s 28C.

¹¹⁰ Ibid s 28D.

¹¹¹ Ibid s 28S.

¹¹² Ibid s 28ZB.

¹¹³ Australian Energy Regulator, *Enforcement Matters* (2015) <<http://www.aer.gov.au/retail-markets/enforcement-matters>>.

Court ordering the imposition of an enforceable undertaking, civil penalties totalling \$400,000, the requirement of an independent compliance review and a contribution to the AER's costs.¹¹⁴

One of the notable features of the AER as a regulator charged with enforcement is the relatively low number of both infringement notices and prosecutions. A further area of concern is the low cost of the infringement notice penalties. Given the size of these infringement penalties and infrequent enforcement actions, it seems unlikely that they are sufficient to act as an adequate disincentive to breach the rules, especially when compared to the annual revenue and profits of these businesses.

Structure of the AER

This section will consider two issues in relation to the impact of the structure of the AER on its capacity to achieve its legislative objectives:

1. the relationship between the AER and the Australian Competition and Consumer Commission (ACCC); and
2. issues arising from the efficiency of AER operations.

Relationship with ACCC

Structurally, the AER is a division of the ACCC. The implications of this relationship include that the AER is funded from the ACCC budget appropriation; that the AER and the ACCC share a number of resources including physical infrastructure and human resources; and that a member of the AER Board is a Commissioner of the ACCC. However, there are also a number of senses in which the AER is independent – including its autonomy regarding budget and strategy, and its independent reporting obligations. Nevertheless, the relationship between the AER and the ACCC is often cited as a significant area of concern in relation to NEM governance. In particular, there is consensus among the States and Territories that the goals of transparency and accountability are best served by the separation of the AER from the ACCC.

The Productivity Commission, although ultimately concluding that the AER ought to remain within the ACCC, gave detailed and balanced consideration of the strengths and limitations of the present governance arrangements. On the one hand, The Productivity Commission considered that arguments in favour of the present arrangement included that:

- proximity and resource sharing enabled a consistent and coordinated multi-sectoral approach to the economic regulation of infrastructure;

¹¹⁴ Ibid.

- there are resource-sharing benefits to the AER, in particular during periods of high demand upon the AER's resources;
- there are real synergies between the two organisations, and each benefits from the specific expertise of the staff of the other;
- integration with the ACCC is a safeguard against the risk of the NEM regulator becoming too closely affiliated with energy industry bodies ('regulatory capture'); and
- there are pragmatic concerns about the burden of undergoing a process of separation.¹¹⁵

On the other hand, the Productivity Commission considered that there were equally a number of advantages to constituting the AER as a separate entity, including that:

- the unique and complex conceptual challenges of the electricity network required expert and specialised knowledge, which could not be found through resource-sharing with the ACCC;
- the multi-sectoral nature of the ACCC, together with its combined role as economic regulator, competition watchdog and consumer protection regulator presents challenges to the efficiency and clarity of mission of the AER; and
- separation would resolve any perceptions (whether well founded or otherwise) that there is a conflict of interest between the AER and the ACCC.¹¹⁶

The Productivity Commission is not the only institution to have considered the meta-structural arrangements of the AER as contributing to market inefficiency. There has been some suggestion, in particular from the *Competition Policy Review* released on 31 March 2015, that the functions of the AER in relation to different regulatory subject matters ought to be transferred to different regulators. The dominant suggestion is that network regulation ought to be separated from their market regulation functions. The *Competition Policy Review* recommends that the pricing regulation functions be transferred to the proposed Australian Pricing Regulator.¹¹⁷ The AER has argued strongly against this position.¹¹⁸ The AER submitted in relation to this proposal that 'it is not possible to consider one element of the supply chain in isolation.'¹¹⁹

¹¹⁵ Productivity Commission, above n 16, 781-3.

¹¹⁶ Ibid.

¹¹⁷ Competition Policy Review, *Competition Institutions* (2015) <http://competitionpolicyreview.gov.au/files/2015/03/Part5_final-report_online.pdf>.

¹¹⁸ Andrew Reeves, *AER Submission to Competition Policy Review* (AER, 2014) <https://www.aer.gov.au/sites/default/files/AER%20submission%20to%20Competition%20Policy%20Review%20-%201%20August%202014_0.pdf>.

¹¹⁹ Ibid 4.

Ultimately, this Report does not adopt a firm view as to whether it is in the interests of consumers for the AER to be constituted separately from the ACCC. Regardless of the system adopted, it is clear that a number of structural considerations have significant implications for consumers within the NEM:

1. The complexity of the regulatory environment affects the extent to which consumers may meaningfully engage in the process. Increasing the number of relevant regulators, introducing more convoluted regulatory environments, and multiplying (or duplicating) the role of market regulation makes it altogether less likely that consumers will engage in these processes. From the perspective of consumers, it is best to prioritise whichever structural model delivers the greatest regulatory clarity for consumers who may lack specialised knowledge of the energy sector.
2. Constant piecemeal changes in the structure of the regulatory environment further amplify the problems associated with a complex institutional arrangement. The outcome of numerous reviews suggests that the current arrangements are not working and that broad reform is needed in order to ensure the future competitiveness of the market given the transformations currently taking place in the energy sector.
3. The independence of the regulator and the avoidance of regulatory capture are important considerations to ensure the protection of consumers within the NEM. A regulator may become burdened by a close relationship to the market businesses, and be consequently unable to act for the (often conflicting) interests of regulators.
4. The capacity of the regulator to recommend reforms to the NER (which the AER could not do were it to be merged within the AEMC under the present NEL) is important to ensure that the regulations remain responsive to the dynamic market needs.
5. The presence of organisational structures that will guarantee consultation with and representation of the interests of consumers is essential.

Efficiency of the AER

Concerns have been raised in a number of public reviews that the AER lacks the resources or technical capacity to execute its functions in an efficient manner. Most critically, the stakeholder survey conducted by the AER itself identifies a number of areas of dissatisfaction within the market regarding its performance. The AER's 2011 stakeholder survey identified a number of alarming systemic inefficiencies. The share of respondents rating an attribute of the AER as 'good' or 'excellent' was only:

- 53% for the AER's communication responsiveness;

- 43% for the AER's output quality;
- 44% for the AER's analytical and intellectual capacity;
- 40% for the AER's technical competence; and
- 36% for the AER's industry understanding.¹²⁰

The most significant concerns identified in relation to the efficiency of the AER relate to the time delay in the process of making a determination, the accuracy of determinations made, and the degree of communication with relevant stakeholders. These have obvious implications for consumers. Further, taking into account the growth of demand side participation, distributed generation and new market technologies, it is likely that the demands upon the capacity of the AER will only increase into the future. It is clear from the submissions made to other reviews, that in order to meet their objective of regulating in the 'long term interests of consumers' requires greater resourcing for the AER.

Role of Consumers in the AER

A significant strategic priority for the AER in 2013-2014 was the increased participation of consumers in market governance. Principally, the AER sought to achieve this objective through a number of structural reforms, including:

- Establishing a Consumer Reference Group to advise the AER from the perspective of electricity consumers in the performance of their duties. Advice from the Consumer Reference Group is integrated into various elements of the AER's operations – including network regulation, retail energy market regulation and the conduct of reviews;
- Drafting Service Provider Consumer Engagement Guidelines to guide the performance of network businesses in the consultation of consumer stakeholders. Significantly, the guidelines provide for the thorough consultation of consumers in the preparation of proposals made to the AER for pricing determinations. However, these guidelines are non-binding and they have not always been interpreted in a way that optimises consumer consultation; and
- Creating a Consumer Challenge Panel to challenge the integrity of consumer consultation in the work of the AER. The Panel represents the perspectives of consumers in two respects. First, they are tasked with investigating and challenging the

¹²⁰ Productivity Commission, above n 16, 766.

thoroughness of the consultation engaged in by network businesses in preparing proposals made to the AER for pricing determinations. Second, they challenge the AER internal processes of review and determination to strengthen the participation and perspectives of consumers at each stage of AER processes. By 2016, the Consumer Challenge Panel will have advised the AER on 23 network businesses' pricing proposals.

Structurally, these developments in the consultation processes of the AER undoubtedly strengthen the position of consumers in regulatory decision-making. Assuming that the processes operate as intended, they serve to ensure that regulatory, oversight and review functions within the NEM are undertaken in the interests of consumers and with appropriate consultation. Given that these systems were only implemented for the 2013-2014, it is too early to provide a definitive assessment of their efficacy.

While these structures serve, in part, to safeguard the position of consumers within the NEM regulatory framework, there are two potential shortcomings in the consultation of consumers through this process.

First, the participation of consumers within the AER consultative bodies is limited to a select group of consumer advocates and selected representatives. While the AER indicates that efforts are made to seek a diversity of experiences in the appointment of both the Consumer Reference Group and Consumer Challenge Panel, it is important to ensure that a diverse range of consumers within the NEM continue to be consulted in the future. As the participation of consumers within the NEM continues to diversify – through the growth of distributed generation, development of cost-effective consumer renewable technologies, and diversification of retail energy offerings – consultation from a greater range of consumers will become more important.

Secondly, participation by consumers within the AER and network business consultation process requires a significant degree of information and understanding – both in relation to the consumer's own market participation and the NEM more broadly. While the AER has significant information-gathering capacities under the NEL, their capacity to publicly disclose that information is significantly limited in light of commercial considerations. The AER must strike a balance between protecting the commercial concerns of network businesses, and empowering consumers through the appropriate provision of relevant information.

Potential reforms

1. *That, in considering reforms to the relationship of the AER and the ACCC, priority should be given to limiting the complexity of the regulatory environment, ensuring the independence of the regulator, and increasing the capacity of the regulator to safeguard the needs of consumers.*
2. *That the AER Consumer Reference Group and Consumer Challenge Panel should, in their composition, reflect the diversity of experiences of consumers in the market – including adequate representation of vulnerable consumers and those with a focus on new technologies.*

2.4 AUSTRALIAN ENERGY MARKET OPERATOR

The Australian Energy Market Operator Ltd was established to manage the NEM and gas markets from 1 July 2009. According to cl 5.1(c) of the AEMA, AEMO is:

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.

In particular, it carries out a range of functions within the NEM as specified in the NEL, AEMO's Constitution, the *Australian Energy Market Commission Establishment Act 2004* (SA), the NERL and the NERR.

The role and statutory functions of AEMO as specified in the National Energy Law are:

Part 5—Role of AEMO under National Electricity Law Division 1—General 49—AEMO's statutory functions

(1) AEMO has the following functions:

- (a) to operate and administer the wholesale exchange;
- (b) to promote the development and improve the effectiveness of the operation and administration of the wholesale exchange;
- (c) to register persons as Registered participants;
- (d) to exempt certain persons from being registered as Registered participants;
- (e) to maintain and improve power system security;
- (f) to facilitate retail customer transfer, metering and retail competition;
- (g) for an adoptive jurisdiction—the additional advisory functions or declared network functions (as the case requires);
- (h) any functions conferred by jurisdictional electricity legislation or an application Act; (i) any other functions conferred under this Law or the Rules.

(2) In its role as National Transmission Planner, AEMO has the following functions: (a) to prepare, maintain and publish a plan for the development of the national transmission grid (the National Transmission Network Development Plan) in accordance with the Rules; (b) to establish and maintain a database of information relevant to planning the development of the national transmission grid and to make the database available to the public; (c) to keep the national transmission grid under review and provide advice on the development of the grid or projects that could affect the grid; (d) to provide a national strategic perspective for transmission planning and coordination; (e) any other functions conferred on AEMO under this Law or the Rules in its capacity as National Transmission Planner.

(3) AEMO must, in carrying out functions referred to in this section, have regard to the national electricity objective.

The governance and ownership structure of AEMO

AEMO is organised as a company limited by guarantee under the *Corporations Act 2001* (Cth). This is a common corporate structure for not-for-profit companies in Australia. AEMO operates on a cost recovery basis and fully recovers its operating costs through fees paid by market participants and network service providers.

AEMO's ownership structure is split between government and industry, with there being two classes of Member under clause 4.9 of their constitution: Government Members (cl 4.9(a)) and Industry Members (cl 4.9(b)). There are eligibility criteria placed on the ability to qualify as a Member of AEMO under cl 1.1 of its corporate Constitution:

Membership Eligibility Criteria means:

(a) in the case of an applicant for admission as a Government Member:

- (i) being the Crown in right of the Commonwealth of Australia, a State of Australia, the Australian Capital Territory or the Northern Territory; and
- (ii) having conferred on the Company at least one function relating to the objects of the Company; and

(b) in the case of an applicant for admission as an Industry Member, being a person who:

- (i) is a "Registered Participant" within the meaning of section 2 of the National Electricity Law; or
- (ii) is a "Registered Participant" within the meaning of section 2 of the National Gas Law; or
- or
- (iii) is a "Service Provider" within the meaning of section 2 of the National Gas Law; or
- (iv) is required to provide information to the operator of the Natural Gas Services Bulletin Board under section 223 of the National Gas Law.

Note that consumer groups do not qualify as a 'Registered Participant' within the meaning of s 2 of the NEL, and therefore their interests must be represented by the Government Members.

Membership (and consequently, ownership) of AEMO is made up of 60 per cent Government Members and 40 per cent Industry Members. Members of AEMO are included in Appendix 5. It is governed by a Board of Directors comprising nine non-Executive Directors and the Chief

Executive Officer. The Directors must be independent and must have core skills and experience (as outlined in Sch 2 of the AEMO Constitution).

Members of AEMO have many benefits of shareholders of companies organised under the *Corporations Act 2001* (Cth). This includes the ability of any two or more Members to convene a general meeting of AEMO at the cost of AEMO (cl 5.3 of the Constitution) and to vote at a general meeting (cl 6.11).¹²¹ However, there are some limitations on Members. For example, under cl 3.2 of AEMO's Constitution,

[n]o part of the profits, income or property of the Company may be paid or transferred to a Member or officer of the Company, either directly or indirectly, by way of dividend, bonus, or otherwise.

This is consistent with AEMO's being a company limited by guarantee and its not-for-profit status. Further, under cl 7.3, Members do not have the ability to appoint the Board Directors of AEMO. Rather, this power to appoint is vested in 'the members of the Ministerial Council on Energy in accordance with the MCE Protocol and this Constitution.' The Members of AEMO do have the ability to endorse the MCE's Board Selection Panel Report. However, given the effective ownership split between Government and Industry Members and the requirements of quorum under cl 6.2 of the Constitution,¹²² this is really just a 'rubber stamp.' The MCE is also

¹²¹ A formula contained in cl 6.11 of the AEMO constitution is used to calculate the weight of votes at a general meeting depending on the class of Member.

6.11 Number of votes exercisable in a general meeting

At each general meeting of the Company, on a vote decided by a poll or show of hands,

(a) each Government Member present in person or by proxy, attorney or Representative shall be entitled to cast the number of votes calculated according to the following formula:

$$\text{number of votes} = \frac{60}{G} \times 1,000, \text{ where}$$

G = the total number of Government Members present in person or by proxy, attorney or Representative and entitled to vote at the meeting, and

(b) each Industry Member present in person or by proxy, attorney or Representative shall be entitled to cast the number of votes calculated according to the following formula:

$$\text{number of votes} = \frac{40}{I} \times 1,000, \text{ where}$$

I = the total number of Industry Members present in person or by proxy, attorney or Representative and entitled to vote at the meeting.

If the calculation under this article 6.11 results in a fraction, the number of votes will be rounded up or down to the nearest whole number.

¹²² The requirements of quorum under cl 6.2 of the Constitution, which effectively requires 85.71% of Government Members to be present (total number of Government Members minus one) but only 10% of Industry Members (or 8 of the current 74 Industry Members) to be present for a general meeting to be quorate.

responsible for nominating a Chair of the Board of the Directors from among the Independent Directors.

The AEMO Governance Review 2013

The recent AEMO Governance Review highlighted a number of issues in the current governance and ownership structure. First, a number of participants cited concern that AEMO had internally reviewed its own governance and reported its findings to SCER prior to consulting with industry stakeholders or Members on the content of the Governance Review Discussion Paper.¹²³ For example, the Chief Executive Officer of ElectraNet, Mr Ian Stirling, stated:

It is not clear whether this internal review conducted by AEMO somehow purports to represent the review required to be undertaken by SCER or whether it is merely a review initiated by AEMO and passed to SCER, but without any real status.

If it is the former, it is most disconcerting as it lacks independence being in the form of a self-review without any appropriate consultation with shareholders and seems to continue the history of poor or ineffectual consultation on governance matters by AEMO.

If it is the latter, the lack of supporting information, regarding what recommendations were submitted to SCER, any independent assessment as to whether these proposals are consistent with good corporate governance principles and any commentary as to whether there is any acceptance or otherwise by SCER of these recommendations, is of major concern.¹²⁴

The ownership/membership split between Government (60%) and Industry Members (40%) also remains contentious and was cited as an issue by almost every industry submission to the Governance Review. In the Governance Review Discussion Paper, AEMO stated that:

Some parties were of the view that industry membership potentially afford the energy sector a greater degree of accountability to those who use and pay for AEMO's services, and the potential for improved responsiveness to the needs of market participants, enhanced transparency of operations and greater independence from any particular market participant or government stakeholder. Alternatively, other parties, perceived that government membership of AEMO could

¹²³ See e.g. Chris Deague, Senior Market Specialist at GDF Suez, 'Letter on the AEMO Governance Review', 13 September 2013; Ian Stirling, Chief Executive Officer, ElectraNet, 'Letter on the AEMO Governance Review', 13 September 2013; Jamie Lowe, Manager of Market Regulation, Alinta Energy, 'Letter on the AEMO Governance Review', 13 September 2013.

¹²⁴ Peter McIntyre, Managing Director, Transgrid, 'Letter on the AEMO Governance Review', 13 September 2013, 1.

provide greater protection and improved accountability to end users who are the ultimate beneficiary of its services, and greater independence from any particular market participant.¹²⁵

Unfortunately, while the former view is clearly apparent in the industry submissions, the source of the latter view is not transparent. However, given the apparent resistance by the Industry Members to alter the board skills required for directors to include expertise in end-use consumer matters, it is arguable that ongoing Government involvement in AEMO is critical in terms of representing the interests of end-users.

A number of formal submissions also advocated that the composition of the Board should be changed to reflect the Membership of AEMO, i.e. that Industry Members should be able appoint 40% of the Board (i.e. 4 of the Board Directors).¹²⁶ They have further argued that the MCE Selection Panel arrangements should be retained (though the skills required of Board Directors and the standard of independence applying to them should be altered) but only apply to the Directors representing the 60% Government Members.¹²⁷ Alternative proposals also included having the Board or a Board committee propose nominations directly to the Members in order to better reflect the membership make-up of AEMO¹²⁸ and involving an Industry Member representative in the first stage of the nominee selection process.¹²⁹

As part of its Governance Review, AEMO proposed that the Board also consider amending the Board skills to incorporate expertise in end-use consumer matters. Not surprisingly, given the make-up of the organisations that submitted formal submissions to the Review, this recommendation was not well received with a number of submissions stating that this would be more appropriate for the AER and the ECA. GDF Suez in their submission noted that AEMO's core objective to advance the NEO should adequately address consumer interests, without adjusting the skills or experience of the AEMO Board Directors.¹³⁰

Further areas of consideration were whether the terms of Board appointments should be extended, whether Directors should be able to have a greater number of terms and whether the AEMO definition of 'Independent Director' in its Constitution ought to be aligned with that used by the ASX in its Corporate Governance Guidelines.

¹²⁵ Australian Energy Market Operator, *AEMO Governance Review* (AEMO, 2013) 8-9.

¹²⁶ See e.g. Ian Stirling, above n 127, 1.

¹²⁷ Ibid 3-4.

¹²⁸ Chris Deague, above n 127, 2.

¹²⁹ Phil Moody, Group Manager of Energy Markets Regulatory Development, Origin Energy, 'Letter on the AEMO Governance Review', 13 September 2013, 2.

¹³⁰ Chris Deague, above n 127, 2.

The outcome of the AEMO Governance Review was that decisions about whether it was appropriate to amend its Constitution were deferred until after this review. It was, however, noted that ‘a range of views [had been] submitted in respect of the existing governance arrangements, some of which were focused on issues outside of AEMO’s remit to consider, including structural changes to its ownership.’¹³¹

Comparison with other international functional equivalents

AEMO’s structure, with its mix of government and industry participation, is unique amongst international market or system operators. In other jurisdictions, the operators are either:

- a 100% state owned entity, such as Transpower in New Zealand;
- a not for profit corporate entity established under an Act of parliament governed by an independent Board of Directors whose Chair and Directors are appointed by the Government, such as the California Independent System Operator Corporation (CAISO) in California, Independent Electricity System Operator (IESO) in Ontario;
- a publicly listed company, such as National Grid (NGET) in the United Kingdom; or
- an industry owned, limited liability company registered in Delaware, such as PJM Interconnection, LLC.

A comparison of their legislative or corporate mandate, ownership structure, corporate values, governance structure and financing is contained in Appendix 6.

Potential reforms

1. *That in future, reviews of the corporate governance of AEMO should be conducted by an external panel, with a broad range of stakeholders consulted and all of the submissions publicly available.*
2. *That the Government retain an interest in the operation of AEMO given the apparent reticence of the Industry Members of AEMO to consider expertise in end-consumer matters as a necessary skill for the AEMO Board Directors.*
3. *That either experience in or knowledge of end-consumer matters should be a necessary requirement for AEMO Board Directors.*
4. *That in line with its international functional equivalents, AEMO consider adopting a more consumer-centric approach.*

¹³¹ David Swift, *AEMO Governance Review – Next Steps* (AEMO, 2014).

2.5 ENERGY CONSUMERS AUSTRALIA

Traditionally, consumer engagement approaches in the electricity sector seek to inform consumers and collect feedback. This generally occurs through consultation methods such as fact sheets, websites, surveys, focus groups and public meetings. There have been concerns raised over the failure of these methods to bring consumer concerns into major policy discussion, and that they do not encourage consumers to deliberate key issues.¹³²

Energy Consumers Australia Ltd (ECA) was established on 30 January 2015 for the purpose of ‘increasing consumer advocacy on national energy market matters of strategic importance and material consequence for energy consumers, in particular household and small business consumers.’¹³³ ECA is structured as a company limited by guarantee under the *Corporations Act 2001*. Under cl 5 of the Constitution of Energy Consumers Australia Ltd, the company has a single Member, ‘the Minister of the Crown in right of the State of South Australia for the time being administering the National Energy Laws as applied by South Australia.’¹³⁴

Objects and activities of the ECA

The object of the company is enshrined in cl 4.1:

(a) To promote the long term interests of Consumers of Energy with respect to the price, quality, safety, reliability and security of supply of Energy services by providing and enabling strong, coordinated, collegiate evidence based consumer advocacy on National Energy Market matters of strategic importance or material consequence for Energy Consumers, in particular for Residential Customers and Small Business Customers.

The activities of the company are listed in cl 4.2:

Without limiting the effect of article 4.3, the Company will seek to achieve its objects through:

- (a) Effectively and objectively participating in National Energy Market issues and influencing regulatory activities and Energy market reform to benefit Consumers;
- (b) Frequently engaging and communicating with Consumers and consumer advocates to discuss, support, liaise, collaborate, educate, identify and to receive and provide updates on the National Energy Market and its policies, reforms, issues and general news;

¹³² Productivity Commission, above n 16, 10-11.

