ATA response to the Finkel Review

Overall response

The *Independent Review into the Future Security of the National Electricity Market* (the "Finkel Review") is an extensive report. It considers a wide range of current and future National Electricity Market issues relating to the price, security, reliability and emissions intensity of the National Electricity Market (NEM).

It contains over 50 specific recommendations for future improvements to the NEM – many of which, if implemented by government, would considerably improve the operation of the wholesale market, the electricity grid and outcomes for electricity consumers.

As with all major reports of this nature, there are issues that Dr Finkel seeks to influence directly; whilst there are others that are left to government to decide upon.

A "Clean Energy Target" (CET) is the centrepiece of the report's recommendations. A CET would, in practice, work similarly to an expanded Renewable Energy Target (RET) – a federal policy in place since 2001.

The CET would offer revenue to "clean" energy projects, in addition to the wholesale price of electricity. Certificates would be awarded to eligible generators based on their emissions intensity. The CET would not penalise high emissions generators (e.g. gas or coal) in the same way a carbon tax or emissions trading scheme would.

The CET will have an emissions intensity cap: only generators with emissions below the cap would be eligible for certificates. A zero-emissions generator (e.g. solar or wind) would receive the full value of each certificate created. A low-emissions generator (e.g. gas) would receive partial value based on its emissions intensity relative to the cap. This means that while low-emissions generators will receive some incentives, zero-emissions ones will receive more.

The modelling in the report has been carried out assuming an emissions intensity cap of 0.6 tonnes per megawatt hour (0.6t/MWh). However Dr Finkel leaves the decision as to what cap to set to the federal government. The setting of the cap is critical to determining future pathways for different generation technologies.

It is broadly agreed that a cap of 0.6t/MWh would see new investment in both renewable energy and gas technology for electricity generation, but no new investment in clean coal or carbon capture & storage technologies (CCS).

A cap of 0.7t/MWh would likely incentivise renewables, gas and clean coal, but not CCS[1]. A cap of 0.75 or 0.8t/MWh might incentivise all three[2]. Still it must be remembered that the higher the emissions, the less the incentive.

One of the key arguments against any new investment in gas, clean coal or CCS technology is that all three now have a higher cost of electricity generated than for wind and solar. At the same time, high penetrations of wind and solar do require a level of storage capacity across the electricity grid. Modelling in the report

[1] http://reneweconomy.com.au/clean-australias-clean-coal-power-stations-14224/
[2] http://www.afr.com/business/energy/minerals-council-spruiks-clean-coal-role-in-paris-goals-20170612-gwplst

and elsewhere suggests that even with the additional cost of storage, wind and solar are still no more expensive than gas and significantly cheaper than clean coal or CCS[3].

Given this, and given the lack of commercial experience with clean coal and CCS, ATA sees no reason to provide any incentives to clean coal or CCS within the CET. ATA also sees no reason for coal generation to exist in 2050, at which point the world needs to have decarbonised to net zero emissions. Australia does not need coal generation from a price, security, reliability or emissions perspective. This means setting the eligibility cap for the CET no higher than 0.6t/MWh.

The ANU has found that in the long term, the cheapest generation option is wind and solar, supported by energy storage and additional transmission lines.[4] In the future, generators burning fossil gas will not be required, except perhaps for supplementary energy during an occasional cloudy, calm week.

However, it will take many years to deploy enough energy storage to support a fully-renewable grid. In the meantime, a surge of new solar and wind farms is coming.[5] In some parts of the grid, new fast-response gas generation may be required to balance this intermittent supply.

Another decision that Dr Finkel has left to government is the emissions reduction target from the electricity sector. The report's modelling was carried out assuming the same percentage reduction (28%) in the electricity sector as for the wider economy. This is in line with Australia's current Paris commitment of a 26-28% reduction on 2005 levels by 2030.

Notwithstanding the scientific credibility[6] of our current 2030 target, the energy sector should deliver a higher than proportionate part of whatever national target is selected, as:

- energy accounts for up to 40% of our national emissions profile and remains the largest contributing sector; and
- with commercially proven and low cost technologies, abatement in the energy sector is easier than in others such as agriculture and transport; and
- a cleaner energy sector assists efforts in other areas, for example electric transport.

Ultimately, if Australia had a single carbon price across the entire economy, the total cost of meeting future targets would be lower than using a CET plus policies in other sectors; and the energy sector would deliver a greater share of total abatement.

The Finkel report is also silent on small-scale technology certificates, i.e. the up-front "rebate" for solar systems and efficient hot water. ATA favours retaining the current arrangements, including the phase-out which commenced in 2017.