¹³³ Energy Consumers Australia, *Energy Consumers Australia* (2015) <<http://www.energyconsumersaustralia.com.au/>>.

¹³⁴ Energy Consumers Australia, *Constitution of Energy Consumers Australia Ltd* (2015) cl 5.2.

- (c) Building national and jurisdictional expertise and capacity through research, knowledge development and consultation to advance the interests of Australian Energy Consumers, in particular residential and small business Energy Consumers;
- (d) Undertaking robust research to build knowledge, engage and influence policy development and educate Consumers in the Energy markets;
- (e) When notified by the Member, after the Effective Date, of the Company's capacity to do so – funding and managing grants to build knowledge and sectoral capacity supporting policy development and consumer education in the National Energy Market;
- (f) Creating and maintaining effective working relationships with key stakeholders including but not limited to: Consumers and consumer advocates, the AER, jurisdictional regulators, Energy market participants, the AEMC, the AEMO, governments and Energy Ombudsmen; and
- (g) Developing an understanding of the distinct market differences between jurisdictions within the National Energy Market and applying these considerations when engaging, responding or initiating work on behalf of Energy Consumers' interests, and with jurisdictional bodies where appropriate;
- (h) Frequently and collaboratively engaging and communicating with representatives from the Energy industry on issues in the interest of Consumers to help inform the Company when performing the activities in this article 4.2; and
- (i) Doing all things as may be incidental or ancillary to achieving the Objects and performing the activities in this article 4.2.

The ECA has also established a number of guiding principles to help it carry out its activities.¹³⁵

Analysis

These objects and activities appear admirable, especially as they are designed to supplement rather than supplant the existing forms of consumer engagement and consultation in the other key market institutions. While it is clearly too soon to evaluate the success of this initiative, a study of the ECA's functional equivalents in other jurisdictions may still prove valuable in providing some examples of innovative practice. To this end, we analysed the Citizens' Energy Forum and the 2020 Vision for Europe's energy customers in the European Union, the consumer role of the Ontario Energy Board in Ontario, Canada, and the Utilities Consumer Advocate in Alberta, Canada.

¹³⁵ Energy Consumers Australia, *About us* (2015) <<http://www.energyconsumersaustralia.com.au/about-us>>.

Citizens' Energy Forum (also known as the 'London Forum') (the European Union)

The Citizen's Energy Forum was established by the European Commission in 2007 to help facilitate the establishment of 'competitive, energy-efficient and fair retail markets for consumers.'¹³⁶ The Forum is chaired by the Commission, with the Commissioner for Consumer Policy, the Director of the Directorate-General for Energy (DG Energy) and the Director for the Directorate-General for Health and Consumers (DG SANCO) all taking active roles. The Forum, held annually in London with the support of Ofgem (the Office of Gas and Electricity Markets in the United Kingdom), attracts a wide range of participants from national and European consumer advocacy organisations, national regulators, representatives of Member States, and industry representatives. It is actively supported by the Council of European Energy Regulators.

The Forum tackles a wide range of consumer related topics, which in 2015 included 'energy consumer empowerment, the roll-out of smart meters, self-generation, consumer vulnerability and energy poverty.'¹³⁷ Working Groups are established to follow-up on the issues raised in the Forum. The Forum has a number of benefits. First, it keeps consumer issues on the agenda across the sector. Secondly, by bringing all of the key stakeholders together, it minimises the ability of stakeholders to pass the buck to other organisations that may otherwise not be engaged in the Forum. Thirdly, it encourages the sharing of ideas and best practices across Europe. Finally, as the agenda, presentations, reports, and conclusions of the Forum, as well as associated Working Group documents are publicly available, it is transparent and participants can be held accountable.

2020 Vision for Europe's energy customers

Another consumer-orientated initiative that seems to be effective is the joint Council of European Energy Regulators (CEER) and The European Consumer Organisation (BEUC)'s statement of 'A 2020 vision for Europe's energy customers.' This vision was designed with 'input by 37 consumer bodies from 20 countries, in addition to representatives from the energy industry, the European Commission and the European Parliament.'¹³⁸ The Vision is focused on 'four principles governing the relationship between the energy sector and its variety of customers: reliability, affordability, simplicity, protection and empowerment.'

¹³⁶ European Commission, *Citizens' Energy Forum in London* (2015), <<http://ec.europa.eu/energy/en/events/citizens-energy-forum-london>>.

¹³⁷ Ibid.

¹³⁸ Council of European Energy Regulators, 'A 2020 Vision for Europe's energy customers' (Discussion Paper C12-SC-02-04, CEER, 13 November 2012) 4.

Customers for this purpose are defined as ‘the European retail customers of electricity, gas and district heating, as well as those that both generate and consume electricity. Customers can be a household customer or a small enterprise’¹³⁹ but do not include large energy customers. 2020 was chosen as the date for the Vision due to a series of significant changes occurring in the period immediately prior to 2020, such as:

- the implementation of the European 20-20-20 goals for climate change, renewables and energy efficiency set by European heads of state, where ‘empowering consumers and achieving the highest level of safety and security’ is one of five priorities;
- the implementation of the common internal energy market;¹⁴⁰
- ‘the partial or complete implementation of smart metering systems for electricity should be fulfilled by 2020 (as required by European energy legislation and provided a cost benefit analysis does not show negative results);’¹⁴¹ and
- the need for massive infrastructure investment in Europe both in order to meet the 20-20-20 goals and to support the implementation of the common internal energy market, but also to replace aging transmission, distribution and generation assets.

In the creation of the Vision, CEER committed to engage ‘more actively in securing the views of customers and their representative bodies on what customers want and expect so that they can have trust in a market that will meet their needs.’¹⁴² They further support capacity building consumer organisations around energy issues, while conversely creating specific actions for energy regulators, consumer organisations, and energy suppliers and retail service providers in terms of their engagement with customers. The Vision has been supported by a number of other European umbrella groups such as the European Federation of Local Energy Companies (CEDEC), the European Distribution System Operators’ Association for Smart Grids (EDSO for smart grids), the European Network of Transmission System Operators for Europe (ENTSO-E), the European Smart Metering Industry Group (ESMIG), Eurelectric, Eurogas, the European Group of Distribution Companies and Organizations (GEODE), the National Energy Ombudsmen

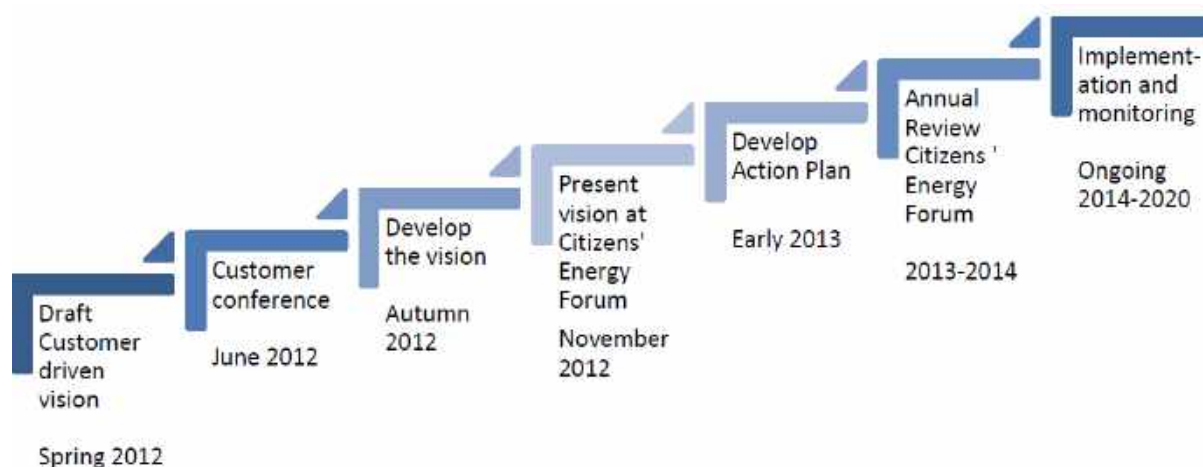
¹³⁹ European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Energy 2020 A Strategy for competitive, sustainable and secure energy*, COM(2010) 639 final. Where small enterprises are enterprises with fewer than 50 occupied persons and annual turnover or balance sheet not exceeding EUR 10 million, in accordance with *Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC* [2009] OJ L 211/55, art 3 para 3 and *Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC* [2009] OJ L 211/94.

¹⁴⁰ Note that this was meant to be completed by 2014, but remains an ongoing project.

¹⁴¹ Council of European Energy Regulators, above n 143.

¹⁴² Ibid.

Network (NEON) and the Smart Energy Demand Coalition (SEDC). CEER currently has rolling three-year action plans to implement the Vision, with regular reporting on its implementation at the Citizen's Energy Forum.



Ontario Energy Board (Ontario, Canada)

The Ontario Energy Board, not only acts as the entity responsible for rule making, market development, and acts as the market regulator; it also fulfils important compliance and consumer protection roles. Its consumer protection role is specified in Ch 8 of the *Energy Consumer Protection Act 2010* (Ontario). However, its role is more restricted than the proposed role of the ECA or the function carried out by the Citizen's Energy Forum in Europe, as it limited to protecting consumers from 'energy retailers who commit unfair business practices in the sale of energy contracts to electricity and natural gas consumers.'¹⁴³ That said, it does conduct audits of energy retailers to ensure compliance with the wide-ranging enforceable provisions of the *Energy Consumer Protection Act*, with a number of successful investigations leading to fines, revocation or suspension of licences and voluntary assurances of compliance.

Office of the Utilities Consumer Advocate (UCA) (Alberta, Canada)

The entity that seems most similar to ECA is the UCA. The UCA was established in October 2003 to represent the interests of electricity and natural gas consumers (residential, small business, rural) in Alberta. The UCA has 'the following core program areas: Regulatory, Mediation, Advocacy Services, and Consumer Awareness.'¹⁴⁴ Through these programs, the UCA works to ensure that consumers have the information they require to make informed choices in Alberta's deregulated markets through:

¹⁴³ Ontario Ministry of Energy, *Consumer Protection* (2015) <<http://www.energy.gov.on.ca/en/consumer-protection/>>.

¹⁴⁴ Utilities Consumer Advocate, *Annual Report 2013-14* (UCA, 2014) 6.

- consumer education and transparent disclosure;
- representation of consumers by mediating in conflicts with retail service providers; and
- consumer advocacy in regulatory proceedings.

The UCA is also responsible for administering the 'budget of the Transmission Facilities Cost Monitoring Committee, a committee established by the Minister of Energy pursuant to Ministerial Order 64/2010.'¹⁴⁵

The responsibilities of the UCA are set out in Sch 13.1 of the *Government Organization Act (2000)* and in the Utilities Consumer Advocate Regulation as follows:

Schedule 13.1

Responsibilities

2 The Office of the Utilities Consumer Advocate has the following responsibilities:

- (a) to represent the interests of Alberta residential, farm and small business consumers of electricity and natural gas before proceedings of the Alberta Utilities Commission and other bodies whose decisions may affect the interests of those consumers;
- (b) to disseminate independent and impartial information about the regulatory process relating to electricity and natural gas, including an analysis of the impact of decisions of the Alberta Utilities Commission, other bodies and the courts relating to electricity and natural gas;
- (c) to inform and educate consumers about electricity and natural gas issues;
- (d) to carry out such other responsibilities relating to electricity and natural gas as the responsible Minister determines.

Utilities Consumer Advocate Regulation

Additional responsibilities of the Office of the Utilities Consumer Advocate

2 In addition to the responsibilities set out in the Schedule, the Office of the Utilities Consumer Advocate has the following responsibilities:

- (a) to develop and undertake activities that the Utilities Consumer Advocate considers appropriate for the purposes of
 - (i) preventing the disconnection of electricity or natural gas provided by a retailer or provider to a consumer, or
 - (ii) facilitating the reconnection of electricity or natural gas provided by a retailer or provider to a consumer;

¹⁴⁵ Ibid.

(b) to assist in the resolution of any consumer issue, complaint or dispute between a consumer and a distributor, provider or retailer relating to the provision of electricity or natural gas as the Utilities Consumer Advocate considers appropriate.

The UCA also provides some guiding principles to inform its work.¹⁴⁶

The UCA in Alberta is currently Mr Chris Hunt, who was appointed on 16 March 2015. Mr Hunt has extensive experience in stakeholder engagement, policy development and regulatory processes and was prior to this appointment the Director of Public Engagement in the Market Diversification Branch of the Alberta Department of Energy.¹⁴⁷ His work is assisted by an annual budget in 2013/2014 of Canadian \$9,135,000.00.¹⁴⁸ The work of the UCA is also guided by the UCA Advisory Board, and the UCA must file mandatory public annual reports on their activities with the Minister of Service, Alberta.

In 2013/2014, the UCA:

- initiated participation in 60 Alberta Utilities Commission (AUC) proceedings and intervened in 115 issues;
- received favourable responses from the AUC on 58.7% of the issues presented;
- total cost disallowances from regulatory proceedings for the year were \$48 million;
- assisted 31, 869 Albertans looking for information or assistance related to their utility service, including providing mediation services to 3517 Albertans; and
- facilitated the reconnection of 112 customers through the AUC's disconnection and reconnection project.¹⁴⁹

Conclusion

Genuine engagement and consultation requires concerted effort on the part of all of the market institutions and stakeholders. It has often been put in the 'too hard basket,' with lack of agency, lack of time and disinterest sometimes cited as reasons preventing consumers from engaging with the NEM. Previous innovative consumer engagement strategies such as the 54-member Citizen Jury used by the NSW Government's Public Accounts Committee Inquiry into the economics of energy generation in 2012 have highlighted that 'citizens were concerned about

¹⁴⁶ Utilities Consumer Advocate, *Who We Are* (2015) <<http://www.ucahelps.alberta.ca/about.aspx>>

¹⁴⁷ Utilities Consumer Advocate, *Who We Are* (2015) <<http://www.ucahelps.alberta.ca/about.aspx>>.

¹⁴⁸ Utilities Consumer Advocate, above n 149, 14.

¹⁴⁹ Ibid 7-11.

complex issues and interested in participating in governance.’¹⁵⁰ This Citizen Jury was asked to ‘agree on an order of preference, barriers to adoption (including financial aspects and public perception issues) and recommended course of action with regard to alternative forms of energy generation in NSW.’¹⁵¹ Novel forms of engagement such as this are valuable, with the work of the juries being extensively relied upon by the Public Accounts Committee in its Final Report.

This Report has highlighted that in fact one of the most significant challenges to consumer engagement and consultation is both a lack of willingness on the part of market institutions to engage with end-consumers in a meaningful way, coupled with a complete lack of transparency and effective accountability for entities such as the COAG Energy Council. It is difficult to see how the NEO, with its reference to ‘the long-term interests of consumers’, could possibly be met without actually engaging those same consumers. The consumers engaged must not merely be the large energy users or the most vulnerable, but must reflect the cross-section of interests in Australian society.

The industry seems to rely on the argument that the best possible protection for consumers is an open, dynamic and competitive market. However, this argument relies on the market being perfectly competitive, and free of market failures and the corresponding market interventions used to tackle them. This simply does not reflect the reality of the National Electricity Market. While this should arguably improve with the advent of the ECA and the recent advances made by the AER, this will not resolve the underlying resistance on the part of some market institutions or resolve the transparency and accountability issues.

Potential reforms

1. *That Energy Consumers Australia be supported in their activities and encouraged to consider whether an equivalent of the Citizen’s Energy Forum might be appropriate in the context of encouraging greater concern for consume interests across the range of market institutions and stakeholders in the NEM. If such a Forum were to be established, it may also consider whether a 2030 Vision for Australia’s energy customers might also be a positive development.*

¹⁵⁰ Legislative Assembly Public Accounts Committee, New South Wales, *The Economics of Energy Generation*, Report No 6/55 (2012).

¹⁵¹ Sydney Citizens’ Policy Jury, Submission to Legislative Assembly Public Accounts Committee, New South Wales, *Energy Economics and Security in NSW*, August 2012.

3. MANAGING THE CHALLENGES OF FEDERALISM

The key structural shift in the regulation of energy in Australia since the late 1990s has been increasing national consistency and centralised federal control of regulation. However, under the Constitution, the Commonwealth government has no basis for policymaking in relation to electricity markets without either the referral of that power from the states or a Commonwealth takeover under the Corporations power. In many senses, the states have recognised the importance of common market regulation and conceded significant portions of their regulatory competency to Federal regulators. However, a number of aspects of the market continue to be regulated by state and territory governments. In practice, this has led to widely divergent market conditions in various states and territories, with differing implications across generation, networks and retail for energy consumers.

This section will consider the implications of different aspects of the complexities of Australian federalism on the regulation of the NEM. In particular, this section will discuss:

- the impact of different ownership structures between the various states and territories upon the regulation of the NEM; and
- the degree to which regulatory power has been derogated to state and territory governments in some instances.

Ownership Structures

The ownership arrangements in electricity generation, transmission, distribution and retail in Australia vary markedly between the states and territories.¹⁵² Australian governments currently own about 75 per cent of electricity network assets in the NEM.¹⁵³ Before the 1990s, all state governments owned and operated all four components of the retail electricity market. However, as Table 1 indicates, there has been a gradual shift towards privatisation.

¹⁵² Australian Energy Regulator, *State of the energy market 2014*, above n 3.

¹⁵³ Productivity Commission, above n 16, 273.

TABLE 1 - OWNERSHIP STRUCTURES IN THE NEM¹⁵⁴

	Generation	Transmission	Distribution	Retail
SA	Private	Private	Private	Private
Vic	Private	Private	Private	Private
Qld	Public/Private	Public	Public	Public/Private
NSW ¹⁵⁵	Public/Private	Public	Public	Private
Tas	Public/Private	Public	Public	Public
ACT	Public/Private	Public/Private	Public/Private	Public/Private

Although typically these public ownership arrangements do not equate to complete day-to-day control of the utilities, governments exert shareholder control, and may effectively influence the behaviour of their utility companies.¹⁵⁶ In addition to the specific influence which may be exerted by a state or territory government through their shareholder rights, State Owned Corporations (SOCs) are typically required under legislation to explicitly include multiple objectives in their decision-making.

By way of example, s 8 of the *State Owned Corporations Act 1989* (NSW) mandates the following:

8 Principal objectives of company SOCs

(1) The principal objectives of every company SOC are:

(a) to be a successful business and, to this end:

(i) to operate at least as efficiently as any comparable businesses, and

(ii) to maximise the net worth of the State's investment in the SOC, and

(b) to exhibit a sense of social responsibility by having regard to the interests of the community in which it operates, and

(c) where its activities affect the environment, to conduct its operations in compliance with the principles of ecologically sustainable development contained in section 6 (2) of the Protection of the Environment Administration Act 1991, and

¹⁵⁴ ABC News, 'Fact check: Does privatisation increase electricity bills?', *ABC News* (online), 30 March 2015 <<http://www.abc.net.au/news/2015-03-25/fact-check-does-privatisation-increase-electricity-prices3f/6329316>>.

¹⁵⁵ There are currently plans to partly privatise transmission and distribution in NSW, involving the leasing of 49% of TransGrid, AusGrid and Endeavour Energy, while the government will retain 51% ownership. See New South Wales Government, *Rebuilding NSW: Update on Electricity Networks* (2014) <<http://www.nsw.gov.au/sites/default/files/miscellaneous/rebuilding-nsw-update-electricity-networks.pdf>>.

¹⁵⁶ AMP Capital, Submission to Australian Productivity Commission, *The Capital Efficiency of Australian Electricity Distributors – Results of a Benchmarking Study*, November 2012, 4.

- (d) to exhibit a sense of responsibility towards regional development and decentralisation in the way in which it operates.
- (2) Each of the principal objectives of a company SOC is of equal importance.

In other jurisdictions, the objectives required of SOC's are more susceptible to discretionary political control by the serving government. For example, in Tasmania under the *Government Business Enterprises Act 1995* (Tas), the principal objectives of Government Business Enterprises are defined as follows:

7. Principal objectives of Government Business Enterprise

- (1) The principal objectives of a Government Business Enterprise are –
 - (a) to perform its functions and exercise its powers so as to be a successful business by –
 - (i) operating in accordance with sound commercial practice and as efficiently as possible; and
 - (ii) achieving a sustainable commercial rate of return that maximises value for the State in accordance with its corporate plan and having regard to the economic and social objectives of the State; and
 - (b) to perform on behalf of the State its community service obligations in an efficient and effective manner; and
 - (c) to perform any other objectives specified in the Portfolio Act.
- (2) On the request of the Portfolio Minister, the Treasurer may, by notice published in the Gazette, specify the economic and social objectives of the State relevant to the Government Business Enterprise specified in the notice.
- (3) On the request of the Portfolio Minister, the Treasurer may, by order, exempt the Government Business Enterprise specified in the order from the application of subsection (1)(a)(ii).

There are significant financial benefits to state governments from asset ownership, including the revenue from the ownership *per se*, that the regular income from energy assets favourably affects the considerations of the state by credit rating agencies, and that dividend payments are not subject to national income tax. This analysis explains one of the main reasons why state governments have been slow to privatise their utilities.¹⁵⁷

Some submissions to the Productivity Commission review of the NEM suggested that the financial implications of asset ownership for state governments created incentives for state-owned utilities to over-invest in their networks.¹⁵⁸

¹⁵⁷ Ibid 6.

¹⁵⁸ Ibid.

This ownership structure has a number of implications for the governance of the NEM. First, state and territory governments exert significant regulatory control over the governance framework of the NEM through the COAG Energy Council. For states and territories that operate SOCs, virtually every decision has financial implications for the capacity of the government to raise revenue. This clear conflict of interest in many senses explains the parochial approach taken by some state and territory governments to the regulatory environment through COAG.

Secondly, the current regulatory design presumes that market entities will respond to incentives to cost-minimise through regulatory compliance; and that investment will reward the most efficient entities within the market. There are a number of reasons why SOCs, and the financial institutions that invest in them, respond less predictably to these incentives, including the additional legislative objectives that may compete with the incentive to reduce cost, finance being more readily available in comparison to private businesses and that insolvency is effectively impossible.

Thirdly, the economic performance of state-owned utilities is a significant point of contention in state and territory political debates. Retail electricity consumers place significant pressure upon their state and territory political leaders in relation to the management of the SOCs – including in relation to the cost of retail electricity, regional development and access, and environmental concerns. In some senses, this explains the desire of the states and territories to retain substantial control over some elements of the regulation of the NEM.

State and Territory Regulatory Competence and Derogations

Undoubtedly, the introduction of the NEM reflected a significant regulatory shift to empower a consistent national regulation. However, given the strong parochial incentives for local regulatory control, a number of significant areas of regulatory competence in relation to the NEM were preserved within state and territory legislatures. A number of areas of significant areas of concern for retail consumers within the NEM remain with the state and territory governments, including:

- feed-in tariffs;
- the application of National Energy Customer Framework;
- consumer protections;
- retail price regulation;

- energy efficiency standards; and
- environmental regulation.

Additionally, Annexure 2 to the AEMA, as amended in December 2013, indicates that the following components of distribution and retail functions remain allocated to the state and territory governments notwithstanding their referral of power to the Commonwealth in other areas:

- distributor technical/safety business authorisation – licensing and authorisation schemes that require demonstration of technical capability;
- small customer dispute resolution – obligation for distributors and retailers to have internal dispute resolution schemes and participate in independent dispute resolution (Ombudsman) schemes;
- load shedding and curtailment – customer supply reduction sequence to maintain system security;
- service reliability standards – standards to ensure network security and reliability;
- metering – policies on the type of meters required for specific customer classes, accredited service provider arrangements, and load profile arrangements; and
- distribution and retail service areas – specification of geographical areas in which responsibilities/obligations apply.

On these substantive regulatory policy questions within the competency of state and territory governance, policies vary substantially in terms of the extent of regulation, the regulatory mechanisms, the content of the policies, and the effectiveness of enforcement.¹⁵⁹ This has a number of implications for consumers.

First, a lack of consistent regulation regarding market participation, including in relation to retail price regulation, consumer protections, tariffs and environmental standards, has a detrimental effect on the productivity and efficiency of network services between the states and territories.

Secondly, the complexity of divergent regulatory environments makes it more difficult for consumers to engage meaningfully with network institutions.

¹⁵⁹ Michael N Danielson, 'Thinking Politically about American Federalism' in Clinton J Andrews (ed), *Regulating Regional Power Systems* (Quorum, 1995) 53, 54.

Thirdly, in some senses, inconsistent market regulation between jurisdictions also undermines the capacity for NEM market entities to effectively undertake their mandate. In an environment where there is increasing demand side management, energy efficiency measures and at least in Victoria, the take-up of smart metering, this issue is likely to have a greater impact on the market regulation functions of the national institutions.

4. CONSOLIDATED POTENTIAL REFORMS

1. *Noting that:*

- d) the separation of the rule making and investigatory and enforcement functions between the AER and AEMC is unique among international arrangements for energy markets;*
- e) internationally, many jurisdictions have consolidated their institutional arrangements over recent years; and*
- f) internationally, several jurisdictions have developed new or amended regulatory objectives appropriate to transforming energy markets:*

That similar to the approaches in other international jurisdictions, the enforcement, investigatory and enforcement functions of the AER and AEMC should be consolidated into a single agency.

- 2. That similar to some other COAG Councils, the consensus-based approach to decision-making be reconsidered for some decisions of the COAG Energy Council, with other voting models such as consensus minus one, a two-thirds majority or a simple majority being possible replacements.*
- 3. That given the importance of the role played by the COAG Energy Council in setting the future direction of national energy policy, in future, changes to its scope and work plan should be subject to consultation stakeholders, including consumers and industry.*
- 4. That the COAG Energy Council finalise their Terms of Reference as a matter of urgency. This would provide greater transparency in respect of their role and would enable them to be held accountable for their actions.*
- 5. That in the interim period prior to the conclusion of negotiations on the Terms of Reference, that the Council's draft Terms of Reference be made publicly available to enable stakeholders, including consumers, to assess how their role has changed since the shift from SCER.*
- 6. That AEMA be amended to reflect recent market developments and to ensure consistency with its Objectives.*
- 7. That similar to the approach of other COAG Councils, the identity of the SCO, any delegations made to them, and their governance structure be made public so that these delegations are transparent and appropriate accountability mechanisms can be put in place.*
- 8. That the forward agendas and work plans of the COAG Energy Council be made publicly available for reasons of transparency and accountability.*

9. *That the COAG Energy Council website be updated to provide up to date and meaningful information to the public, especially on the legislation that the Council is currently responsible for and its governance.*
10. *That COAG take a more active role in ensuring that the COAG Energy Council is transparent, accountable and meeting their Terms of Reference.*
11. *That, in the event that any element of the AEMC and the AER are to be merged, the capacity of the regulatory entity to initiate the Rule-change process ought to be revisited.*
12. *That, for the purposes of the fast-track process, reviews by additional agencies and entities ought to satisfy the consultation requirements where they include thorough stakeholder engagement.*
13. *That the AEMC should institute mechanisms to ensure the engagement of consumers in the consultation stages of the Rule-change process and in any review of the Rule-change process.*
14. *That the AEMC ought to publish, in addition to applications for Rule-changes, sufficient information to enable consumers to participate meaningfully in the process.*
15. *That the AEMC should better prioritise the staffing of Rule-changes and policy reviews to ensure the efficiency of decision-making processes.*
16. *That, in considering reforms to the relationship of the AER and the ACCC, priority should be given to limiting the complexity of the regulatory environment, ensuring the independence of the regulator, and increasing the capacity of the regulator to safeguard the needs of consumers.*
17. *That the AER Consumer Reference Group and Consumer Challenge Panel should, in their composition, reflect the diversity of experiences of consumers in the market – including adequate representation of vulnerable consumers and those with a focus on new technologies.*
18. *That in future, reviews of the corporate governance of AEMO should be conducted by an external panel, with a broad range of stakeholders consulted and all of the submissions publicly available.*
19. *That the Government retain an interest in the operation of AEMO given the apparent reticence of the Industry Members of AEMO to consider expertise in end-consumer matters as a necessary skill for the AEMO Board Directors.*
20. *That either experience in or knowledge of end-consumer matters should be a necessary requirement for AEMO Board Directors.*
21. *That in line with its international functional equivalents, AEMO consider adopting a more consumer-centric approach.*
22. *That Energy Consumers Australia be supported in their activities and encouraged to consider whether an equivalent of the Citizen's Energy Forum might be appropriate in the*

context of encouraging greater concern for consumer interests across the range of market institutions and stakeholders in the NEM. If such a Forum were to be established, it may also consider whether a 2030 Vision for Australia's energy customers might also be a positive development.

23. *That a consolidated 'One Stop Shop' of Australian energy market materials be created in the form of an up to date and searchable database on a website such as www.energy.gov.au. This will make it easier for consumers to access information and will increase transparency.*

REFERENCES

Books, Articles, Reports, Internet Sources

ABC News, 'Fact check: Does privatisation increase electricity bills?', *ABC News* (online), 30 March 2015 <<http://www.abc.net.au/news/2015-03-25/fact-check-does-privatisation-increase-electricity-prices3f/6329316>>.

AMP Capital, Submission to Australian Productivity Commission, *The Capital Efficiency of Australian Electricity Distributors – Results of a Benchmarking Study*, November 2012.

Australian Energy Market Commission, *Annual Report 2010-2011* (AEMC, 2011)

Australian Energy Market Commission, *Customer access to information about their energy consumption* (2015) <<http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>>.

Australian Energy Market Commission, *Governance Arrangements and Implementation of the Reliability Standard and Settings* (2015) <<http://www.aemc.gov.au/Rule-Changes/Governance-of-the-Reliability-Standard-and-Setting>>.

Australian Energy Market Commission, *Guidelines for Proponents: Preparing a Rule change request – National Electricity Rules* (AEMC, 2013).

Australian Energy Market Commission, *Improving demand side participation information provided to AEMO by registered participants* (2015) <<http://www.aemc.gov.au/Rule-Changes/Improving-Demand-Side-Participation-information-pr>>.

Australian Energy Market Commission, *Inter-regional Transmission Charging* (2015) <<http://www.aemc.gov.au/Rule-Changes/Inter-regional-Transmission-Charging>>

Australian Energy Market Commission, *Ministerial Council on Energy Statement of Policy Principles* (2015) <<http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/MCE-statements-of-policy-principles/MCE-Statement-of-Policy-Principles>>.

Australian Energy Market Commission, *Rule Changes* (2015) <<http://www.aemc.gov.au/Rule-Changes>>.

Australian Energy Market Commission, *Stage 1: Initial consideration of a request for the making of a Rule* (2015) <<http://www.aemc.gov.au/Energy-Rules/Retail-energy-rules/Rule-making-process/Stage-1>>.

Australian Energy Market Commission, *Statement of Intent of the Australian Energy Market Commission for the Financial Year 2014/15* (2014) <<http://www.aemc.gov.au/getattachment/51d50777-9999-4c37-af83-71d65812f511/Statement-of-Intent-of-the-Australian-Energy-Marke.aspx>>.

Australian Energy Market Operator, *National Electricity Forecasting Report* (AEMO, 2014).

Australian Energy Regulator, *AER Statement of Intent in response to the COAG Energy Council's Statement of Expectations* (2015) <<http://www.aer.gov.au/node/26301>>.

Australian Energy Regulator, *Annual Report 2013-14* (AER, 2014).

Australian Energy Regulator, *Enforcement Matters* (2015) <<http://www.aer.gov.au/retail-markets/enforcement-matters>>.

Australian Energy Regulator, *Our role* (2015) <<https://www.aer.gov.au/about-us/our-role>>.

Australian Energy Regulator, *State of the energy market 2014* (AER, 2014).

Australian Energy Regulator, *The Board* (2015) <<https://www.aer.gov.au/about-us/the-board>>.

Blake, Cassels & Graydon LLP, *Blakes Overview of Electricity Regulation in Canada* (2015) <http://www.acc.com/_cs_upload/vl/membersonly/Article/946100_1.pdf>.

California Independent System Operator, *Our Leadership* (2015) <<https://www.caiso.com/about/Pages/OurLeadership/Default.aspx>>.

COAG Energy Council, 'Meeting Communiqué', 1 May 2014.

COAG Energy Council, 'Meeting Communiqué', 11 December 2014.

COAG Energy Council, *AER and AEMC Enhanced Budget and Performance Reporting* (2015) <<http://www.scer.gov.au/workstreams/energy-market-reform/aer-and-aemc-enhanced-budget-and-performance-reporting/>>.

COAG Energy Council, *Terms of Reference* (2015) <<http://www.scer.gov.au/about-us/terms-of-reference/>>.

COAG Standing Council on Energy and Resources, *Terms of Reference* (SCER, 2013).

COAG Standing Council on Transport and Infrastructure, *Decision Making (Voting) Protocol* (SCTI, 2014).

Competition Policy Review, *Competition Institutions* (2015) <http://competitionpolicyreview.gov.au/files/2015/03/Part5_final-report_online.pdf>.

Council of Australian Governments, *About COAG* (2015) <https://www.coag.gov.au/about_coag>.

Council of Australian Governments, *Australian Energy Market Agreement*, 9 December 2013.

Council of Australian Governments, *Description of COAG Councils Agreed by COAG on 13 December 2013* (Department of Prime Minister and Cabinet, 2014).

Council of European Energy Regulators, 'A 2020 Vision for Europe's energy customers' (Discussion Paper C12-SC-02-04, CEER, 13 November 2012).

Council of European Energy Regulators, *2020 vision for Europe's energy customers*, Discussion Paper C12-SC-02-04 (2012).

Danielson, Michael N, 'Thinking Politically about American Federalism' in Clinton J Andrews (ed), *Regulating Regional Power Systems* (Quorum, 1995) 53.

Deague, Chris, Senior Market Specialist at GDF Suez, 'Letter on the AEMO Governance Review', 13 September 2013.

Department of Industry and Science, *Energy White Paper* (Commonwealth of Australia, 2015).

Department of Prime Minister and Cabinet, Commonwealth of Australia, *Guidance on COAG Councils* (2015).

Electricity Authority and Ministry of Business, Innovation and Employment, *Memorandum of Understanding*, 19 September 2014.

Energy Consumers Australia, *About us* (2015)
<<http://www.energyconsumersaustralia.com.au/about-us>>.

Energy Consumers Australia, *Constitution of Energy Consumers Australia Ltd* (2015).

Energy Consumers Australia, *Energy Consumers Australia* (2015)
<<http://www.energyconsumersaustralia.com.au/>>.

European Commission, *Citizens' Energy Forum in London* (2015),
<<http://ec.europa.eu/energy/en/events/citizens-energy-forum-london>>.

European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Energy 2020 A Strategy for competitive, sustainable and secure energy*, COM(2010) 639 final.

Gifford, Jonathan, 'Solar plus storage becoming "new normal" in rural and remote Australia', *RenewEconomy* (online), 4 December 2014, <<http://reneweconomy.com.au/2014/solar-plus-storage-becoming-new-normal-rural-remote-australia-59236>>.

Goldthau, Andreas, 'Rethinking the governance of energy infrastructure: Scale, decentralization and polycentrism' (2014) 1 *Energy Research & Social Science* 134.

Jarvis, Darryl SJ and Benjamin K Sovacool, 'Conceptualizing and evaluating best practices in electricity and water regulatory governance' (2011) 36 *Energy* 4340.

Legislative Assembly Public Accounts Committee, New South Wales, *The Economics of Energy Generation*, Report No 6/55 (2012).

Lewis, Phillip, 'Market Entrant Processes, Hurdles and Ideas for Change in the Nordic Energy Market – the View of the Market' (Report, Nordic Energy Regulators, 2014).

Lowe, Jamie, Manager of Market Regulation, Alinta Energy, 'Letter on the AEMO Governance Review', 13 September 2013.

McIntyre, Peter, Managing Director, Transgrid, 'Letter on the AEMO Governance Review', 13 September 2013.

Moody, Phil, Group Manager of Energy Markets Regulatory Development, Origin Energy, 'Letter on the AEMO Governance Review', 13 September 2013.

Mountain, Bruce, Submission No 19 to Commonwealth Standing Committee on Environment and Communications References Committee, *Inquiry into electricity network companies*, 18 December 2014.

New South Wales Government, *Rebuilding NSW: Update on Electricity Networks* (2014)
<<http://www.nsw.gov.au/sites/default/files/miscellaneous/rebuilding-nsw-update-electricity-networks.pdf>>.

Nordic Energy Regulators, *NordREG* (2015) <<http://www.nordicenergyregulators.org>>.

Ontario Ministry of Energy, *Consumer Protection* (2015)
<<http://www.energy.gov.on.ca/en/consumer-protection/>>.

Orr, Stephen, Submission No 36 to Commonwealth Productivity Commission, *Electricity Network Regulation*, 16 April 2012.

Parkinson, Giles, 'AGL Energy pick new CEO with eye to solar and storage', *RenewEconomy* (online), 18 November 2014 <<http://reneweconomy.com.au/2014/agl-energy-pick-new-ceo-with-eye-to-solar-and-storage-35344>>.

Parkinson, Giles, 'UBS: Australian households could go off-grid by 2018', *RenewEconomy* (online), 9 May 2014, <<http://reneweconomy.com.au/2014/ubs-australian-households-go-grid-2018>>.

Pineau, Pierre-Olivier, 'Fragmented Markets: Canadian Electricity Sectors' Underperformance' in Fereidoon P Sioshansi (ed), *Evolution of Global Electricity Markets: New paradigms, new challenges, new approaches* (Elsevier Science, 2013) 363.

Productivity Commission, *Electricity Network Regulatory Frameworks*, Report No 62 (2013).

Reeves, Andrew, *AER Submission to Competition Policy Review* (AER, 2014)
<https://www.aer.gov.au/sites/default/files/AER%20submission%20to%20Competition%20Policy%20Review%20-%201%20August%202014_0.pdf>.

Select Committee on Regulators, *UK Economic Regulators*, House of Lords Report No 1, Session 2006-07 (2007).

Senate Environment and Communications References Committee, Parliament of Australia, *Interim report on the performance and management of electricity network companies* (2015).

Shen, D and Q Yang, 'Electricity Market Regulatory Reforms and Competition – Case Study of the New Zealand Electricity Market' in Y Wu, X Shi and F Kimura (eds), *Energy Market Integration in East Asia: Theories, Electricity Sector and Subsidies* (ERIA, 2012) 103.

Stirling, Ian, Chief Executive Officer, ElectraNet, 'Letter on the AEMO Governance Review', 13 September 2013.

Swift, David, *AEMO Governance Review – Next Steps* (AEMO, 2014).

Utilities Consumer Advocate, *Annual Report 2013-14* (UCA, 2014)

Utilities Consumer Advocate, *Who We Are* (2015)
<<http://www.ucahelps.alberta.ca/about.aspx>>.

Zinaman, Owen, Mackay Miller and Morgan Bazilian, *The Evolving Role of the Power Sector Regulator* (Alliance for Sustainable Energy, 2014).

Legislative Sources

Alberta Utilities Commission Act, SA 2007.

Australian Energy Markets Commission Establishment Act 2004 (SA).

Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [2009] OJ L 211/55.

Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC [2009] OJ L 211/94.

Electricity Industry Act 2010 (Vic).

Federal Power Act, 16 USCS § 791a.

National Electricity (South Australia) Act 1996 (SA).

Ontario Energy Board Act, SO 1998.

Utilities Act 2000 (UK).

APPENDICES

APPENDIX 1: COMPARISON OF INTERNATIONAL REGULATORY SYSTEM OBJECTIVES

APPENDIX 2: COMPARISON OF INTERNATIONAL INSTITUTIONAL MANDATES

APPENDIX 3: COMPARISON OF INTERNATIONAL FUNCTIONAL EQUIVALENTS OF
AER/AEMC

APPENDIX 4: TRANSPARENCY MEASURES OF THE COAG COUNCILS

APPENDIX 5: AEMO MEMBERSHIP

APPENDIX 6: COMPARISON OF INTERNATIONAL FUNCTIONAL EQUIVALENTS OF AEMO

APPENDIX 7: AEMC RULE CHANGE DETERMINATIONS

APPENDIX 1: COMPARISON OF INTERNATIONAL REGULATORY SYSTEM OBJECTIVES

Jurisdiction	Objective
Australia	<i>National Electricity Objective</i> <i>National Electricity (South Australia) Act 1996, Sch 1 s 7.</i> The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to- (a) price, quality, safety, reliability and security of supply of electricity; and (b) the reliability, safety and security of the national electricity system.
Chile	<i>Chile National Energy Strategy 2012-2030</i> 1 INTRODUCTION As our country grows, it needs more energy, so there is a natural linkage between the economy and energy. Therefore, the challenge for Chile today is to have sufficient and competitive energy resources to support this development. Energy is an essential material for society. Its availability and supply directly affect social and economic growth and consequently the reduction of poverty. The lack of access to reliable energy sources and networks constitutes a dangerous limitation to sustained social progress, to economic growth and to the wellbeing of the population. This being the case, when it comes to forecasting growth, Chile must be clear that it can sustain it with <i>clean, safe, economical</i> energy. <i>General Law of Electric Utilities (DFL-4)</i>
Estonia	<i>Electricity Market Act 2007</i> <i>National Development Plan of the Energy Sector Until 2020</i> The [Electricity Market] Act prescribes the principles for the operation of the electricity market based on the need to ensure an effective supply of electricity at reasonable prices and meeting environmental requirements and the needs of customers, and balanced, environmentally clean and long-term use of energy sources.
EU	<i>Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [2009] OJ L 211/55</i> (1) The internal market in electricity, which has been progressively implemented throughout the Community since 1999, aims to deliver real choice for all consumers of the European Union, be they citizens or businesses, new business opportunities and more cross-border trade, so as to achieve efficiency gains, competitive prices, and higher standards of service, and to contribute to security of supply and sustainability.

Jurisdiction	Objective
Finland	<i>Electricity Market Act 1995</i> 1 OBJECTIVES The purpose of this Act is to ensure preconditions for an efficiently functioning electricity market so as to secure the sufficient supply of high-standard electricity at reasonable prices. The primary means to do this is to secure a sound and well-functioning economic competition in electricity generation and sales and reasonable and equitable service principles in the operation of electricity systems.
France	<i>New Organisation of the Electricity Market, Loi No 2010-1488</i>
Hungary	<i>Hungarian Energy Strategy 2030</i> 2 EXECUTIVE SUMMARY The energy policy of the future should be developed on the basis of the answers to the most important domestic and global challenges and the energy policy efforts of the EU, also taking into consideration our specific geopolitical features. It should focus on achieving both a rationalised energy demand and an energy supply (infrastructure and service) encouraging the growth of the Hungarian economy, ensuring the accessibility of the services and prices affordable to a large group of consumers.
Ireland	<i>Electricity Regulation Act 1999</i>; <i>Electricity Regulation (Amendment) (Single Electricity Market) Act 2007</i> Principal objective and functions of Minister, the Commission and SEM Committee in carrying out their functions in relation to the Single Electricity Market 9BC(1) The principal objective of— (a) the Minister in carrying out his or her electricity functions in relation to matters which the Minister considers materially affect, or are likely materially to affect, the Single Electricity Market, (b) the Commission in giving effect to any decision of the SEM Committee, and (c) the SEM Committee in carrying out its functions under section 8A(4), is to protect the interests of consumers of electricity in the State and Northern Ireland supplied by authorised persons, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the sale or purchase of electricity through the Single Electricity Market.
New Zealand	<i>Electricity Act 1992</i> 1A PURPOSES The purposes of this Act are— (a) to provide for the regulation, supply, and use of electricity in New Zealand; and (b) [Repealed] (c) to protect the health and safety of members of the public in connection with the supply and use of electricity in New Zealand; and (d) to promote the prevention of damage to property in connection with the supply and use of electricity in New Zealand; and (da) to provide for the regulation of fittings and electrical appliances that are, or may be, exported pursuant to an international trade instrument; and (d) to provide for the regulation of electrical workers.

Jurisdiction	Objective
NordReg	All Nordic electricity customers will enjoy free choice of supplier, efficient and competitive prices and reliable supply through the internal Nordic and European electricity market. Interpretation of strategic priorities and underlying objectives 1.A truly common Nordic retail market with free choice of supplier A. To develop a common balance management and settlement system B. To ensure easy and harmonised switching procedures in the whole Nordic market C. To create harmonised criteria for unbundling to ensure neutrality 2. A well-functioning Nordic wholesale market with competitive prices A. To promote competitive market structures B. To ensure smooth interaction with other European regions C. To ensure a well functioning power exchange D. To ensure adequate level of transparency in the market 3. Reliable supply A. To promote market-based or legal environment for security of supply B. To ensure harmonised procedures for handling extreme situations 4. Efficient regulation of TSO A. To regulate and monitor the TSOs with focus on efficiency and Nordic harmonisation B. To promote adequate transmission capacity and efficient market-based congestion management methods. In addition to the above, the Strategy for a harmonised Nordic retail market 2015-2018 has also identified the following additional objectives for a harmonised Nordic market: NordREG's work is to ensure that the regulations that define roles and responsibilities for different market players is sufficiently harmonised. The processes between them need to be adequately harmonised in the Nordic countries to make it relatively easy for stakeholders to start operating in all Nordic countries. The framework for customer empowerment should also be sufficient so that customers, with confidence, can be active and benefit from the competitive market. The goals for further development of the Nordic retail market are: The Nordic retail market should be the most efficient retail market in Europe. Characterized by attractive offers to customers, easy business operation, efficient information exchange and efficient process between market actors and have industry in the frontline for development of energy services for active customers

Jurisdiction	Objective
	The Nordic retail market should have the highest customer service level. It should be easy to be customer. Relevant information should be easy accessible and there should be efficient and processes such as supplier switch and customer move should be customer friendly. Further, the supplier and energy service provider should be easy accessible and customer complaints should be handled professionally in a timely manner. All Nordic electricity customers will benefit from a free choice of suppliers and energy service companies along with competitive prices, reliable supply and energy services through the Nordic and European electricity market. The Nordic retail market should be characterized by competitive prices and few entry barriers to make it easy for new market players to enter the market. 4.1 Objectives for harmonised solutions NordREG aims at continuing the work to reach a truly harmonised Nordic retail market, future NordREG recommendations and Nordic solutions should focus on the following objectives: Customer friendliness: increase customer friendliness of the market; have a good customer service and create market conditions that make it easy for customers to be active in the market. Well-functioning Nordic electricity market: the goal is to have a well-functioning common electricity market. It should be easy for stakeholders to enter the market and business processes need to be clear and easy to apply. When making business processes – focus should be on speedy, qualitative processes to a reasonable cost. Increased competition: lower the obstacles for the market players in the competitive part of the electricity market, there should be room for innovation and development of energy services in order to increase the attractiveness of the competitive market. EU-regulation: Nordic harmonization should comply with the EU regulations and EU retail market development. Non-discrimination: The Nordic retail market design should promote non-discrimination. The introduction of national Points of Information (NPIs⁷) should guarantee neutrality of Distribution System Operators (DSOs) towards other stakeholder. NPIs should function as market facilitators.
Switzerland	<i>Electricity Supply Act 1992</i> 1 OBJECTIVES This Act defines the general conditions for: a. The secure and sustainable supply of electricity to end users in all parts of the country; b. Competition at the national level and participation in international competition in the electricity sector.

Jurisdiction	Objective
United Kingdom	<i>Utilities Act 2000</i> 3A The principal objective and general duties of the Secretary of State and the Authority. (1) The principal objective of the Secretary of State and the Gas and Electricity Markets Authority (in this Act referred to as “the Authority”) in carrying out their respective functions under this Part is to protect the interests of consumers in relation to electricity conveyed by distribution systems, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity.

APPENDIX 2: COMPARISON OF INTERNATIONAL INSTITUTIONAL MANDATES

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
Australia		COAG Energy Council The COAG Energy Council's terms of reference are still under development. This is the SCER terms of reference. The COAG Energy Council commenced operation on 13 December 2013. The Terms of Reference for the COAG Energy Council is under development. Under the new COAG council system each Council's Terms of Reference are to be action oriented and reflect current COAG priorities. Terms of Reference will be reviewed annually as part of a broader review of the COAG council system to ensure they remain consistent with COAG's priorities. The Terms of Reference for the former Standing Council on Energy and Resources (SCER), agreed to by COAG in 2011, included a number of priority issues of national significance. The work streams currently detailed on this website refer to their relevant priority issue under the	AEMA 2.OBJECTIVES 2.1 The objectives of this agreement are: (a) the promotion of the long term interests of consumers with regard to the price, quality and reliability of electricity and gas services; and (b) the establishment of a framework for further reform to: (i) strengthen the quality, timeliness and national character of governance of the energy markets, to improve the climate of investment; (ii) streamline and improve the quality of economic regulation across energy markets to lower the cost and complexity of regulation facing investors, enhance regulatory certainty, and lower barriers to competition; (iii) improve the planning and development of electricity transmission networks, to create a stable framework for efficient investment in new (including distributed) generation and transmission capacity; (iv) enhance the participation of energy	AER Part 3—Functions and powers of the Australian Energy Regulator Division 1—General 15—Functions and powers of AER (1) The AER has the following functions and powers— (a) to monitor compliance by— (i) Registered participants and other persons with this Law, the Regulations and the Rules; and (ii) regulated network service providers with network revenue or pricing determinations; and (iii) AEMO with this Law, the Rules, the Regulations or a transmission determination; and (b) to investigate breaches or possible breaches of provisions of this Law, the Regulations or the Rules, including offences against this Law; and (c) to institute and conduct proceedings— (i) against persons under section 61 of this Law or section 44AAG of	AEMC Part 4—Functions and powers of the Australian Energy Market Commission Division 1—General 29—Functions and powers of the AEMC (1) The AEMC has the following functions and powers— (a) the Rule making functions and powers conferred on it under this Law and the Regulations; and (b) the market development functions conferred on it under this Law and the Rules; and (c) any other functions and powers conferred on it under this Law and the Rules. (2) The AEMC has power to do all things necessary or convenient to be done for or in connection with the performance of its functions. 5. AUSTRALIAN ENERGY MARKET INSTITUTIONS 5.1 The Parties agree that the Australian energy market institutions will comprise: (a) The AEMC, responsible for rule-making and energy market development at a national level, including in respect of the National Electricity	AEMO Part 5—Role of AEMO under National Electricity Law Division 1—General 49—AEMO's statutory functions (1) AEMO has the following functions: (a) to operate and administer the wholesale exchange; (b) to promote the development and improve the effectiveness of the operation and administration of the wholesale exchange; (c) to register persons as Registered participants; (d) to exempt certain persons from being registered as Registered participants; (e) to maintain and improve power system security; (f) to facilitate retail customer transfer, metering and retail competition; (g) for an adoptive jurisdiction—the additional advisory functions or declared network functions (as the case requires); (h) any functions conferred by jurisdictional electricity legislation or an application Act; (i) any other functions conferred under this Law or the Rules. Notes— 1 AEMO has additional functions under its Constitution. 2 It should be noted that AEMO's statutory	Energy Consumers Australia Ltd 4 OBJECTS, ACTIVITIES AND POWERS 4.1 Objects The object of the Company is: (a) To promote the long term interests of Consumers of Energy with respect to the price, quality, safety, reliability and security of supply of Energy services by providing and enabling strong, coordinated, collegiate evidence based consumer advocacy on National Energy Market matters of strategic importance or material consequence for Energy Consumers, in particular for Residential Customers and Small Business Customers. 4.2 Activities Without limiting the effect of article 4.3, the Company will seek to achieve its objects through: (a) Effectively and objectively participating in National Energy Market issues and influencing regulatory activities and Energy market reform to benefit Consumers; (b) Frequently engaging and communicating with

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		former SCER Terms of Reference. By way of reference, SCER's priority issues, as specified in its Terms of Reference, were: Progressing consistent upstream petroleum administration and regulation standards, (including through the establishment of a National Offshore Petroleum Regulator and responding to the Productivity Commission Review of Regulatory Burden on Upstream Petroleum (Oil & Gas) Sector); Addressing issues impacting on investment in resources exploration and development, including land access, community, infrastructure, and labour; Developing a nationally consistent approach to clean energy technology development and deployment, including Carbon Capture and Storage; Addressing impediments to, and promoting the commercial adoption of, demand-side response in	users in the markets including through demand side management and the further introduction of retail competition, to increase the value of energy services to households and businesses; (v) further increase the penetration of natural gas, to lower energy costs and improve energy services, particularly to regional Australia, and reduce greenhouse emissions; and (vi) address greenhouse emissions from the energy sector, in light of the concerns about climate change and the need for a stable long-term framework for investment in energy supplies.	the Competition and Consumer Act 2010 of the Commonwealth; or (ii) in respect of Registered participants under section 63 of this Law; or (iii) against persons under section 68 of this Law; or (iv) in relation to offences against this Law; and (d) to institute and conduct appeals from decisions in proceedings referred to in paragraph (c); and (e) to exempt persons proposing to engage, or engaged, in the activity of owning, controlling or operating a transmission system or distribution system forming part of the interconnected transmission and distribution system from being registered as Registered participants; and (ea) to prepare and publish reports on the financial and operational performance of network service providers in providing electricity network services; and (eb) to approve compliance programs of service providers relating to compliance by service providers with this Law or the Rules; and (f) AER economic regulatory functions or	Rules, the National Gas Rules and the National Energy Retail Rules. (AEMA 2013)	functions include its functions under the National Gas Law, the National Gas Rules and related subordinate legislation: See definition of statutory functions in section 2. 3 AEMO also has responsibilities, under Part 4 of the Australian Energy Market Commission Establishment Act 2004 of South Australia, related to administrative costs associated with the work of the Consumer Advocacy Panel. 4 AEMO has additional functions and powers under the National Energy Retail Law and the National Energy Retail Rules. (2) In its role as National Transmission Planner, AEMO has the following functions: (a) to prepare, maintain and publish a plan for the development of the national transmission grid (the National Transmission Network Development Plan) in accordance with the Rules; (b) to establish and maintain a database of information relevant to planning the development of the national transmission grid and to make the database available to the public; (c) to keep the national transmission grid under review and provide advice on the development of the grid or projects that could	Consumers and consumer advocates to discuss, support, liaise, collaborate, educate, identify and to receive and provide updates on the National Energy Market and its policies, reforms, issues and general news; (c) Building national and jurisdictional expertise and capacity through research, knowledge development and consultation to advance the interests of Australian Energy Consumers, in particular residential and small business Energy Consumers; (d) Undertaking robust research to build knowledge, engage and influence policy development and educate Consumers in the Energy markets; (e) When notified by the Member, after the Effective Date, of the Company's capacity to do so – funding and managing grants to build knowledge and sectoral capacity supporting policy development and consumer education in the National Energy Market; (f) Creating and maintaining effective working relationships with key stakeholders including but not limited to: Consumers and consumer advocates, the

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		Australian markets; Promoting efficiency through the development of consistent national frameworks where appropriate, including the implementation of the National Energy Customer Framework, Intergovernmental Agreement (IGA) on Energy Supply Industry Safety and the National Mine Safety Framework; Assessing existing market mechanisms and regulatory frameworks (including governance of network regulation) to ensure facilitation of adequate, efficient, and timely investment in, and operation of, generation and networks; and Identifying changes required to ensure market resilience and energy security, and ongoing testing of national emergency management arrangements for liquid fuel, electricity and gas. MCE 1.6 (o) “Ministerial Council on Energy” or “MCE” means the		powers; and (g) any other functions and powers conferred on it under this Law and the Rules. (2) The AER has the power to do all things necessary or convenient to be done for or in connection with the performance of its functions. (3) However, the AER— (a) cannot make a transmission determination— (i) regulating the revenue AEMO earns or may earn; or (ii) regulating the price of electricity network services provided by AEMO unless the services are shared transmission services provided by means of, or in connection with, a declared shared network; and (b) cannot regulate by transmission determination or in any other way the price of any other service provided by AEMO, or the amount of any other charge made by AEMO. 5. AUSTRALIAN ENERGY MARKET INSTITUTIONS 5.1 The Parties agree that the Australian energy market institutions will comprise: (b) The AER, responsible for regulation and compliance at a		affect the grid; (d) to provide a national strategic perspective for transmission planning and coordination; (e) any other functions conferred on AEMO under this Law or the Rules in its capacity as National Transmission Planner. (3) AEMO must, in carrying out functions referred to in this section, have regard to the national electricity objective. 5. AUSTRALIAN ENERGY MARKET INSTITUTIONS 5.1 The Parties agree that the Australian energy market institutions will comprise: (c) AEMO, 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. (AEMA 2013)	AER, jurisdictional regulators, Energy market participants, the AEMC, the AEMO, governments and Energy Ombudsmen; and (g) Developing an understanding of the distinct market differences between jurisdictions within the National Energy Market and applying these considerations when engaging, responding or initiating work on behalf of Energy Consumers’ interests, and with jurisdictional bodies where appropriate; (h) Frequently and collaboratively engaging and communicating with representatives from the Energy industry on issues in the interest of Consumers to help inform the Company when performing the activities in this article 4.2; and (i) Doing all things as may be incidental or ancillary to achieving the Objects and performing the activities in this article 4.2. In performing these Activities, the Company must have regard to any relevant objectives set out in the National Energy Laws. 4.3 Powers The Company may exercise all powers, rights and privileges as a

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		body established on 8 June 2001, being the Council of Ministers with primary carriage of energy matters at national level comprising Ministers representing the Commonwealth and each of the States and Territories; 4. MINISTERIAL COUNCIL ON ENERGY Role of the MCE 4.1 The Parties agree that the MCE is the national policy and governance body for the Australian energy market including for electricity and gas. 4.2 The MCE will report to COAG on the operation of this agreement and any proposed amendments. 4.3 The Parties agree that the MCE has responsibility for: (a) the national energy policy framework; (b) policy oversight of, and future strategic directions for the Australian energy market; (c) governance and institutional arrangements for the Australian energy market; (d) the legislative and		national level, including in respect of the Australian Energy Market Legislation. (AEMA 2013)			natural person may do or exercise, for the purpose of furthering the Objects set out above. (Constitution of Energy Consumers Australia Ltd December 2014)

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		regulatory framework within which the market operates and natural monopolies are regulated; (e) longer-term, systemic and structural energy issues that affect the public interest; and (f) such other energy related responsibilities as are conferred by Commonwealth, State or Territory legislation and unanimously agreed by the MCE consistent with this agreement. 4.4 The Parties agree that the MCE has: (a) power to issue statements of policy principles to the AEMC with respect to rulemaking or electricity, gas or retail market reviews; (b)power to recommend appointments of commissioners to the AEMC in accordance with this agreement and the Australian Energy Market Commission Establishment Act 2004 (SA); (c)power to recommend certain appointments of members to the AER in accordance with this agreement and the Competition and					

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		Consumer Act 2010 (Cth); and (d) any other energy related power conferred on it by agreement between the Parties or by legislation. 4.5The Parties agree that the MCE will not be engaged directly in the day-to-day operation of the energy markets or the conduct of regulators. (AEMA 2013)					
				16—Manner in which AER performs AER economic regulatory functions or powers (1) The AER must, in performing or exercising an AER economic regulatory function or power— (a) perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the national electricity objective; and (b) if the function or power performed or exercised by the AER relates to the making of a distribution determination or transmission determination, ensure that— (i) the regulated network service provider to whom the determination will	32—AEMC must have regard to national electricity objective In performing or exercising any function or power under this Law, the Regulations or the Rules, the AEMC must have regard to the national electricity objective. 33—AEMC must have regard to MCE statements of policy principles in relation to Rule making and reviews The AEMC must have regard to any relevant MCE statement of policy principles— (a) in making a Rule; or (b) in conducting a review under section 45. Division 2—Rule making functions and powers of the AEMC 34—Rule making powers (1) Subject to this Division, the AEMC, in accordance with this Law and the		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				apply; and (ii) any affected Registered participant; and (iii) if AEMO is affected by the determination— AEMO; and (iv) network service users or prospective network service users of the relevant services that the AER considers have an interest in the determination; and (v) any user or consumer associations or user or consumer interest groups that the AER considers have an interest in the determination, are, in accordance with the Rules— (vi) informed of material issues under consideration by the AER; and (vii) given a reasonable opportunity to make submissions in respect of the determination before it is made; and (c) in relation to making a reviewable regulatory decision, specify— (i) the manner in which the constituent components of the decision relate to each other; and (ii) the manner in which that interrelationship has been taken into account in the making of	Regulations, may make Rules, to be known, collectively, as the "National Electricity Rules", for or with respect to— (a) regulating— (i) the operation of the national electricity market; (ii) the operation of the national electricity system for the purposes of the safety, security and reliability of that system; (iii) the activities of persons (including Registered participants) participating in the national electricity market or involved in the operation of the national electricity system; (iv) the provision of connection services to retail customers; and (aa) facilitating and supporting the provision of services to retail customers; and (b) any matter or thing contemplated by this Law, or is necessary or expedient for the purposes of this Law. Note— The procedure for the making of a Rule by the AEMC is set out in Division 3 of Part 7. National Electricity (South Australia) Act 1996—30.1.2015 Schedule—National Electricity Law 66 This version is not published under the Legislation Revision and Publication Act 2002 [30.1.2015] (2) Without limiting subsection (1), the AEMC, in accordance with this Law and the Regulations, may make Rules for or with respect to any matter or thing specified in Schedule 1 to this Law. (3)		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				the reviewable regulatory decision; and (d) if the AER is making a reviewable regulatory decision and there are 2 or more possible reviewable regulatory decisions that will or are likely to contribute to the achievement of the national electricity objective— (i) make the decision that the AER is satisfied will or is likely to contribute to the achievement of the national electricity objective to the greatest degree (the preferable reviewable regulatory decision); and (ii) specify reasons as to the basis on which the AER is satisfied that the decision is the preferable reviewable regulatory decision. (2) In addition, the AER— (a) must take into account the revenue and pricing principles— (i) when exercising a discretion in making those parts of a distribution determination or transmission determination relating to direct control network services; or (ii) when making an access determination relating to a rate or charge for an electricity network service; and	Rules made by the AEMC in accordance with this Law and the Regulations may— (a) be of general or limited application; (b) vary according to the persons, times, places or circumstances to which they are expressed to apply; (c) confer functions or powers on, or leave any matter or thing to be decided or determined by— (i) the AER, the AEMC, AEMO or a jurisdictional regulator; or (ii) the Reliability Panel or any other panel or committee established by the AEMC; or (iii) any other body established, or person appointed, in accordance with the Rules; (d) confer rights or impose obligations on any person or a class of person (other than the AER, the AEMC or a jurisdictional regulator); (e) confer a function on the AER, the AEMC, AEMO or a jurisdictional regulator to make, prepare, develop or issue guidelines, tests, standards, procedures or any other document (however described) in accordance with the Rules, including guidelines, tests, standards, procedures or any other document (however described) that leave any matter or thing to be determined by the AER, the AEMC, AEMO or jurisdictional regulator; (f) empower or require any person (other than a person referred to in paragraph (e)) or body to make or issue guidelines, tests, standards, procedures or any other		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				(b) may take into account the revenue and pricing principles when performing or exercising any other AER economic regulatory function or power, if the AER considers it appropriate to do so. (3) For the purposes of subsection (2)(a)(ii), a reference to a "direct control network service" in the revenue and pricing principles must be read as a reference to an "electricity network service". (4) In this section— affected Registered participant means a Registered participant (other than the regulated network service provider to whom the distribution determination or transmission determination will apply) whose interests are affected by the distribution determination or transmission determination.	document (however described) in accordance with the Rules; (fa) provide for procedures governing the operation of the national electricity market and the sale and supply of electricity to retail customers; (g) apply, adopt or incorporate wholly or partially, or as amended by the Rules, the provisions of any standard, rule, specification, method or document (however described) formulated, issued, prescribed or published by any person, authority or body whether— (i) as formulated, issued, prescribed or published at the time the Rules are made or at any time before the Rules are made; or (ii) as amended from time to time; (h) confer a power of direction on the AER, the AEMC, AEMO or a jurisdictional regulator to require a person conferred a right or on whom an obligation is imposed under the Rules (including a Registered participant) to comply with— (i) a guideline, test, standard, procedure or other document (however described) referred to in paragraph (e), (f) or (fa); or (ii) a standard, rule, specification, method or document (however described) referred to in paragraph (g); (i) if this section authorises or requires Rules that regulate any matter or thing, prohibit that matter or thing or any aspect of that matter of thing; (j)		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
					provide for the review of, or a right of appeal against, a decision or determination made under the Rules and for that purpose, confer jurisdiction on the Court; (k) require a form prescribed by or under the Rules, or information or documents included in, attached to or given with the form, to be verified by statutory declaration; (l) in a specified case or class of case, exempt— (i) AEMO; or (ii) a Registered participant or class of Registered participant; or (iii) any other person or body performing or exercising a function or power, or conferred a right, or on whom an obligation is imposed, under the Rules or a class of any such person or body, from complying with a provision, or a part of a provision, of the Rules; (m) provide for the modification or variation of a provision of the Rules (with or without substitution of a provision of the Rules or a part of a provision of the Rules) as it applies to— (i) AEMO; or (ii) a Registered participant or class of Registered participant; or (iii) any other person or body performing or exercising a function or power, or conferred a right, or on whom an obligation is imposed, under the Rules or a class of any such person or body; (n) confer an immunity on, or limit the liability of, any person or		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
					body performing or exercising a function or power, or conferred a right, or on whom an obligation is imposed, under the Rules; (o) require a person or body performing or exercising a function or power, or conferred a right, or on whom an obligation is imposed, under the Rules to indemnify another such person or body; (p) contain provisions of a savings or transitional nature consequent on the amendment or revocation of a Rule. 35—Rules relating to MCE or Ministers of participating jurisdictions require MCE consent The AEMC must not, without the consent of the MCE, make a Rule that confers a right or function, or imposes an obligation, on the MCE or a Minister of a participating jurisdiction. Note— The term "function" is defined in clause 10 of Schedule 2 to this Law to include "duty". 36—AEMC must not make Rules that create criminal offences or impose civil penalties for breaches The AEMC must not make a Rule that— (a) creates an offence for a breach of a provision of the Rules; or (b) provides for a criminal penalty or civil penalty for a breach of a provision of the Rules. 37—Documents etc		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
					applied, adopted and incorporated by Rules to be publicly available (1) The AEMC must make publicly available— (a) every standard, rule, specification, method or document (however described) formulated, issued, prescribed or published by any person, authority or body that is applied, adopted or incorporated by a Rule; and (b) if a standard, rule, specification, method or document (however described) formulated, issued, prescribed or published by any person, authority or body is applied, adopted or incorporated by a Rule as amended from time to time—any amendment to that standard, rule, specification, method or document. (2) For the purposes of subsection (1), the AEMC makes a standard, rule, specification, method or document (however described) formulated, issued, prescribed or published by any person, authority or body applied, adopted or incorporated by any Rule publicly available if the AEMC— (a) publishes the standard, rule, specification, method or document on the AEMC's website; or (b) specifies a place from which the standard, rule, specification, method or document may be obtained or purchased (as the case requires).		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
EU	‘Under the political guidance of Commissioner Günther H. Oettinger, the Directorate-General for Energy is responsible for developing and implementing a European energy policy. Through the development and implementation of innovative policies, the Directorate-General aims at: - Contributing to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services. - Promoting sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 decarbonisation objective. - Enhancing the conditions for secure energy supply in a spirit of solidarity between Member States. In developing a European energy policy, the Directorate-General aims to support the Europe 2020 programme which, for energy, is captured in the Energy 2020 strategy.’ ‘CEER’s work complements (and does not overlap) the work of the Agency for the Cooperation of Energy Regulators (ACER). ACER, which has its seat in Ljubljana, is an EU Agency. CEER is a Belgian not-for-profit association. They share similar objectives. ACER’s focus is on what is required in the legislation and CEER does everything else in energy regulation. CEER’s motto is fostering energy markets, empowering customers. CEER’s work includes international cooperation, smart grids, sustainability, Demand Side Operators and customer issues.’ <http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ABOUT/CEER>	Council of European Energy Regulators (CEER) Articles of Association Article 3 - Purpose 3.1. The association does not seek to make profits. The objectives of the association are to: - promote the development of efficient and competitive internal markets for electricity and gas in Europe through the establishment of appropriate mechanisms; - set up co-operation in order to achieve competitive internal markets for electricity and gas in Europe, in which the principles of transparency and non-discrimination are ensured; - promote a broad and representative vision of Europe’s energy markets; - set up co-operation, information exchange and assistance amongst the Members and Observers, with a view to establishing expert views for discussion with the institutions of the European Union and,	Directive 2009/72/EC	Agency for the Cooperation of Energy Regulators (ACER) (Formerly ERGEG) Regulation (EC) No 713/2009 The Agency should ensure that regulatory functions performed by the national regulatory authorities in accordance with Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity (1) and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas (2) are properly coordinated and, where necessary, completed at the Community level. To that end, it is necessary to guarantee the independence of the Agency from electricity and gas producers, transmission and distribution system operators, whether public or private, and consumers and to ensure the conformity of its actions with Community law, its technical and regulatory capacities and its transparency, amenability to democratic control and efficiency.	Directorate-General for Energy	ENTSO-E Regulation No (EC) 714/2009 1. The ENTSO for Electricity shall elaborate network codes in the areas referred to in paragraph 6 of this Article upon a request addressed to it by the Commission in accordance with Article 6(6). 2. The ENTSO for Electricity may elaborate network codes in the areas set out in paragraph 6 with a view to achieving the objectives set out in Article 4 where those network codes do not relate to areas covered by a request addressed to it by the Commission. Those network codes shall be submitted to the Agency for an opinion. That opinion shall be duly taken into account by the ENTSO for Electricity. 6. The network codes referred to in paragraphs 1 and 2 shall cover the following areas, taking into account, if appropriate, regional specificities: (a) network security and reliability rules including rules for technical transmission reserve capacity for operational network security;	Citizens’ Energy Forum IP/08/1594 The aim of the forum is to tackle consumer problems and propose practical solutions so that current EU-wide consumer rights exist in practice and not only on paper and improve regulatory conditions in the retail markets. The Forum brings together national consumer organisations, industry, national regulators, and government authorities to work on key issues such as switching energy suppliers, user-friendly billing, smart metering or protecting vulnerable groups.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		in particular, with the European Commission, and representative international organizations of other sectors which may be involved; - contribute to the advancement of research on regulatory issues; - establish coherent and expert knowledge and analysis such that the institutions with which Members wish to hold discussion naturally consult the Members at a formative stage in policy development; - provide a framework for the discussion of regulatory issues and exchange of experience; - provide the necessary elements for the development of regulation in the fields of electricity and gas; - develop joint approaches vis-à-vis transnational energy companies that operate in ,or can exert influence on, separated regulated utility markets; - promote training; - cultivate relations with similar		The Agency should monitor regional cooperation between transmission system operators in the electricity and gas sectors as well as the execution of the tasks of the European Network of Transmission System Operators for Electricity (ENTSO for Electricity), and the European Network of Transmission System Operators for Gas (ENTSO for Gas). The involvement of the Agency is essential in order to ensure that the cooperation between transmission system operators proceeds in an efficient and transparent way for the benefit of the internal markets in electricity and natural gas. The Agency should monitor, in cooperation with the Commission, the Member States and relevant national authorities, the internal markets in electricity and natural gas and inform the European Parliament, the Commission and national authorities of its findings where appropriate. Those monitoring tasks of the Agency should not duplicate or hamper monitoring by the Commission or national authorities, in particular national competition authorities. The Agency has an important role in		(b) network connection rules; (c) third-party access rules; (d) data exchange and settlement rules; (e) interoperability rules; (f) operational procedures in an emergency; (g) capacity-allocation and congestion-management rules; (h) rules for trading related to technical and operational provision of network access services and system balancing; (i) transparency rules; (j) balancing rules including network-related reserve power rules; (k) rules regarding harmonised transmission tariff structures including locational signals and inter-transmission system operator compensation rules; and (l) energy efficiency regarding electricity networks.	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
		associations outside the EU area; - With the agreement of the other members of the International Confederation of Energy Regulators (ICER), CEER will, as and where appropriate, represent ICER in the management of projects related to the dissemination of best regulatory practices; - work together, where possible, to establish common policies among Members and Observers towards agreed issues; and - share the knowledge and expertise acquired in Europe in respect of energy market regulation with authorities, organisations or associations from countries situated outside of the European Union, on its own or through entities it cooperates with.		developing frame- work guidelines which are non-binding by nature (frame-work guidelines) with which network codes must be in line. It is also considered appropriate for the Agency, and consistent with its purpose, to have a role in reviewing network codes (both when created and upon modification) to ensure that they are in line with the framework guidelines, before it may recommend them to the Commission for adoption. page 55 of this Official Journal. page 94 of this Official Journal. (10) It is appropriate to provide an integrated framework within which national regulatory authorities are able to participate and cooperate. That framework should facilitate the uniform application of the legislation on the internal markets in electricity and natural gas throughout the Community. As regards situations concerning more than one Member State, the Agency should be granted the power to adopt individual decisions. That power should under certain conditions cover technical issues, the regulatory regime for electricity and natural gas infrastructure that connects or that might connect at least two Member States and, as a last resort, exemptions			

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				from the internal market rules for new electricity interconnectors and new gas infra- structure located in more than one Member State. (11) Since the Agency has an overview of the national regulatory authorities, it should have an advisory role towards the Commission, other Community institutions and national regulatory authorities as regards the issues relating to the purpose for which it was established. It should also be required to inform the Commission where it finds that the cooperation between transmission system opera- tors does not produce the results which are needed or that a national regulatory authority whose decision is not in compliance with the Guidelines does not implement the opinion, recommendation or decision of the Agency appropriately. (12) The Agency should also be able to make recommendations to assist regulatory authorities and market players in sharing good practices.			
NordReg	Establish a common Nordic retail electricity market. There are nearly 15 million electricity customers in the combined Nordic market of Denmark, Finland, Norway and Sweden. Of these, over 12 million are residential. If these customers were combined into a common Nordic electricity market, it would be a market similar in size (number of customers) to Australia, and similar in consumption volume to the entire Benelux region. Under such a harmonised	NordREG Board The highest decision making organ within NordREG is the Board. The Board consists of the Director Generals from the	Memorandum of Understanding Promote the development of efficient electricity markets in the Nordic area, consistent with the development in within the European				

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
	scenario (a common Nordic end user market as it is often referred to), market models and processes would be similar if not the same across the Nordic market; competitors could operate with similar systems and approaches across the Nordic market, and the Nordic market should be able to thereby gain greater efficiencies and choice in electricity supply. It would also present a more appealing picture to those potential entrants for whom the scale of any one Nordic market is currently seen as too small. Because the four markets are already relatively similar to each other in terms of market size, structure, culture (though not language), politics and competitive maturity, harmonisation would seem a reasonable target.¹⁶⁰ 'Member States are: Denmark The Danish Energy Regulatory Authority (DERA) regulates the infrastructure of the electricity and gas sectors as well as access to this infrastructure. For supply-obligation companies providing electricity, the Authority is also responsible for price control, partly based on requirements for security of supply. Furthermore the Authority carries out benchmarking of the regulated enterprises. The purpose is to ensure that consumers – households and enterprises – are charged reasonable and transparent prices under reasonable, uniform and transparent terms of supply. If it is a matter of transparency, DERA regulations can also apply for areas subject to competition, e.g. publication of prices and terms. DERA's competence is laid down in the three energy supply acts – the Electricity Supply Act, the Natural Gas Supply Act and the District Heating Supply Act and the Energinet.dk Act. Finland The Energy Market Authority (Energiamarkkinavirasto), established in 1995, is an expert authority in the Ministry of Trade and Industry's field of administration. Its tasks are related to the electricity and natural gas markets as well as emissions trading. The mission of the Energy Market Authority is to regulate	Nordic National Regulatory Authorities (NRAs). NordREG Board authorises the Retail Market Working Group and has the ultimate decision making powers on all tasks and deliverables that are organized under the Board. One specific task for the Board in the work on creating a harmonised Nordic retail market will be to approve proposals from the project organisation that should be passed on to EMG and NCM in order to make high level political decisions.' 'Retail Market Working Group NordREG's Retail Market Working Group (RMWG) is the group in charge of all retail market projects within NordREG. The RMWG monitors ongoing national work, consults with stakeholders, develops the work programme, prepares all deliverables to the Board and receives all material from the underlying task forces. Furthermore, the RMWG manages	Union. Co-operate in order to promote a competitive Nordic market in electricity, in which the principles of transparency and non-discrimination are ensured. "The Regulators" will monitor, reinforce and follow up these processes of liberalization in the electricity market. Co-operate in issues relating to energy markets in which "The Regulators" have responsibilities according to respective national legislation. Set up the appropriate mechanisms of co-operation, information exchange and assistance amongst "The Regulators", and reinforce their level of common representation in the cooperation within the Council of European Energy Regulators and joint actions especially in connection with the co-operation among the Nordic transmission system operators (Nordel). Provide a framework for the discussion of regulatory issues and exchange of experience in order to facilitate convergence of views				

¹⁶⁰ Philip Lewis, 'Market Entrant Processes, Hurdles and Ideas for Change in the Nordic Energy Market – the View of the Market' (Report, Nordic Energy Regulators, 2014), 11.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
	and promote the operation of the electricity and natural gas markets and to create a framework for emissions trading. Norway The Norwegian Water Resources and Energy Directorate (NVE) is subordinated to the Ministry of Petroleum and Energy, and is responsible for the administration of Norway's water and energy resources. The goals of NVE are to ensure consistent and environmentally sound management of water resources, promote an efficient energy market and cost-effective energy systems, and contribute to the economic utilization of energy. Sweden The Energy Markets Inspectorate supervise the Swedish electricity, natural gas and district heating markets. The Inspectorate works for an improvement of the functioning and efficiency of these markets. Iceland Orkustofnun (National Energy Authority of Iceland) Orkustofnun is a government agency under the Ministry of Industries and Innovation. Its main responsibilities are to advise the Government of Iceland on energy issues and related topics, license and monitor the development and exploitation of energy and mineral resources, regulate the operation of the electrical transmission and distribution system and promote energy research. Organization / Divisions Energy Administration Division The Energy Administration Division is in charge of administration of energy issues, and directs research on energy resources in Iceland. Hydrological Service The Hydrological Service monitors the hydrological conditions and the hydrological budget of Iceland's water resources, for public authorities and energy organizations. The United Nations University Geothermal Training Programme is operated by the National Energy Authority under a special agreement with the United Nations University.¹⁶¹	the work of negotiating and issuing recommendations, making status reports and coordinates the implementations and development on a national and European level. This implies contact with other organisations such as the EC, for example, to be part of and interact with the European development.' (NordREG, <i>Strategy for a harmonised Nordic retail market 2015-2018</i> (NordREG, 2014)).	and common positions when appropriate. Provide the necessary elements for the development of regulation and promote increased harmonisation and efficiency in the regulatory framework and processes. Provide where appropriate the necessary elements for developing joint approaches vis-a-vis transnational energy utilities and companies that operate in separated regulated utility markets (multi-utilities). With due regard to national differences in the legal framework and responsibilities, work to establish common policies toward agreed issues.				

¹⁶¹ Nordice Energy Regulators, *NordREG* (2015) <<http://www.nordicenergyregulators.org>>.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
California	Several states have independent system operators (ISO) that are regulated by the Federal Energy Regulatory Commission (FERC). The ISO Board consists of five Governors nominated by the governor of California and confirmed by the Senate that serve staggered three-year terms. The Board selection process involving stakeholders was outlined in a FERC order issued July 1, 2005. The Board Nominee Review Committee is comprised of six stakeholders from each of the following member-class sectors: transmission owners, transmission-dependent utilities, public interest groups, end-users and retail energy providers, alternative energy providers, and generators and marketers. Each sector is responsible for selecting its own six members to serve on the committee. Typically, the Committee becomes active beginning late summer each year.¹⁶²			FERC and the California Public Utilities Commission (CPUC) Federal Power Act 201 (a) Federal regulation of transmission and sale of electric energy It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States. 205 (a) Just and reasonable rates All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful. 206 (a) Unjust or preferential rates, etc.; statement of reasons for changes; hearing; specification of issues Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or	CAISO FERC Order 2000 The Federal Energy Regulatory Commission (Commission) is amending its regulations under the Federal Power Act (FPA) to advance the formation of Regional Transmission Organizations (RTOs). The regulations require that each public utility that owns, operates, or controls facilities for the transmission of electric energy in interstate commerce make certain filings with respect to forming and participating in an RTO. The Commission also codifies minimum characteristics and functions that a transmission entity must satisfy in order to be considered an RTO. The Commission's goal is to promote efficiency in wholesale electricity markets and to ensure that electricity consumers pay the lowest price possible for reliable service.' <i>California Public Utilities Code</i> 345. The Independent System Operator shall ensure efficient use and reliable operation of the transmission grid consistent with	California Public Utilities Commission (CPUC)	

¹⁶² California Independent System Operator, *Our Leadership* (2015) <<https://www.caiso.com/about/Pages/OurLeadership/Default.aspx>>.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order. Any complaint or motion of the Commission to initiate a proceeding under this section shall state the change or changes to be made in the rate, charge, classification, rule, regulation, practice, or contract then in force, and the reasons for any proposed change or changes therein. If, after review of any motion or complaint and answer, the Commission shall decide to hold a hearing, it shall fix by order the time and place of such hearing and shall specify the issues to be adjudicated. 219 (a) Rulemaking requirement Not later than 1 year after August 8, 2005, the Commission shall establish, by rule, incentive-based (including performance-based) rate treatments for the transmission of electric energy in interstate commerce by public utilities for the purpose of benefitting consumers by ensuring reliability and reducing the cost of delivered power by reducing transmission congestion. 307 The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person, electric utility, transmitting utility, or other entity has violated or is about to violate any provision of this chapter or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this chapter or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for recommending further legislation concerning the matters to which this chapter relates, or in obtaining information about the sale of electric energy at wholesale in interstate commerce and the transmission of electric energy in interstate commerce. The Commission may permit any person, electric utility, transmitting utility, or other entity to file with it a statement in writing under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish or make available to State commissions information concerning any such subject.	achievement of planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Council. <i>CAISO Bylaws</i> ARTICLE II: PURPOSES AND OBJECTIVES Section 1. Purposes. The purpose of the Corporation is to ensure efficient use and reliable operation of the electric transmission facilities of those transmission owners that have transferred operational control of those facilities to the Corporation (the “ISO Controlled Grid”), consistent with Chapter 2.3, Part 1, Division 1, of the California Public Utilities Code. <i>ISO Articles of Incorporation</i> II.b. The specific purpose of this corporation is to ensure efficient use and reliable operation of the electric transmission grid pursuant to the Statute.		

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				309 The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this chapter. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this chapter; and may prescribe the form or forms of all statements, declarations, applications, and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.			
United Kingdom	GEMA has primary responsibility for regulation of the energy sector. It comprises individuals appointed by the Secretary of State, and other than the Secretary’s powers to remove/determine remuneration of members, it is independent and has no stakeholder participation. GEMA delegates its day-to-day administration to Ofgem. Ofgem’s primary duty is to protect the interests of consumers. NGET is the licensed national electricity transmission operator.			GEMA/Ofgem Utilities Act 2000 3A(2) The Secretary of State and the Authority shall carry out those functions in the manner which he or it considers is best calculated to further the principal objective, having regard to— (a) the need to secure that all reasonable demands for electricity are met; and (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000. (5)Subject to subsection (2), the Secretary of State and the Authority shall carry out their respective functions under this Part in the manner which he or it considers is best calculated— (a)to promote efficiency and economy on the part of persons authorised by licences or exemptions to	NGET Electricity Act 1989 S 6(1)(b) a licence authorising a person to transmit electricity for that purpose in that person’s authorised area (“a transmission licence”) Transmission Licence Standard Conditions Condition C16: Procurement and use of balancing services 1. The licensee shall co-ordinate and direct the flow of electricity onto	Ofgem Utilities Act 2000 3A(3) In performing that duty, the Secretary of State or the Authority shall have regard to the interests of— (a) individuals who are disabled or chronically sick; (b) individuals of pensionable age; (c) individuals with low incomes; and (d) individuals residing in rural areas; but that is not to be taken as implying that regard	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				transmit, distribute or supply electricity and the efficient use of electricity conveyed by distribution systems; (b)to protect the public from dangers arising from the generation, transmission, distribution or supply of electricity; and (c)to secure a diverse and viable long-term energy supply, and shall, in carrying out those functions, have regard to the effect on the environment of activities connected with the generation, transmission, distribution or supply of electricity.		and over the national electricity transmission system in an efficient, economic and co-ordinated manner	may not be had to the interests of other descriptions of consumer. (4)The Secretary of State and the Authority may, in carrying out any function under this Part, have regard to— (a) the interests of consumers in relation to gas conveyed through pipes (within the meaning of the M1Gas Act 1986); and (b) any interests of consumers in relation to— (i) telecommunication services and telecommunication apparatus (within the meaning of the M2Telecommunications Act 1984); or (ii) water services or sewerage services (within the meaning of the M3Water Industry Act 1991),which are affected by the carrying out of that function
New Zealand			Memorandum of Understanding between the Electricity Authority and the Ministry of Business, Innovation and Employment (19 September 2014)	Electricity Authority (NZ) <i>Electricity Industry Act 2010 (NZ)</i> 15 Objective of Authority The objective of the Authority is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers. 16 Functions of Authority		Transpower State Owned Enterprise (SOE), owns, operates and maintains the transmission network. As owner it provides the infrastructure of electric power transmission that allows consumers to have access to generation from a wide range of sources, and enables competition in the wholesale electricity	Consumer Affairs (part of the Ministry for Business, Innovation and Enterprise) [C]ontributes to the MBIE's purpose by delivering trusted, competitive and well-regulated markets and by creating an environment in which: a) The interests of

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				(1)The Authority's functions are as follows: (a)to maintain a register of industry participants in accordance with subpart 2, and to exempt individual industry participants from the obligation to be registered: (b)to make and administer the Electricity Industry Participation Code in accordance with subpart 3: (c)to monitor compliance with the Act, the regulations, and the Code, and to exempt individual industry participants from the obligation to comply with the Code or specific provisions of the Code: (d)to investigate and enforce compliance with this Part, Part 4, the regulations, and the Code (see subpart 4 of this Part): (e)to investigate and enforce compliance with Part 3 (see subpart 2 of Part 3): (f)to undertake market-facilitation measures (such as providing education, guidelines, information, and model arrangements), and to monitor the operation and effectiveness of market facilitation measures: (g)to undertake industry and market monitoring, and carry out and make publicly available reviews, studies, and inquiries into any matter relating to the electricity industry: (h)to contract for market operation services (but see subsection (2)) and system operator services: (i)to promote to consumers the benefits of comparing and switching retailers: (j)to perform any other specific functions imposed on it under this or any other Act. (2)Instead of, or as well as, contracting for market operation services, the Authority may itself perform— (a)the functions of the market administrator, if the Authority considers it desirable to do so; and (b)any other market operation service, but only on a temporary basis (such as when there is no current	market. As System Operator, under contract with the Electricity Authority, it managed the real-time operation of the network and the physical operation of the New Zealand Electricity Market.¹⁶³ <i>Electricity Industry Act 2010 (NZ)</i> 8 Transpower is system operator (1) The system operator is Transpower. (2) As well as acting as system operator for the electricity industry, the system operator must— (a) provide information, and short- to medium-term forecasting on all aspects of security of supply; and (b) manage supply emergencies. (3) The Code must— (a) specify the functions of the system operator; and (b) specify how the system operator's functions are to be performed; and (c) set requirements relating to transparency	consumer are protected; b) Businesses compete effectively; c) Consumers and businesses participate confidently.¹⁶⁴ MBIE's functions carried out by their internal energy team such as low fixed-charge regulations. Some functions also held by the Electricity and Gas Complaints Commissioner (EGCC): resolves disputes about retailers; and the Ministry of Social Policy/Work and Income New Zealand: assisting vulnerable customers.	

¹⁶³ D Shen and Q Yang, 'Electricity Market Regulatory Reforms and Competition – Case Study of the New Zealand Electricity Market' in Y Wu, X Shi and F Kimura (eds), *Energy Market Integration in East Asia: Theories, Electricity Sector and Subsidies* (ERIA, 2012) 103, 119.

¹⁶⁴ Extracted from Electricity Authority and Ministry of Business, Innovation and Employment, *Memorandum of Understanding*, 19 September 2014.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				contract, or the contractor is unable or unwilling to perform the service).		and performance. (4) A failure to comply with subsection (2) is to be treated, for the purposes of enforcement under this Part, as a breach of the Code.	
Canada	Canada is a federal state, comprised of 10 provinces (and three territories, which are not addressed in this paper). The provinces are given significant jurisdictional responsibility in many key areas by the Canadian Constitution. The Constitution assigns jurisdiction over electricity and natural resources to the provinces and, as a result, the Canadian electricity industry is primarily organized along provincial lines. As a consequence of this constitutional reality, as well as the variations in each province's political and physical environments, there are significant differences between the electricity industries of each of the provinces. The key market and regulatory characteristics of Canada's individual provincial electricity industries are discussed below.¹⁶⁵ 'II. Regulatory Responsibilities in Canada A. Federal In the context of the electricity industry, the federal sphere of responsibility is primarily derived from the constitutional authority over international and interprovincial trade and commerce. As a result, the construction and operation of international transmission lines as well as the regulation of electricity exports to the United States are matters that fall within the authority of the National Energy Board, a federal regulatory tribunal. Canada's nuclear industry is also federally regulated; this responsibility falls to the Canadian Nuclear Safety Commission. An additional important area of joint responsibility is that of environmental protection. Responsibility for environmental matters (including the environmental assessment of electricity developments) is shared between the federal and provincial governments – which level of government may be paramount, changes with various environmental, regulatory and government funding considerations.'	<i>National Energy Board Act</i> , RSC 1985, c1 N-7					

¹⁶⁵ Blake, Cassels & Graydon LLP, *Blakes Overview of Electricity Regulation in Canada* (2015) <http://www.acc.com/_cs_upload/vl/membersonly/Article/946100_1.pdf> 1.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
	'B. Provincial With the exception of those areas of responsibility that are carved out for the federal government, as discussed above, most matters of electricity industry regulation and policy are addressed at the provincial level. Project developers must also obtain certain key environmental approvals at the provincial level.'¹⁶⁶ Federal/provincial division of powers for electricity under the <i>Constitution Act 1867</i>, UK 30 Federal Powers under s 91 means that the Federal Canadian Government is responsible for the construction and operation of international transmission lines, authorisation of electricity exports to the US, inter-provincial trade and infrastructure. This role is carried out by the National Energy Board, 'an independent federal regulatory agency ... [which is] the Canadian equivalent to the FERC, albeit with less visibility, power, and drive to implement reforms.'¹⁶⁷ Provincial governments, under ss 92 and 92A, are responsible for comprehensively regulation for generation, transmission and distribution facilities, approvals and licensing, rate regulation, some Crown corporations.						
Ontario	'Policy Setting and Regulation Two entities set electricity policy and regulate the market: the Government of Ontario and the Ontario Energy Board (OEB or the Board). (a) Government of Ontario The Ontario Cabinet retains legislative authority to set policy for Ontario's energy sector and to alter the mandate of any of the Ontario Hydro successor corporations; however, day-to-day oversight of Ontario's electricity and natural gas industries is maintained by the Minister of Energy (the Minister). Upon the approval of Cabinet, the Minister can issue policy directives to the OEB, the IESO, and the Ontario Power Authority (OPA), and each is required to implement such policy directives. The Minister can also request that the OEB examine and advise upon any issue with respect to Ontario's energy sector. (b) Ontario Energy Board The OEB acts as the regulator of Ontario's electricity and natural gas industries. Although the OEB reports to the			Ontario Energy Board Ontario Energy Board Act, SO 1998, Ch 15 Sch B PART I GENERAL Board objectives, electricity (1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives: To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and		Independent Electricity System Operator (as merged with the Ontario Power Authority from 1 Jan 2015) Ontario Energy Board Act, SO 1998, Ch 15 Sch A Objects (1) The objects of the IESO are, (a) to exercise the powers and perform the duties assigned to it	Ontario Energy Board Energy Consumer Protection Act, SO 2010, Ch 8

¹⁶⁶ Ibid.

¹⁶⁷ Pierre-Olivier Pineau, 'Fragmented Markets: Canadian Electricity Sectors' Underperformance' in Fereidoon P Sioshansi (ed), *Evolution of Global Electricity Markets: New paradigms, new challenges, new approaches* (Elsevier Science, 2013) 363, 367.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
	Minister, it operates as an independent entity. OEB responsibilities include: (a) determining the rates charged for regulated services in the electricity and the natural gas sectors; (b) approving the construction of new transmission and distribution facilities; (c) approving natural gas franchise agreements; (d) formulating rules to govern the conduct of participants in the electricity and the natural gas sectors; (e) engaging in advocacy on behalf of consumers in the electricity and the natural gas sectors; (f) hearing appeals from decisions made by the IESO; (g) monitoring and approving the IESO's budget and fees; and (i) monitoring electricity markets and reporting thereupon to the Minister. The Board also operates as an administrative tribunal with exclusive jurisdiction "in all cases and in respect of all matters in which jurisdiction is conferred on it." In exercising this exclusive jurisdiction, the OEB is entitled to hear and to determine all questions of law and fact, and may render a decision by issuing an order (except in respect of an application for the designation of a gas storage area, on which the Board can only issue a recommendation to the government). An order of the OEB may be appealed to Ontario's Divisional Court, but appeals may only be made on narrow grounds, namely, on jurisdiction or on questions of law. Blake, Cassels & Graydon LLP, 'Blakes Overview of Electricity Regulation in Canada,' http://www.acc.com/_cs_upload/vl/membersonly/Article/946100_1.pdf			demand management of electricity and to facilitate the maintenance of a financially viable electricity industry. To promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario, including having regard to the consumer's economic circumstances. To facilitate the implementation of a smart grid in Ontario. To promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities. 2004, c. 23, Sched. B, s. 1; 2009, c. 12, Sched. D, s. 1. Facilitation of integrated power system plans (2) In exercising its powers and performing its duties under this or any other Act in relation to electricity, the Board shall facilitate the implementation of all integrated power system plans approved under the Electricity Act, 1998. 2004, c. 23, Sched. B, s. 1.		under this Act, the regulations, directions, the market rules and its licence; (b) to enter into agreements with transmitters to give it authority to direct the operation of their transmission systems; (c) to direct the operation and maintain the reliability of the IESO-controlled grid to promote the purposes of this Act; (d) to participate in the development by any standards authority of criteria and standards relating to the reliability of the integrated power system; (e) to establish and enforce criteria and standards relating to the reliability of the integrated power system; (f) to work with the responsible authorities outside of Ontario to co-ordinate the IESO's activities with the activities of those authorities; (g) to operate the IESO-administered markets to promote the purposes of this Act; (h) to engage in activities related to contracting for the procurement of electricity supply,	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
						electricity capacity and conservation resources; (i) to engage in activities related to settlements, payments under a contract entered into under the authority of this Act and payments provided for under this Act or the Ontario Energy Board Act, 1998; (j) to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario; (k) to forecast electricity demand and the adequacy and reliability of electricity resources for Ontario for the short term, medium term and long term; (l) to conduct independent planning for electricity generation, demand management, conservation and transmission; (m) to engage in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources; (n) to engage in activities in support of system-wide goals for the amount of electricity	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
						to be produced from different energy sources; (o) to engage in activities that facilitate load management; (p) to engage in activities that promote electricity conservation and the efficient use of electricity; (q) to assist the Board by facilitating stability in rates for certain types of consumers; (r) to collect and make public information relating to the short term, medium term and long term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs; and (s) to engage in such other objects as may be prescribed by the regulations. 2014, c. 7, Sched. 7, s. 3 (1). PART I GENERAL Purposes 1. The purposes of this Act are, (a) to ensure the adequacy, safety, sustainability and reliability of electricity supply in Ontario through responsible	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
						planning and management of electricity resources, supply and demand; (b) to encourage electricity conservation and the efficient use of electricity in a manner consistent with the policies of the Government of Ontario; (c) to facilitate load management in a manner consistent with the policies of the Government of Ontario; (d) to promote the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources, in a manner consistent with the policies of the Government of Ontario; (e) to provide generators, retailers, market participants and consumers with non-discriminatory access to transmission and distribution systems in Ontario; (f) to protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service; (g) to promote economic efficiency and sustainability in the generation, transmission, distribution and sale of	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
						electricity; (h) to ensure that Ontario Hydro’s debt is repaid in a prudent manner and that the burden of debt repayment is fairly distributed; (i) to facilitate the maintenance of a financially viable electricity industry; and (j) to protect corridor land so that it remains available for uses that benefit the public, while recognizing the primacy of transmission uses. 2004, c. 23, Sched. A, s. 1; 2014, c. 7, Sched. 7, s. 1.	
Alberta	The AESO provides the function of the Independent System Operator, and is tasked with providing for the safe, reliable and economic operation of the Alberta Interconnected Electric System (AIES) and promoting a fair, efficient and openly competitive market for electricity. The Balancing Pool manages the PPA auction proceeds on behalf of consumers, and acts to backstop certain risks inherent in the PPAs. The Alberta Utilities Commission (AUC) has evolved from the former Electric Utilities Board (EUB) to provide adjudication on ISO rules, transmission applications, penalties and any other related market challenges. The Market Surveillance Administrator (MSA) provides the surveillance function for the market. While the AESO has a role to collect information and recommend areas for evaluation, only the MSA can recommend penalties or fines to the AUC.¹⁶⁸			Alberta Utilities Commission (AUC), Market Surveillance Administrator (MSA) <i>Alberta Utilities Commission Act (2007)</i> MSA mandate 39(1) Subject to regulations made under section 59(1)(a), the Market Surveillance Administrator has the mandate to carry out surveillance in respect of (i) the supply, generation, transmission, distribution, trade, exchange, purchase or sale of electricity, electric energy, electricity services or ancillary services or any aspect of those activities, and (ii) the provision of retail gas services, or services provided under a default rate tariff, to natural gas customers by natural gas market participants, or any aspect of those activities, to investigate matters, on its own initiative or on receiving a complaint or referral under section 41, and to undertake activities to address (i) contraventions of the Electric Utilities Act, the regulations under that Act, the ISO rules, reliability	Alberta Electric System Operator (AESO) <i>Electric Utilities Act (2003)</i> Duties of Independent System Operator 17 The Independent System Operator has the following duties: (a) to operate the power pool in a manner that promotes the fair, efficient and openly competitive exchange of electric energy; (b) to facilitate the operation of markets for electric energy in a	Utilities Consumer Advocate <i>Government Organization Act</i> Schedule 13.1 Responsibilities 2 The Office of the Utilities Consumer Advocate has the following responsibilities: (a) to represent the interests of Alberta residential, farm and small business consumers of electricity and natural gas before proceedings of the Alberta Utilities	

¹⁶⁸ Alberta Electric System Operator, *Guide to Understanding Alberta's Electricity Market* (2015) <<http://www.aeso.ca/29864.html>>.

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				standards, Part 2.1 of the Gas Utilities Act or the regulations under that Act or of decisions, orders or rules of the Commission, (ii) conduct that does not support the fair, efficient and openly competitive operation of the electricity market or the natural gas market, and (iii) any other matters that relate to or affect the structure and performance of the electricity market or the natural gas market, including negotiating and entering into settlement agreements and bringing matters before the Commission. (2) Without limiting the generality of subsection (1), the Market Surveillance Administrator’s mandate (a) in respect of the electricity market includes surveillance and, where applicable, investigation and enforcement, in respect of any one or more of the following: (i) the conduct of electricity market participants; (ii) the structure and performance of the electricity market; (iii) the conduct of the Independent System Operator; (iv) the conduct of the Balancing Pool; (v) the conduct of owners of generating units to which power purchase arrangements apply in meeting their obligations to provide the generating capacity set out in those power purchase arrangements; (vi) arrangements, information sharing and decisions relating to electricity market participants exchanging or wishing to exchange electric energy and ancillary services or any aspect of those activities; (vii) arrangements, information sharing and decisions relating to electricity market participants providing or wishing to provide retail electricity services to electricity customers, or any aspect of those activities; (viii) the relationship between the owner of an electric distribution system and its affiliated retailers or other retailers, or any aspect of the parties in the relationship; (ix) the relationship between the owner of an electric distribution system and a regulated rate provider or between the regulated rate provider and an affiliated	manner that is fair and open and that gives all market participants wishing to participate in those markets and to exchange electric energy a reasonable opportunity to do so; (c) to determine, according to relative economic merit, the order of dispatch of electric energy and ancillary services in Alberta and from scheduled exchanges of electric energy and ancillary services between the interconnected electric system in Alberta and electric systems outside Alberta, to satisfy the requirements for electricity in Alberta; to carry out financial settlement for all electric energy exchanged through the power pool at the pool price unless this Act or the regulations made by the Minister under section 41 provide otherwise; to manage and recover the costs of transmission line losses; to manage and recover the costs for the provision of ancillary services; to provide system access service on the transmission system and to prepare an ISO tariff; to direct the safe, reliable and economic	Commission and other bodies whose decisions may affect the interests of those consumers; (b) to disseminate independent and impartial information about the regulatory process relating to electricity and natural gas, including an analysis of the impact of decisions of the Alberta Utilities Commission, other bodies and the courts relating to electricity and natural gas; (c) to inform and educate consumers about electricity and natural gas issues; (d) to carry out such other responsibilities relating to electricity and natural gas as the responsible Minister determines. <i>Utilities Consumer Advocate Regulation</i> Additional responsibilities of the Office of the Utilities Consumer Advocate 2 In addition to the responsibilities set out in the Schedule, the Office of the Utilities Consumer Advocate has the following responsibilities: (a) to develop and	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				retailer, or any aspect of the parties in the relationship; (x) electricity exchanges on the tie lines connecting the interconnected electric system in Alberta with electric systems outside Alberta; (xi) any other conduct that may be specified in the regulations made under section 59(1)(a) and (f), and (b) in respect of the natural gas market includes surveillance and, where applicable, investigation and enforcement, in respect of any one or more of the following: (i) the conduct of natural gas market participants; (ii) the structure and performance of the natural gas market; (iii) arrangements, information sharing and decisions relating to natural gas market participants providing or wishing to provide retail gas services, or services provided under a default rate tariff, to customers, or any aspect of those activities; (iv) the relationship between a gas distributor and its affiliated retailers or other retailers, or any aspect of the parties in the relationship; (v) the relationship between a gas distributor and a default supply provider or between a default supply provider and an affiliated retailer, or any aspect of the parties in the relationship; (vi) any other conduct that may be specified in the regulations made under section 59(1)(a) and (f). (3) In carrying out its mandate, the Market Surveillance Administrator shall assess whether or not (a) the conduct of electricity market participants and natural gas market participants supports the fair, efficient and openly competitive operation of the electricity market or the natural gas market, as the case may be, and (b) the person carrying out the conduct has complied with or is complying with (i) the Electric Utilities Act, the regulations under that Act, the ISO rules, reliability standards, market rules and any arrangements entered into under the Electric Utilities Act or the regulations under that Act, in the	operation of the interconnected electric system; to assess the current and future needs of market participants and plan the capability of the transmission system to meet those needs; to make arrangements for the expansion of and enhancement to the transmission system; to collect, store and disseminate information relating to the current and future electricity needs of Alberta and the capacity of the interconnected electric system to meet those needs, and make that information available to the public; to administer load settlement; to monitor the compliance of market participants with rules made under sections 19, 20 and 24.1; to perform any other function or engage in any activity the Independent System Operator considers necessary or advisable to exercise its powers and carry out its duties, responsibilities and functions under this Act and regulations.	undertake activities that the Utilities Consumer Advocate considers appropriate for the purposes of (i) preventing the disconnection of electricity or natural gas provided by a retailer or provider to a consumer, or (ii) facilitating the reconnection of electricity or natural gas provided by a retailer or provider to a consumer; (b) to assist in the resolution of any consumer issue, complaint or dispute between a consumer and a distributor, provider or retailer relating to the provision of electricity or natural gas as the Utilities Consumer Advocate considers appropriate.	

Jurisdiction	Electricity Market Structure and Regulatory Overview	National Energy Council	Energy Agreement	Regulator and Compliance	Rule Maker and Market Development	Market Operator	Consumer Advocate
				case of an electricity market participant, (ii) the Gas Utilities Act, the regulations under that Act, market rules and any arrangements entered into under the Gas Utilities Act or the regulations under that Act, in the case of a natural gas market participant, or (iii) a decision, order or rule of the Commission, and (c) the ISO rules are sufficient to discourage anti-competitive practices in the electric industry and whether or not the ISO rules support the fair, efficient and openly competitive operation of the electricity market. (4) As part of its mandate, the Market Surveillance Administrator may establish guidelines to support the fair, efficient and openly competitive operation of the electricity market and the natural gas market and shall make those guidelines public.			

APPENDIX 3: INTERNATIONAL EQUIVALENTS OF THE AER AND AEMC

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
New Zealand Electricity Authority	<i>Electricity Industry Act 2010</i> 15 Objective of Authority The objective of the Authority is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers. 16 Functions of Authority (1) The Authority's functions are as follows: (a) to maintain a register of industry participants in accordance with subpart 2, and to exempt individual industry participants from the obligation to be registered: (b) to make and administer the Electricity Industry Participation Code in accordance with subpart 3: (c) to monitor compliance with the Act, the regulations, and the Code, and to exempt individual industry participants from the obligation to comply with the Code or specific provisions of the Code: (d) to investigate and enforce compliance with this Part, Part 4, the regulations, and the Code (see subpart 4 of this Part): (e) to investigate and enforce compliance with Part 3 (see subpart 2 of Part 3): (f) to undertake market-facilitation measures (such as providing education, guidelines, information, and model arrangements), and to monitor the operation and effectiveness of market facilitation measures: (g) to undertake industry and market monitoring, and carry out and make publicly available reviews, studies, and inquiries into any matter relating to the electricity industry: (h) to contract for market operation services (but see subsection (2)) and system operator services: (i) to promote to consumers the benefits of comparing and switching retailers: (j) to perform any other specific functions imposed on it under this or any other Act. (2) Instead of, or as well as, contracting for market operation services, the Authority may itself perform— (a) the functions of the market administrator, if the Authority considers it desirable to do so; and (b) any other market operation service, but only on a temporary basis (such as when there is no current contract, or the contractor is unable or unwilling to perform the service).	The Authority is an independent Crown entity (under the <i>Crown Entities Act 2004</i>), free to adopt its own approach to matters covered by government policy statements presented in Parliament by the Minister of Energy and Resources.	Our values Our people We support the development of each other and work together to achieve our goals. Boldness We are decisive, forward thinking and not afraid to do the right thing. Excellence We are committed to producing the highest-quality work. Openness We are transparent in our work and listen to others. Integrity We are honest and trustworthy and treat everyone with fairness and respect.	The Board of the Electricity Authority comprises four Directors and one Chairperson. They are appointed by the Governor-General on the recommendation of the Minister, following a public call for nominations. They are appointed for five-year terms, and are tasked with hiring the Chief Executive Officer.	Funded through appropriations approved by Parliament each financial year. The government is then reimbursed through a levy on industry participants, collected in accordance with the <i>Electricity Industry (Levy of Industry Participants) Regulations 2010</i> .

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
United States Federal Energy Regulatory Commission	<u>Federal Power Act</u> 201 (a) Federal regulation of transmission and sale of electric energy It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States. 205 (a) Just and reasonable rates All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful. 206 (a) Unjust or preferential rates, etc.; statement of reasons for changes; hearing; specification of issues Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order. Any complaint or motion of the Commission to initiate a proceeding under this section shall state the change or changes to be made in the rate, charge, classification, rule, regulation, practice, or contract then in force, and the reasons for any proposed change or changes	FERC is an independent government agency.	<u>Guiding Principles</u> Organizational Excellence: The Commission strives to use its resources efficiently and effectively to achieve its strategic priorities. Due Process and Transparency: Paramount in all of its proceedings is the Commission's determination to be open and fair to all participants. Regulatory Certainty: In each of the thousands of orders, opinions and reports issued by the Commission each year, the Commission strives to provide regulatory certainty through consistent approaches and actions. Stakeholder Involvement: The Commission conducts regular outreach to ensure that interested parties have an appropriate opportunity to contribute to the performance of the Commission's responsibilities. Timeliness: The Commission's goal is to reach an appropriate resolution of each proceeding in an expeditious manner.	FERC is composed of up to five commissioners who are appointed by the President with the advice and consent of the Senate. Commissioners serve five-year terms, and possess an equal vote on regulatory matters. No more than three Commissioners may belong to the same political party. There is no review of FERC decisions by the President or Congress.	The Commission is funded through costs recovered by the fees and annual charges from the industries it regulates.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
	therein. If, after review of any motion or complaint and answer, the Commission shall decide to hold a hearing, it shall fix by order the time and place of such hearing and shall specify the issues to be adjudicated. 219 (a) Rulemaking requirement Not later than 1 year after August 8, 2005, the Commission shall establish, by rule, incentive-based (including performance-based) rate treatments for the transmission of electric energy in interstate commerce by public utilities for the purpose of benefitting consumers by ensuring reliability and reducing the cost of delivered power by reducing transmission congestion. 307 The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person, electric utility, transmitting utility, or other entity has violated or is about to violate any provision of this chapter or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this chapter or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for recommending further legislation concerning the matters to which this chapter relates, or in obtaining information about the sale of electric energy at wholesale in interstate commerce and the transmission of electric energy in interstate commerce. The Commission may permit any person, electric utility, transmitting utility, or other entity to file with it a statement in writing under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish or make available to State commissions information concerning any such subject. 309 The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this chapter. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this chapter; and may prescribe the form or forms of all statements, declarations, applications, and reports				

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
	to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.				
California Public Utilities Commission	<u>California Constitution</u> ARTICLE XII SECTION 1. The Public Utilities Commission consists of 5 members appointed by the Governor and approved by the Senate, a majority of the membership concurring, for staggered 6-year terms. A vacancy is filled for the remainder of the term. The Legislature may remove a member for incompetence, neglect of duty, or corruption, two thirds of the membership of each house concurring. SEC. 2. Subject to statute and due process, the commission may establish its own procedures. Any commissioner as designated by the commission may hold a hearing or investigation or issue an order subject to commission approval. SEC. 3. Private corporations and persons that own, operate, control, or manage a line, plant, or system for the transportation of people or property, the transmission of telephone and telegraph messages, or the production, generation, transmission, or furnishing of heat, light, water, power, storage, or wharfage directly or indirectly to or for the public, and common carriers, are public utilities subject to control by the Legislature. The Legislature may prescribe that additional classes of private corporations or other persons are public utilities. SEC. 4. The commission may fix rates and	The CPUC is an independent government agency.	<u>Values</u> Leadership We lead with integrity, take initiative, and inspire a shared vision in the pursuit of the public interest. Excellence Our skilled, dedicated, and diverse workforce provides the highest quality products and services. People We promote professional growth, empowerment, innovation, accountability, teamwork, collegiality, and mutual respect. Participation We provide an open, fair, timely, and inclusive process. Stewardship We are responsible stewards of the human, financial, information, and natural resources entrusted to us. Communication	The Governor appoints five Commissioners, who must be confirmed by the Senate, for six-year staggered terms.	

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
	establish rules for the transportation of passengers and property by transportation companies, prohibit discrimination, and award reparation for the exaction of unreasonable, excessive, or discriminatory charges. A transportation company may not raise a rate or incidental charge except after a showing to and a decision by the commission that the increase is justified, and this decision shall not be subject to judicial review except as to whether confiscation of property will result. SEC. 5. The Legislature has plenary power, unlimited by the other provisions of this constitution but consistent with this article, to confer additional authority and jurisdiction upon the commission, to establish the manner and scope of review of commission action in a court of record, and to enable it to fix just compensation for utility property taken by eminent domain. SEC. 6. The commission may fix rates, establish rules, examine records, issue subpoenas, administer oaths, take testimony, punish for contempt, and prescribe a uniform system of accounts for all public utilities subject to its jurisdiction. SEC. 7. A transportation company may not grant free passes or discounts to anyone holding an office in this State; and the acceptance of a pass or discount by a public officer, other than a Public Utilities Commissioner, shall work a forfeiture of that office. A Public Utilities Commissioner may not hold an official relation to nor have a financial interest in a person or corporation subject to regulation by the commission. SEC. 8. A city, county, or other public body may not regulate matters over which the Legislature grants regulatory power to the Commission. This section does not affect power over public utilities relating to the making and enforcement of police, sanitary, and other regulations concerning municipal affairs pursuant to a city charter existing on October 10, 1911, unless that power has been revoked by the city's electors, or the right of any city to grant franchises for public utilities or other businesses on terms, conditions, and in the manner prescribed by law.		We provide accurate, timely information and consumer education.		

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
Ontario Energy Board	<u>Ontario Energy Board Act 1998</u> PART 1 GENERAL 1 Board Objectives, Electricity 1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service. 2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry. 3. To promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario, including having regard to the consumer's economic circumstances. 4. To facilitate the implementation of a smart grid in Ontario. 5. To promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities.	The accountability relationships between the chair, the management committee and the Minister are determined every three years in an MOU (<u>s 4.6</u>).	<u>Our Mission</u> The Board's mission is to promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services that are cost effective.	The Board has full and part-time members who are appointed by the Lieutenant Governor in Council for two years, and renewable up to five years. It comprises a Chairperson/CEO, and seven additional members.	The OEB is an independent, self-financing Crown corporation.
Office of Gas and Electricity Markets UK (Ofgem)	<u>Utilities Act 2000</u> 3A(2) The Secretary of State and the Authority shall carry out those functions in the manner which he or it considers is best calculated to further the principal objective, having regard to— (a) the need to secure that all reasonable demands for electricity are met; and (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000. (5) Subject to subsection (2), the Secretary of State and the Authority shall carry out their respective functions under this Part in the manner which he or it considers is best calculated— (a) to promote efficiency and economy on the part of persons authorised by licences or exemptions to transmit, distribute or supply electricity and the	Non-ministerial government department and an independent National Regulatory Authority, recognised by EU Directives.	<u>Our themes</u> • Promoting value for money • Promoting security of supply • Promoting sustainability • Delivering government programmes <u>Simpler Clearer Fairer</u>	Its governing body is the Gas and Electricity Markets Authority (GEMA), which comprises non-executive and executive members and a non-executive chair. GEMA oversees the work of Ofgem and provides strategic direction.	Ofgem recovers costs from the licensed companies it regulates. Licensees must pay an annual licence fee.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
	efficient use of electricity conveyed by distribution systems; (b) to protect the public from dangers arising from the generation, transmission, distribution or supply of electricity; and (c) to secure a diverse and viable long-term energy supply, and shall, in carrying out those functions, have regard to the effect on the environment of activities connected with the generation, transmission, distribution or supply of electricity.				

APPENDIX 4: TRANSPARENCY MEASURES OF THE COAG COUNCILS

COAG Council	Terms of reference	Governance structure	Names, titles and contact details of SCO	Guidance or delegation issued to SCO	Advance meeting dates
Transport and Infrastructure Council (TIC)	No	Yes - governance diagram showing reporting lines for the interaction between the Council, TISOC, working groups etc. published on website.	Yes - publishes the names, titles and contact details of the members of the Transport and Infrastructure Senior Officials' Committee (TISOC)	No – not publicly available	Yes - publishes the advance meeting dates of both the TIC and TISOC for the year.
Health Council (CHC)	Not yet finalised. No draft publicly available.	Yes – details available on the website and through the Operating Guidelines.	Yes- publishes the names and titles of the Australian Health Ministers' Advisory Council (AHMAC).	Yes - Operating Guidelines provide information and advice about the Council of Australian Governments (COAG) Health Council (CHC) and the Australian Health Ministers' Advisory Council (AHMAC). These guidelines are updated regularly (last in December 2014) and are publicly available on their website. In relation to AHMAC they provide guidance on: membership, the AHMAC Terms of Reference, chairing and Executive Committee arrangements, decision making, recording decisions and records of meetings, meetings, agenda setting and management, responsibilities and administrative arrangements for AHMAC meetings, funding and principal working committees.	No – not publicly available
Federal Financial Relations	No	No	No	No	No
Energy Council	No	No	No	No	No

COAG Council	Terms of reference	Governance structure	Names, titles and contact details of SCO	Guidance or delegation issued to SCO	Advance meeting dates
Education	Terms of Reference (ToR) for the new Council are currently being developed and will be considered by COAG in due course. The Education Council will continue to operate under SCSEEC Terms of Reference until COAG endorses the new Council's ToR.	No but the Operating Protocol provides helpful guidance.	Yes – publishes the names and titles of both the Education Council members and the members of the Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC).	Yes –Operating Protocol for AEEYSOC (last updated in March 2013) publicly available on their website,	Yes – for both the Education Council and AEEYSOC meetings.
Law, Crime and Community Safety Council	No Terms of Reference are publicly available but a summary of their role and priorities is available on their website.	No	No- the names of the National Justice and Policing Senior Officer’s Group (NJPSOG) and Australia-New Zealand Emergency Management Committee (ANZEMC) are not publicly available although their titles are published in the Operating Procedure.	Yes – Operating Procedures For the Law, Crime And Community Safety Council are publicly available on their website (last updated in July 2014)	No
Industry and Skills Council	No	No	No	No	No
Disability Reform Council	Yes – publicly available on website.	No	No	No	No

APPENDIX 5: AEMO MEMBERSHIP

List of Government Members of AEMO (1 March 2010)

Commonwealth Government

Australian Capital Territory

State of New South Wales

State of Queensland

State of South Australia

State of Tasmania

State of Victoria

List of Industry members of AEMO (19 December 2014)

Acciona Energy Oceania Pty Ltd

AGL Energy Ltd

AGL Loy Yang Marketing Pty Ltd

APA EE Holdings Pty Ltd

APA GasNet Australia (Operations) Pty Ltd

Allgas Energy Pty Ltd

Ararat Wind Farm Pty Ltd

APT Petroleum Pipelines Pty Ltd

APT Pipelines (NSW) Pty Ltd

Attunga Capital Pty Ltd

Aurora Energy (Tamar Valley) Pty Ltd trading as AETV Power

Aurora Energy Pty Ltd

Australian Gas Networks Limited

Aus Gas Trading Pty Ltd

Ausgrid

Australian Power and Gas Pty Ltd

Central Ranges Pipeline Pty Ltd

CitiPower Pty

Click Energy Pty Ltd

Covau Pty Ltd

Delta Electricity

Diamond Energy Pty Ltd

Directlink Joint Venture (ABN 16 779 340 889) (Directlink (No. 1) Pty Limited ABN 85 085 123 468, Directlink (No. 2) Pty Limited ABN 87 095 439 222, and Directlink (No. 3) Pty Limited ABN 86 095 449 817 trading as Directlink Joint Venture)

Dodo Power & Gas Pty Ltd

East Australian Pipeline Pty Ltd

EDL Group Operations Pty Ltd

ElectraNet Pty Ltd

Endeavour Energy

Energex Limited

EnergyAustralia Gas Storage Pty Ltd

EnergyAustralia Pty Ltd

EnergyAustralia Yallourn Pty Ltd

Energy Pacific (Vic) Pty Ltd

EnerNOC Pty Ltd

Epic Energy South Australia Pty Ltd

ERM Power Ltd

ERM Power Retail Pty Ltd

Essential Energy

Flinders Operating Services Pty Ltd

FPC 30 Ltd

Hydro-Electric Corporation

Infigen Energy Markets Pty Ltd

Infratil Energy Australia Pty Ltd

Jemena Ltd

LMS Energy Pty Ltd

Macquarie Generation

Marubeni Australia Power Services Pty Ltd

Millmerran Energy Trader Pty Ltd

Murraylink Transmission Company Pty Ltd

New Gullen Range Wind Farm Pty Ltd

N. P. Power Pty Ltd

OneSteel Manufacturing Pty Ltd

Onsite Energy Solutions Pty Ltd

Origin Energy Electricity Ltd

Origin Energy Eraring

Pacific Hydro Clements Gap Pty Ltd
Pacific Hydro Challicum Hills Pty Ltd
Pacific Hydro Portland Wind Farm Pty Ltd
Pacific Hydro Retail Pty Ltd
People Energy Pty Ltd
Pooled Energy Pty Ltd
Powercor Australia Ltd
Queensland Electricity Transmission Corporation Limited (trading as Powerlink Queensland)
RE Oakey Pty Ltd
Roverton Pty Ltd
Santos Ltd
South East Australia Gas Pty Ltd
SPI Electricity Pty Ltd
Tasmanian Gas Pipeline Pty Ltd
Transend Networks Pty Ltd
TransGrid
Vicpower Trading (State Electricity Commission of Victoria trading as Vicpower Trading)
Westpac Banking Corporation
WINenergy Pty Ltd

APPENDIX 6: INTERNATIONAL FUNCTIONAL EQUIVALENTS OF AEMO

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
Transpower, New Zealand	<u>Electricity Industry Act 2010 (NZ)</u> 8 Transpower is system operator (1) The system operator is Transpower. (2) As well as acting as system operator for the electricity industry, the system operator must— (a) provide information, and short- to medium-term forecasting on all aspects of security of supply; and (b) manage supply emergencies. (3) The Code must— (a) specify the functions of the system operator; and (b) specify how the system operator's functions are to be performed; and (c) set requirements relating to transparency and performance. (4) A failure to comply with subsection (2) is to be treated, for the purposes of enforcement under this Part, as a breach of the Code.	100% State owned enterprise. The shares are held on behalf of the Crown by the Minister of Finance and the Minister for State Owned Enterprises.	Our purpose We connect New Zealanders to their power system, through safe, smart solutions for today and tomorrow. Our values The power of us We listen to each other – we unite to make things happen – we are better together We work with care We care for each other and our communities and we keep everybody safe – we are open, honest and respectful We're here for New Zealand We work hard to keep the lights on for our fellow Kiwis and we're careful how we spend their money We do clever simply This is a great place to work. We deliver excellence – we change, adapt, and make better	Transpower is governed by a Board of seven directors. The Board is responsible for Transpower's performance, and for guiding and monitoring the company on behalf of the shareholding Ministers. The Board is appointed by, and accountable, to the Crown. Transpower's General Management Team is responsible for the day-to-day operation of the company.	Transpower recovers the costs of its regulated transmission business from generators and line companies. The Commerce Commission sets the amount of revenue that Transpower can earn from transmission activities. The System Operator service is provided and funded under an agreement with the Electricity Authority.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
California Independent System Operator Corporation (CAISO), California	<i>California Public Utilities Code</i> 345. The Independent System Operator shall ensure efficient use and reliable operation of the transmission grid consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Council. <i>ISO Articles of Incorporation</i> II.b. The specific purpose of this corporation is to ensure efficient use and reliable operation of the electric transmission grid pursuant to the Statute. <i>CAISO Bylaws</i> ARTICLE II: PURPOSES AND OBJECTIVES Section 1. Purposes. The purpose of the Corporation is to ensure efficient use and reliable operation of the electric transmission facilities of those transmission owners that have transferred operational control of those facilities to the Corporation (the “ISO Controlled Grid”), consistent with Chapter 2.3, Part 1, Division 1, of the California Public Utilities Code.	A non-profit public benefit corporation organised under the Nonprofit Public Benefit Corporation Law for the charitable purposes set forth in Chapter 2.3, Part 1, Division 1 of the Public Utilities Code of the State of California.	OUR PURPOSE Lead the way to tomorrow’s energy network OUR STRATEGY • Lead the transition to renewable energy • Maintain reliability during industry transformation • Expand regional collaboration to unlock mutual benefits OUR OPERATING PRINCIPLES For the benefit of our customers, we: • Attract, develop and retain a highly skilled workforce • Operate the grid reliably and efficiently • Provide fair and open transmission access • Promote environmental stewardship • Facilitate effective markets and promote infrastructure development • Provide timely and accurate information OUR COMMITMENTS We are committed to being: • Reliable	There shall be five members of the Governing Board. Members of the Governing Board are selected by appointment of the Governor of the State of California and subject to confirmation by the Senate of the State of California. The Board selection process involving stakeholders was outlined in a FERC order issued July 1, 2005. The Board Nominee Review Committee is comprised of six stakeholders from each of the following member-class sectors: transmission owners, transmission-dependent utilities, public interest groups, end-users and retail energy providers, alternative energy providers, and generators and marketers. Each sector is responsible for selecting its own six members to serve on the committee. Once the Committee has been established and secretaries nominated, the Board member selection process proceeds as follows: • An independent search firm creates a list of at least four qualified candidates for each open seat on the Board. • The list of qualified candidates is then forwarded to the 36-member Board Nominee Review Committee. • Each member-class sector will select one person to represent the group to conduct a personal interview of selected candidates. • Based on inputs from the member-class sectors, recommendations are submitted to the Office of the Governor for the State of California. Terms of office of each member of the Governing Board are three years in duration and are staggered in accordance with section 337 subdivision (e) of the California Public Utilities Code. Governors may serve multiple terms, with no maximum number of terms. The Chair of the Governing Board shall be elected by	The California ISO operates under the terms and conditions of its FERC-approved tariff, which is modified, amended, supplemented or restated as needed.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
			• Sustainable • Efficient • Resilient • Responsive OUR CORE VALUES • Integrity • Teamwork • Excellence • People focus • Open communication	the Board from among the members of the Governing Board. No member of the Governing Board shall be affiliated with any actual or potential participant in any market administered by the Corporation.	
National Grid Electricity Transmission plc , United Kingdom	Electricity Act 1989 S 6(1)(b) a licence authorising a person to transmit electricity for that purpose in that person's authorised area ("a transmission licence") Transmission Licence Standard Conditions Condition C16: Procurement and use of balancing services 1. The licensee shall co-ordinate and direct the flow of electricity onto and over the national electricity transmission system in an efficient, economic and co-ordinated manner	NGET is a public limited company, registered in England and Wales. National Grid Electricity Transmission plc operates as a subsidiary of National Grid Holdings One Plc.	Connecting you to your energy today, trusted to help you meet your energy needs tomorrow.	The parent company, National Grid plc, is governed by an eleven member Board of Directors. They are supported by an eleven member Executive Committee.	The cost that can be charged by NGET for its regulated activities is governed by RII0-T1 pricing control model, where stands for: Revenue = Incentives+Innovation+Outputs This process is controlled by Ofgem.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
Independent Electricity System Operator (as merged with the Ontario Power Authority from 1 Jan 2015)	(1) The objects of the IESO are, (a) to exercise the powers and perform the duties assigned to it under this Act, the regulations, directions, the market rules and its licence; (b) to enter into agreements with transmitters to give it authority to direct the operation of their transmission systems; (c) to direct the operation and maintain the reliability of the IESO-controlled grid to promote the purposes of this Act; (d) to participate in the development by any standards authority of criteria and standards relating to the reliability of the integrated power system; (e) to establish and enforce criteria and standards relating to the reliability of the integrated power system; (f) to work with the responsible authorities outside of Ontario to co-ordinate the IESO's activities with the activities of those authorities; (g) to operate the IESO-administered markets to promote the purposes of this Act; (h) to engage in activities related to contracting for the procurement of electricity supply, electricity capacity and conservation resources; (i) to engage in activities related to settlements, payments under a contract entered into under the authority of this Act and payments provided for under this Act or the Ontario Energy Board Act, 1998; (j) to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario; (k) to forecast electricity demand and the adequacy and reliability of electricity resources for	The IESO is a not-for-profit corporate entity established in 1998 by the Electricity Act of Ontario.		The IESO is governed by an independent board of eleven directors that oversees its business and affairs. The IESO Board also approves the Market Rules, policies and guidelines that govern the IESO-administered markets. The Board Directors are appointed by the Minister of Energy. However, the Board has the power to elect both their own Chair and Vice-Chair from among the Directors by a majority vote. The IESO Stakeholder Advisory Committee provides appointed stakeholder representatives with the opportunity to present advice and recommendations on market development and planning decisions directly to the IESO's Board of Directors and Executive Leadership Team. Members of the Committee represent electricity service providers, generators, conveyors and consumers of electricity. Stakeholders are encouraged to contact their representative on the Advisory Committee to provide input on issues that affect them. The Stakeholder Advisory Committee meetings are open to all stakeholders with an interest in the electricity industry.	The IESO's usage fees and licence conditions are approved by the Ontario Energy Board (OEB) in accordance with the Electricity Act, 1998.

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
	Ontario for the short term, medium term and long term; (l) to conduct independent planning for electricity generation, demand management, conservation and transmission; (m) to engage in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources; (n) to engage in activities in support of system-wide goals for the amount of electricity to be produced from different energy sources; (o) to engage in activities that facilitate load management; (p) to engage in activities that promote electricity conservation and the efficient use of electricity; (q) to assist the Board by facilitating stability in rates for certain types of consumers; (r) to collect and make public information relating to the short term, medium term and long term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs; and (s) to engage in such other objects as may be prescribed by the regulations. 2014, c 7, Sch 7, s 3 (1).				

Entity	Legislative or corporate mandate	Ownership	Corporate values	Governance	Finance
PJM Interconnection, LLC., United States	3.1 Purposes. The purposes of the LLC shall be: (a) to operate in accordance with FERC requirements as an Independent System Operator, comprised of the PJM Board, the Office of the Interconnection, and the Members Committee, with the authorities and responsibilities set forth in this Agreement; (b) as necessary for the operation of the PJM Region as specified above: (i) to acquire and obtain licenses, permits and approvals, (ii) to own or lease property, equipment and facilities, and (iii) to contract with third parties to obtain goods and services, provided that, the LLC may procure goods and services from a Member only after open and competitive bidding; and (c) to engage in any lawful business permitted by the Act or the laws of any jurisdiction in which the LLC may do business and to enter into any lawful transaction and engage in any lawful activities in furtherance of the foregoing purposes and as may be necessary, incidental or convenient to carry out the business of the LLC as contemplated by this Agreement.	PJM Interconnection LLC, is a 100% industry, limited liability company registered in Delaware. 11.6 Membership Requirements. (a) To qualify as a Member, an entity shall: i) Be a Transmission Owner a Generation Owner, an Other Supplier, an Electric Distributor, or an End-Use Customer; and ii) Accept the obligations set forth in this Agreement.	Vision To be the electric industry leader – today and tomorrow – in reliable operations, efficient wholesale markets, and infrastructure planning. Mission As the primary task, to ensure the safety, reliability and security of the bulk electric power system. Create and operate robust, competitive and non-discriminatory electric power markets. Understand customer needs and deliver valued service to meet those needs in a cost-efficient manner. Achieve productivity through the efficient union of superior knowledge workers and technology advances.	PJM has a two-tier committee structure consisting of 10-person Board of Managers (made up of individuals with no financial interests in PJM market participants) and a Members Committee which represents the interests of participating members. The structure is designed to secure that individual members have strong input on issues while protecting the neutrality of PJM's decision-making process.	PJM recovers its administrative costs ☐ the costs of operating the electric transmission system and the wholesale electric markets – through fixed rates billed to members based on their activity levels. With effective cost-control and productivity initiatives, PJM manages its costs within the established rate, refunds savings to members and funds a financial reserve. In benchmarking against other grid operators, PJM continues to be the lowest-cost operator administering markets in the world.

APPENDIX 7: AEMC RULE CHANGE DETERMINATIONS

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Aligning TasNetworks' regulatory control periods	TasNetworks	Corporate	Yes	26-Feb-15	9-Apr-15	9-Apr-15	6.14	6.14	ERC0180
Governance Arrangements and Implementation of the Reliability Standard and Settings	COAG Energy Council	Government	Yes	25-Sep-14	17-Mar-15	26-Mar-15	24.57	25.86	ERC0160
Improving demand side participation information provided to AEMO by registered participants	COAG Energy Council	Government	Yes	11-Sep-14	26-Mar-15	26-Mar-15	27.86	27.86	ERC0174
Early application of STPIS components to transmission businesses	ElectraNet	Corporate	Yes	31-Jul-14	19-Feb-15	19-Feb-15	28.43	28.43	ERC0173
Removal of Force Majeure Provisions in the DWGM	AEMO	AEMO	Yes	10-Jul-14	11-Dec-14	4-May-15	21.57	42.00	GRC0027
Connecting embedded generators under Chapter 5A	Clean Energy Council	Community	Yes	15-May-14	13-Nov-14	1-Mar-15	25.43	40.86	ERC0158
Customer access to information about their energy consumption	COAG Energy Council	Government	No	8-May-14	6-Nov-14		25.43		RRC0003
Customer access to information about their energy consumption	COAG Energy Council	Government	Yes	8-May-14	6-Nov-14	1-Mar-16	25.43	93.29	ERC0171
Extension of Call Notice Timing	AEMO	AEMO	Yes	1-May-14	12-Jun-14	1-Jul-14	5.86	8.57	ERC0163
Setting the Opening Capital Base	AER	AER	Yes	17-Apr-14	2-Oct-14	2-Oct-14	23.57	23.57	GRC0025
Minor Changes 2014	AEMC	AEMC	Yes	10-Apr-14	22-May-14	1-Jul-14	6.00	11.57	ERC0170
Minor Changes 2014	AEMC	AEMC	Yes	10-Apr-14	22-May-14	1-Jul-14	6.00	11.57	GRC0026

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
System Restart Ancillary Services	AEMO, AGL, Alinta Energy, Energy Brix, GDF Suez, Intergen, NGF, Origin Energy	Mixed (Public / Private)	Yes	27-Mar-14	2-Apr-15	1-Jul-15	52.14	64.86	ERC0168
Portfolio Rights Trading	AEMO	AEMO	No	13-Mar-14	26-Nov-14		36.14		GRC0021
National Gas Bulletin Board Capacity Outlooks	AEMO	AEMO	Yes	6-Mar-14	1-May-14	8-Jan-15	7.86	43.14	GRC0024
Victorian jurisdictional derogation (smelter agreements)	Minister for Energy and Resources (Victoria)	Government	Yes	27-Feb-14	10-Apr-14	1-Aug-14	6.14	22.00	ERC0167
STTM settlement surplus and shortfall	AEMO	AEMO	Yes	20-Feb-14	3-Apr-14	1-May-14	6.14	10.14	GRC0023
Generator ramp rates and dispatch inflexibility in bidding	AER	AER	Yes	13-Feb-14	19-Mar-15	1-Jul-16	56.57	122.57	ERC0165
Retailer Price Variations in Market Retail Contracts	CALC, CUAC	Community	Yes	13-Feb-14	23-Oct-14	1-May-15	35.71	62.57	RRC0001
Publication of the GSOO and Gas VAPR	AEMO	AEMO	Yes	30-Jan-14	13-Mar-14	1-Apr-14	6.14	8.71	GRC0022
Distribution Network Pricing Arrangements	IPART, SCER (merged with referral from Tribunal below)	Government	Yes	14-Nov-13	27-Nov-14	1-Dec-14	53.29	53.86	ERC0161
Governance of retail market procedures	AEMO	AEMO	Yes	24-Oct-13	31-Jul-14	24-Oct-14	39.57	51.43	ERC0162
AER Authorisation of Software Changes by AEMO	AER	AER	Yes	24-Oct-13	17-Apr-14	17-Apr-14	24.71	24.71	ERC0151
Reliability Panel Public Meetings	Reliability Panel	AEMC	Yes	4-Jul-13	15-Aug-13	15-Aug-13	5.86	5.86	ERC0157
Victorian jurisdictional derogation, advanced metering infrastructure	Minister for Energy and Resources (Victoria)	Government	Yes	4-Jul-13	28-Nov-13	1-Jan-14	20.57	25.29	ERC0159

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Annual Network Pricing Arrangements	Referral from Tribunal	Government	N/A	6-Jun-13	27-Nov-14		75.86		ERC0149
Publication of zone substation data	NGF	Corporate	Yes	26-Apr-13	13-Mar-14	13-Mar-14	45.29	45.29	ERC0156
Minor Rule Change 2013	AEMC	AEMC	Yes	18-Apr-13	30-May-13	4-Jul-13	6.00	10.86	GRC0020
Minor Rule Change 2013	AEMC	AEMC	Yes	18-Apr-13	30-May-13	4-Jul-13	6.00	10.86	ERC0155
Recovery of Network Support Payments	SP Ausnet	Corporate	No	11-Apr-13	31-Oct-13		28.57		ERC0154
Access to NMI standing data	EnergyAustralia	Corporate	Yes	14-Mar-13	31-Oct-13	31-Oct-13	32.43	32.43	ERC0153
Changes to Cost Allocation Method	Trans Tasman Energy Group	Corporate	No	14-Feb-13	8-Aug-13		24.86		ERC0150
Network Service Provider Expenditure Objectives	SCER	Government	Yes	7-Feb-13	19-Sep-13	26-Sep-13	31.71	32.71	ERC0152
STTM Brisbane participant compensation fund	AEMO	AEMO	Yes	17-Jan-13	28-Feb-13	7-Mar-13	5.86	7.14	GRC0018
Pipeline operator cost recovery processes	AER	AER	Yes	6-Dec-12	27-Jun-13	1-Jul-13	28.71	29.29	GRC0017
STTM deviations and the settlement surplus and shortfall	AEMO	AEMO	Yes	8-Nov-12	20-Jun-13	1-May-14	31.71	76.14	GRC0014
Changes to normal voltage	GDF Suez	Corporate	Yes	23-Aug-12	28-Feb-13	7-Mar-13	26.43	27.71	ERC0148
STTM Market Schedule Variation Transactions	AEMO	AEMO	Yes	19-Jul-12	28-Aug-12	19-Mar-13	5.57	34.29	GRC0015

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Market operator service - timing and eligibility	AEMO	AEMO	Yes	22-Jun-12	23-May-13	1-Apr-14	47.29	91.29	GRC0016
Connecting embedded generators	ClimateWorks, Seed, Property Council	Community	Yes	14-Jun-12	17-Apr-14	1-Oct-14	94.71	118.14	ERC0147
Minor Changes 2012	AEMC	AEMC	Yes	10-May-12	14-Jun-12	26-Jul-12	4.86	10.86	ERC0146
Distribution Losses in Expenditure Forecasts	The Copper Development Centre	Community	Yes	12-Apr-12	18-Oct-12	1-Jan-13	26.57	37.00	ERC0142
Negative offers from scheduled network service providers	IPRA and LYMMCo	Corporate	Yes	29-Mar-12	19-Dec-13	1-Jan-14	88.57	90.29	ERC0140
Assumed utilisation of imputation credits	SP Ausnet and Electranet	Corporate	No	22-Mar-12	20-Sep-12		25.43		ERC0143
Small Generation Aggregator Framework	AEMO	AEMO	Yes	15-Mar-12	29-Nov-12	1-Jan-13	36.29	40.86	ERC0141
Negative intra-regional settlements residue	AEMO	AEMO	Yes	2-Feb-12	22-Mar-12	5-Apr-12	7.14	9.00	ERC0139
Cost pass through arrangements for network service providers	Grid Australia	Corporate	Yes	2-Feb-12	2-Aug-12	2-Aug-12	25.71	25.71	ERC0137
Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets - Gas	Major Energy Users Inc.	Corporate	No	1-Dec-11	13-Sep-12		40.29		GRC0013
Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets	Major Energy Users Inc.	Corporate	No	1-Dec-11	13-Sep-12		40.29		ERC0136
Calculation of Return on Debt for Electricity Network Businesses	Energy Users Rule Change Committee	Corporate	Yes	3-Nov-11	29-Nov-12	29-Nov-12	55.14	55.14	ERC0135
Economic Regulation of Network Service Providers	AER and EURCC	Mixed (Public / Private)	Yes	3-Nov-11	29-Nov-12	29-Nov-12	55.14	55.14	ERC0134

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
New Prudential Standard and Framework in the NEM	AEMO	AEMO	Yes	20-Oct-11	18-Oct-12	1-Nov-12	51.14	53.00	ERC0133
Price and Revenue Regulation of Gas Services	AER	AER	Yes	20-Oct-11	29-Nov-12	29-Nov-12	57.00	57.00	GRC0011
Reference service and rebateable service definitions	AER	AER	Yes	6-Oct-11	1-Nov-12	2-May-13	55.00	80.86	GRC0012
Distribution Network Planning and Expansion Framework	MCE	Government	Yes	29-Sep-11	11-Oct-12	1-Jan-13	53.14	64.57	ERC0131
Expiry of the Reliability and Emergency Reserve Trader	Reliability Panel	AEMC	Yes	8-Sep-11	15-Mar-12	15-Mar-12	26.71	26.71	ERC0132
Short Term Trading Market - Market Schedule Variation	AEMO	AEMO	Yes	30-Aug-11	13-Oct-11	13-Oct-11	6.14	6.14	GRC0010
Definition of Temporary Over-Voltage Limits	Hydro Tasmania	Corporate	No	30-Jun-11	19-Jan-12		28.43		ERC0120
Inclusion of Embedded Generation Research into Demand Management Incentive Scheme	MCE	Government	Yes	23-Jun-11	22-Dec-11	22-Dec-11	25.57	25.57	ERC0128
Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses	MCE	Government	Yes	23-Jun-11	22-Dec-11	22-Dec-11	25.57	25.57	ERC0127
Network Support Payments and Avoided TUoS for Embedded Generators	MCE	Government	Yes	23-Jun-11	22-Dec-11	22-Dec-11	25.57	25.57	ERC0129
Tasmania Tranche 5a Procedure Changes	Tasmanian Government	Government	Yes	2-Jun-11	14-Jul-11	14-Jul-11	6.00	6.00	ERC0130
Minor Changes 2011	AEMC	AEMC	Yes	5-May-11	16-Jun-11	16-Jun-11	5.86	5.86	GRC0009
Minor Changes 2011 - Electricity	AEMC	AEMC	Yes	5-May-11	16-Jun-11	1-Jul-11	5.86	8.00	ERC0124

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Potential Generator Market Power in the NEM	Major Energy Users Inc.	Corporate	No	14-Apr-11	26-Apr-13		104.57		ERC0123
STTM Brisbane Hub	AEMO	AEMO	Yes	4-Apr-11	15-Sep-11	15-Sep-11	23.00	23.00	GRC0007
Application and operation of Administered Price Periods	AEMO	AEMO	Yes	31-Mar-11	10-Nov-11	10-Nov-11	31.43	31.43	ERC0121
STTM Data Validation and Price Setting Process	AEMO	AEMO	Yes	24-Mar-11	5-May-11	16-Jun-11	5.86	11.71	GRC0008
Business day definition	AEMO	AEMO	Yes	8-Mar-11	21-Apr-11	21-Apr-11	6.14	6.14	ERC0122
Calculation of STTM Participant Compensation Fund Contributions	AEMO	AEMO	Yes	3-Feb-11	17-Mar-11	17-Mar-11	6.29	6.29	GRC0006
Application of Dual Marginal Loss Factors	AEMO	AEMO	Yes	9-Dec-10	29-Jun-11	30-Jun-11	28.57	28.71	ERC0117
Various Hedging Instruments in the Declared Wholesale Gas Market	AEMO	AEMO	Yes	18-Nov-10	25-Aug-11	17-Apr-12	39.57	72.71	GRC0004
Reliability Settings from 1 July 2012	Reliability Panel	AEMC	Yes	11-Nov-10	16-Jun-11	1-Jul-11	30.71	32.86	ERC0115
Timetable for Prescribed Gas STTM Reviews	AEMO	AEMO	Yes	28-Oct-10	9-Dec-10	16-Dec-10	5.86	6.86	GRC0005
Calculation of Interest for Gas Markets	AEMO	AEMO	Yes	23-Sep-10	4-Nov-10	4-Nov-10	5.86	5.86	GRC0002
DNSP recovery of transmission-related charges	United Energy Distribution	Corporate	Yes	2-Sep-10	24-Mar-11	24-Mar-11	28.86	28.86	ERC0114
Network Support and Control Ancillary Services	AEMO	AEMO	Yes	22-Jul-10	7-Apr-11	5-Apr-12	36.43	87.57	ERC0108

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Release of Generator information by AEMO	Senergy Econnect Australia Pty Ltd	Corporate	Yes	15-Jul-10	23-Dec-10	20-Jan-11	22.57	26.43	ERC0112
Timing for spot price reporting	AER	AER	Yes	17-Jun-10	22-Jul-10	22-Jul-10	5.00	5.00	ERC0111
Dandenong Liquefied Natural Gas Storage Facility	AEMO	AEMO	Yes	10-Jun-10	16-Dec-10	23-Dec-10	26.57	27.57	GRC0003
Inter-regional Transmission Charging	MCE	Government	Yes	13-May-10	28-Feb-13	1-Jul-15	143.57	264.00	ERC0106
Amendments to PASA-related Rules	AEMO	AEMO	Yes	7-May-10	2-Dec-10	16-Dec-10	29.29	31.29	ERC0107
Minor Changes 2010	AEMC	AEMC	Yes	22-Apr-10	3-Jun-10	10-Jun-10	5.86	6.86	ERC0105
Scale Efficient Network Extensions	MCE	Government	Yes	1-Apr-10	30-Jun-11	1-Jul-11	64.14	64.29	ERC0100
Aggregation of Ancillary Services Loads	AEMO	AEMO	Yes	25-Mar-10	9-Sep-10	16-Sep-10	23.43	24.43	ERC0104
SA Jurisdictional Derogation (Connections Charging)	South Australian Minister for Energy	Government	Yes	18-Mar-10	6-May-10	1-Jul-10	6.86	14.71	ERC0101
Victoria Generator Technical Performance Standards Derogations	Minister for Energy and Resources (Victoria)	Government	Yes	11-Mar-10	9-Sep-10	16-Sep-10	25.43	26.43	ERC0102
Timing for intervention compensation determinations	AEMO	AEMO	Yes	11-Feb-10	25-Mar-10	25-Mar-10	6.29	6.29	ERC0099
Publication of a Carbon Dioxide Equivalent Intensity Index for the National Electricity Market	AEMO	AEMO	Yes	23-Dec-09	22-Jul-10	22-Jul-10	29.86	29.86	ERC0098
Payments under Feed-in Schemes and Climate Change Funds	ETSA Utilities	Corporate	Yes	16-Dec-09	1-Jul-10	1-Jul-10	27.86	27.86	ERC0097

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Prioritisation of Tied Controlled Withdrawal Bids Rule proposal	AEMO	AEMO	Yes	17-Nov-09	20-May-10	7-Jun-10	26.14	28.57	GRC0001
Transparency of Operating Data	AEMO	AEMO	Yes	12-Nov-09	11-May-10	13-May-10	25.57	25.86	ERC0096
Provision of Metering Data Services and Clarification of Existing Metrology Requirements	AEMO	AEMO	Yes	27-Aug-09	25-Nov-10	16-Dec-10	64.00	67.00	ERC0092
Improved RERT Flexibility and Short-notice Reserve Contracts	Reliability Panel	AEMC	Yes	13-Aug-09	15-Oct-09	15-Oct-09	8.86	8.86	ERC0094
Early Implementation of Market Impact Parameters	Grid Australia	Corporate	Yes	6-Aug-09	11-Mar-10	12-Mar-10	30.71	30.86	ERC0093
Cost Recovery for Other Services Directions	AEMO	AEMO	Yes	13-Jul-09	13-May-10	1-Jul-11	42.86	101.14	ERC0090
Bid and Offer Validation Data	AEMO	AEMO	Yes	11-Jun-09	3-Dec-09	16-Dec-10	24.57	77.86	ERC0091
Confidentiality Provisions for Network Connections	Grid Australia	Corporate	Yes	14-May-09	12-Nov-09	12-Nov-09	25.43	25.43	ERC0089
EnergyAustralia Participant Derogation Extension (Settlement Residue Auctions)	EnergyAustralia	Corporate	Yes	30-Apr-09	11-Jun-09	1-Jul-09	5.86	8.71	ERC0088
AETV Participant Derogation to Allow Commissioning of a New Power Station	Aurora Energy (Tamar Valley) Pty Ltd	Corporate	Yes	16-Apr-09	28-May-09	28-May-09	6.00	6.00	ERC0087
Arrangements for Managing Risks Associated with Transmission Network Congestion - Rule 16	MCE	Government	Yes	5-Mar-09	13-Aug-09	1-Sep-09	22.57	25.14	ERC0076
Negative Settlements Residue Recovery, Extension of Sunset	NEMMCO	NEMMCO	Yes	5-Mar-09	16-Apr-09	16-Apr-09	5.86	5.86	ERC0079
National Transmission Statement	MCE	Government	Yes	26-Feb-09	2-Apr-09	16-Apr-09	5.14	7.14	ERC0078

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Regulatory Investment Test for Transmission	MCE	Government	Yes	26-Feb-09	25-Jun-09	1-Jul-09	17.00	17.86	ERC0077
NEM Reliability Settings: VoLL, CPT and Future Reliability Review	Reliability Panel	AEMC	Yes	22-Feb-09	28-May-09	28-May-09	13.71	13.71	ERC0080
Minor Changes 2009	AEMC	AEMC	Yes	19-Feb-09	26-Mar-09	31-Mar-09	5.29	6.00	ERC0085
WACC Reviews - Extension of Time	AER	AER	Yes	19-Feb-09	26-Mar-09	31-Mar-09	5.29	6.00	ERC0083
Causer Pays for Ancillary Services to Control the Tasmanian frequency	Hydro Tasmania	Corporate	No	29-Jan-09	15-Oct-09		36.57		ERC0082
Removal of Performance Standard for Identifying Manifestly Incorrect Inputs	NEMMCO	NEMMCO	Yes	15-Jan-09	26-Feb-09	27-Feb-09	5.86	6.00	ERC0081
Contingency Administered Price Cap Following a Physical Trigger Event	NGF	Corporate	No	26-Nov-08	4-Jun-09		26.86		ERC0075
Easement Land Tax Pass Through	SP Ausnet	Corporate	Yes	16-Oct-08	27-Nov-08	1-Jan-09	5.86	10.71	ERC0072
Clarification of Market Information Requirements for Market Ancillary Services	NEMMCO	NEMMCO	Yes	16-Oct-08	27-Nov-08	1-Jan-09	5.86	10.71	ERC0074
Preservation of Prudential Margin Through Call Notices	NEMMCO	NEMMCO	Yes	16-Oct-08	27-Nov-08	1-Jan-09	5.86	10.71	ERC0073
Registration changes for Traders, Reallocators, and Transfer of Registration	NEMMCO	NEMMCO	Yes	2-Oct-08	4-Dec-08	1-Jan-09	8.86	12.71	ERC0071
Queensland Generator Technical Performance Standards Derogations	Queensland Government	Government	Yes	28-Aug-08	11-Dec-08	1-Jan-09	14.71	17.57	ERC0070
Transmission Network Prices Publication Date	EnergyAustralia	Corporate	Yes	24-Jul-08	26-Mar-09	31-Mar-09	34.57	35.29	ERC0069

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Total Factor Productivity for Distribution Network Regulation	Minister for Energy and Resources (Victoria)	Government	No	24-Jul-08	22-Dec-11		175.43		ERC0068
Minor Change to Technical Requirement for Generators	NEMMCO	NEMMCO	Yes	26-Jun-08	7-Aug-08	23-Oct-08	5.86	16.71	ERC0067
Ramp Rates, Market Ancillary Service Offers, and Dispatch Inflexibility	AER	AER	Yes	22-May-08	16-Jan-09	31-Mar-09	33.43	44.14	ERC0065
Parameter Values, Equity Beta and Gamma	EUAA	Corporate	No	22-May-08	13-Nov-08		24.43		ERC0063
WACC Parameters – Technical Drafting Issues	AER	AER	Yes	15-May-08	26-Jun-08	1-Jul-08	5.86	6.57	ERC0066
Confidentiality Arrangements in Respect of Information Required for Power System Studies	NGF	Corporate	Yes	8-May-08	19-Feb-09	27-Feb-09	40.14	41.29	ERC0062
Setting VoLL Following the Shedding of Interruptible Load	AER	AER	Yes	24-Apr-08	20-Nov-08	20-Nov-08	29.43	29.43	ERC0061
Reclassification of Contingency Events	AER	AER	Yes	10-Apr-08	2-Oct-08	23-Oct-08	24.57	27.57	ERC0060
Cost Allocation Arrangements for Transmission Services	NGF	Corporate	Yes	3-Apr-08	29-Jan-09	13-Feb-09	42.29	44.29	ERC0057
NEM Reliability Settings: Information, Safety Net and Directions	Reliability Panel	AEMC	Yes	20-Mar-08	26-Jun-08	1-Jul-08	13.71	14.43	ERC0059
Performance Standard Compliance of Generators	NGF	Corporate	Yes	6-Mar-08	23-Oct-08	23-Oct-08	32.43	32.43	ERC0058
Futures Offset Arrangements	Australian Power & Gas, Infratil Energy Australia, Momentum Energy	Corporate	No	14-Feb-08	16-Apr-09		60.29		ERC0056
Compensation Arrangements Under Administered Pricing	EnergyAustralia	Corporate	Yes	20-Dec-07	18-Dec-08	1-Jan-09	51.14	53.00	ERC0051

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Regulatory Test Thresholds and Information Disclosure on Network Replacements	ETNOF	Corporate	Yes	20-Dec-07	23-Oct-08	23-Oct-08	43.29	43.29	ERC0052
Victorian Jurisdictional Derogation (Advanced Metering Infrastructure Roll Out)	Minister for Energy and Resources (Victoria)	Government	Yes	20-Dec-07	29-Jan-09	1-Jul-09	57.00	78.71	ERC0053
Demand Management	TEC	Community	Yes	22-Nov-07	23-Apr-09	1-Jul-09	73.00	82.71	ERC0047
Minor Changes 2007	AEMC	AEMC	Yes	30-Aug-07	11-Oct-07	25-Oct-07	5.86	7.86	ERC0054
Timing of System Restart Ancillary Services Testing	NEMMCO	NEMMCO	Yes	23-Aug-07	25-Oct-07	25-Oct-07	8.86	8.86	ERC0048
Registration of Foreign Based Persons and Corporations as Trader Class Participants	BP Energy Asia	Corporate	Yes	19-Jul-07	20-Dec-07	1-Jan-08	21.57	23.14	ERC0044
NEMMCO Participant Derogation (Deferral of Settlement Payments due to APEC)	NEMMCO	NEMMCO	Yes	5-Jul-07	16-Aug-07	16-Aug-07	5.86	5.86	ERC0046
Integration of NEM Metrology Requirements	NEMMCO	NEMMCO	Yes	31-May-07	6-Mar-08	6-Mar-08	39.43	39.43	ERC0045
Central Dispatch and Integration of Wind and Other Intermittent Generation	NEMMCO	NEMMCO	Yes	10-May-07	1-May-08	1-May-08	50.14	50.14	ERC0043
Economic Regulation of Transmission Services Undertaken by Distributors	EnergyAustralia	Corporate	Yes	5-Apr-07	26-Jun-08	1-Jul-08	63.00	63.71	ERC0039
Congestion Pricing and Negative Residue Management Arrangements for the Snowy Region	Hydro Tasmania, International Power, LYMMCO, NRG Flinders, TRUenergy	Corporate	No	22-Mar-07	8-Nov-07		32.29		ERC0042
Transmission Last Resort Planning Guidelines	AEMC	AEMC	No	15-Mar-07	10-Jul-07		16.43		ERC0040
Split Snowy Region	Macquarie Generation	Corporate	No	8-Mar-07	8-Nov-07		34.29		ERC0041

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Efficient Dispatch of Regulation Services	Hydro Tasmania	Corporate	Yes	22-Feb-07	23-Aug-07	1-Jan-09	25.86	95.57	ERC0035
Responsible Person Contestability	Metropolis Metering Assets Pty Ltd	Corporate	No	13-Feb-07					ERC0038
Dispatch of Scheduled Network Services	Hydro Tasmania	Corporate	No	1-Feb-07	16-Aug-07		27.86		ERC0037
Cost Recovery of Localised Regulation Services	NGF	Corporate	Yes	21-Dec-06	23-Aug-07	1-Jan-09	34.57	104.29	ERC0032
Origin Energy Participant Derogation (Technical Requirements for Mount Stuart Power Station)	Origin Energy	Corporate	No	30-Nov-06					ERC0036
Resolution of existing generator performance standards	NGF	Corporate	Yes	2-Nov-06	7-Dec-06	7-Dec-06	5.00	5.00	ERC0033
NEMMCO Participant Derogation (Extension of Cost Recovery of Regulation Services in Tasmania)	NEMMCO	NEMMCO	Yes	2-Nov-06	7-Dec-06	7-Dec-06	5.00	5.00	ERC0034
Obligations of Network Service Providers - Connection Applications	Energy Solutions Australia	Corporate	No	14-Sep-06	26-Apr-07		31.71		ERC0029
Studland Bay Wind Farm Participant Derogations	Woolnorth Studland Bay Pty Ltd	Corporate	Yes	14-Sep-06	19-Oct-06	1-Nov-06	5.00	6.71	ERC0030
Pricing of Prescribed Transmission Services	AEMC	AEMC	Yes	24-Aug-06	21-Dec-06	28-Dec-06	16.71	17.71	ERC0015
Reallocations	NEMMCO	NEMMCO	Yes	29-Jun-06	15-Feb-07	31-May-07	32.29	47.43	ERC0020
Transmission network replacement and reconfiguration	Stanwell Corporation Limited	Corporate	No	15-Jun-06	1-Mar-07		36.57		ERC0028
Management of negative settlement residues by re-orientation	Snowy Hydro Limited	Corporate	No	8-Jun-06	9-Nov-06		21.57		ERC0027

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
Extension of Inter-regional Settlements Agreement	Department of Infrastructure (Victoria)	Government	Yes	25-May-06	13-Jul-06	13-Jul-06	6.86	6.86	ERC0026
Inspection and Testing of Metering Installations	EnergyAustralia	Corporate	Yes	11-May-06	29-Jun-06	1-Jul-06	6.86	7.14	ERC0025
Participation in SRA - EnergyAustralia Participant Derogation	NEMMCO	NEMMCO	Yes	11-May-06	16-Jun-06	22-Jun-06	5.00	5.86	ERC0023
Technical Standards for Wind Generation and Other Generator Connections	NEMMCO	NEMMCO	Yes	4-May-06	8-Mar-07	15-Mar-07	43.43	44.43	ERC0022
Metrology	NEMMCO	NEMMCO	Yes	30-Mar-06	9-Nov-06	9-Nov-06	31.29	31.29	ERC0024
Economic Regulation of Transmission Services	AEMC	AEMC	Yes	16-Feb-06	16-Nov-06	16-Nov-06	38.57	38.57	ERC0001
Alternative Snowy Region Boundary (Discontinued)	Macquarie Generation	Corporate	No	16-Feb-06	22-Mar-07		56.57		ERC0084
Abolition of Snowy Region	Snowy Hydro Limited	Corporate	Yes	12-Jan-06	30-Aug-07	30-Aug-07	84.00	84.00	ERC0016
Advocacy Panel	MCE	Government	Yes	12-Jan-06	15-Jun-06	1-Jul-06	21.86	24.14	ERC0019
Process for Region Change (formerly called Region Boundaries)	MCE	Government	Yes	12-Jan-06	20-Dec-07	1-Jul-08	99.71	127.00	ERC0005
Reliability Safety Net Extension	Reliability Panel	AEMC	Yes	23-Dec-05	11-May-06	18-May-06	19.71	20.71	ERC0018
Reform of dispute resolution process for the Regulatory Test	MCE	Government	Yes	23-Dec-05	29-Jun-06	1-Jul-06	26.57	26.86	ERC0003
Statement of Opportunities Update	NEMMCO	NEMMCO	Yes	2-Dec-05	13-Apr-06	20-Apr-06	18.71	19.71	ERC0017

Title	Proponents	Type of Entity	Rule Made?	Date Initiated	Date Determined	Date Commenced	Weeks (Initiated - Determined)	Weeks (Initiated - Commenced)	Reference
TransGrid Participant Derogation (Treatment of Contingent Projects (Interim Arrangements))	TransGrid	Corporate	Yes	20-Oct-05	27-Jul-06	27-Jul-06	39.57	39.57	ERC0012
Reform of the Regulatory Test Principles	MCE	Government	Yes	12-Oct-05	30-Nov-06	30-Nov-06	58.29	58.29	ERC0002
Transmission Last Resort Planning	MCE	Government	Yes	12-Oct-05	8-Mar-07	15-Mar-07	72.29	73.29	ERC0004
Review of the Snowy regional boundary by Macquarie Generation	Macquarie Generation	Corporate	No	1-Jul-05					ERC0006
Management of negative settlement residues in the Snowy Region	Hydro Tasmania, International Power, LYMMCO, NEMMCO, NRG Flinders, Southern Hydro	Mixed (Public / Private)	Yes	1-Jul-05	14-Sep-06	1-Nov-06	61.86	68.57	ERC0007
Publication of Information for Non-scheduled Generation	NEMMCO	NEMMCO	Yes	1-Jul-05	15-Dec-05	12-Jan-06	23.43	27.29	ERC0010
Review of operating incidents	NEMMCO	NEMMCO	Yes	1-Jul-05	2-Feb-06	2-Feb-06	30.14	30.14	ERC0014
System restart ancillary service arrangements and pricing under market suspension	NEMMCO	NEMMCO	Yes	1-Jul-05	20-Apr-06	20-Apr-06	41.29	41.29	ERC0011
Revision to dispatch pricing due to manifestly incorrect inputs	NEMMCO	NEMMCO	Yes	1-Jul-05	17-Nov-05	1-Jun-06	19.43	47.14	ERC0009
Recovery of negative inter-regional settlements residue	NEMMCO	NEMMCO	Yes	1-Jul-05	30-Mar-06	1-Jul-06	38.43	51.43	ERC0008
WACC - Alignment of Reviews	AEMO	AEMO	No						
Price Variations in Exit Fee Contracts	Donald Murray Lloyd (private individual)	Individual	No						RRC0004