In contrast to these policy considerations sits the politics of climate and energy policy. In order for Australia to have a singular, national energy policy that includes climate considerations on par with other energy policy objectives, a bipartisan approach will be required. Without both major parties committed to a long term, coherent national policy, the level of investment required to significantly change our generation mix will not materialise.

Whilst not perfect in regards to specific items, the Finkel plan does provides a framework for implementing a long term plan that will significantly alter investment behaviour in generation now and over the years to come. Once in place, future governments will have the opportunity to review and adapt aspects of the framework to better meet future policy goals. And there are many other recommendations that, if implemented, would significantly improve the way our electricity system is operated and improve outcomes for consumers.

In 2009, most environment groups across Australia either formally opposed or publicly criticised Kevin Rudd's emissions trading scheme, largely on the basis of its soft targets. They had a point; but this

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[3] See pages "iii" and "v" at:
http://www.co2crc.com.au/wp-content/uploads/2016/04/LCOE_Report_final_web.pdf

[4] http://www.anu.edu.au/news/all-news/hydro-storage-can-secure-100-renewable-electricity
[5] https://www.cleanenergycouncil.org.au/news/2017/February/2017-renewable-energy-projects-snowy-hydro.html
[6] http://www.abc.net.au/news/2015-08-14/emission-reduction-targets-not-enough-climate-change-authority/6699034

approach gave opponents of any action on climate all the ammunition they needed to destabilise both major parties and prevent any integrated climate and energy policy.

Eight years later, here we are again: an imperfect policy on climate but one that has broader merit and, in ATA's view, is substantially better than current arrangements. We will be working to advance the interests of ATA members and Australian consumers – particularly with regard to distributed generation, energy efficiency and other demand-side measures – as the Finkel review is considered and acted upon by government and energy market institutions.

ATA has reviewed the entire report and provides the following responses below to each of the recommendations contained within.

ATA response to specific report recommendations

(The numbered items below are the report's recommendations, with our responses in the blue boxes.)

Preparing for next summer

1.1 By end-September 2017, the Australian Energy Market Operator should publish an independent third party review of its:

- Short-term demand forecast methodology.
- FY2018 summer forecast.
- Preparedness for the FY2018 summer.

> **VERY WELCOME.** Forecasting is increasingly important in managing the energy system. Independent review is a solid step to improving on current forecasting approaches.

Increased security.

2.1 A package of **Energy Security Obligations** should be adopted. By mid-2018 the Australian Energy Market Commission should:

- Require transmission network service providers to provide and maintain a sufficient level of inertia for each region or sub-region, including a portion that could be substituted by fast frequency response services.
- Require new generators to have fast frequency response capability.
- Review and update the connection standards in their entirety.
- The updated connection standards should address system strength, reactive power and voltage control capabilities, the performance of generators during and subsequent to contingency events, and active power control capabilities.
- To be approved for connection, new generators must fully disclose any software or physical parameters that could affect security or reliability.
- Thereafter, a comprehensive review of the connection standards should be undertaken every three years.

> ***VERY WELCOME.*** *This is all critical to managing a system characterised by diverse and distributed generation resources.*

2.2 A future move towards a market-based mechanism for procuring fast frequency response (as proposed as a subsequent measure in the System Security Market Frameworks Review) should only occur if there is a demonstrated benefit.

2.3 By mid-2018, the Australian Energy Market Operator and Australian Energy Market Commission should:

- Investigate and decide on a requirement for all synchronous generators to change their governor settings to provide a more continuous control of frequency with a deadband similar to comparable international jurisdictions.

- Consider the costs and benefits of tightening the frequency operating standard.

2.4 By mid-2018, the Australian Energy Market Operator should take steps to ensure the black system restart plan for each National Electricity Market region clearly identifies the roles of the parties involved at each stage of the restoration process, and includes regular testing of black start equipment and processes.

> ***VERY WELCOME.*** *Frequency control is increasingly important to maintain reliability, and these recommendations make a lot of sense. The SA blackout proved the necessity of* ***2.4****. (Some system restart facilities were unable to start.)*

2.5 By mid-2018, the COAG Energy Council should direct the Australian Energy Market Commission to review the regulatory framework for power system security in respect of distributed energy resources participation.

By mid-2019, the Australian Energy Market Commission should report to the COAG Energy Council on proposed draft rule changes to better incentivise and orchestrate distributed energy resource participation to provide services such as frequency and voltage control.

> ***VERY WELCOME*** *inasmuch as it is very necessary. Distributed energy has a huge role in the future grid. It needs to be well integrated and sufficiently governed to work with and not against the broader system. More regulation may well put some limits on DER owners to do as they please with their generation – but it will also give them opportunities to participate in the emerging grid services markets and be appropriately rewarded for it.*

2.6 The COAG Energy Council, in addition to its project on energy storage systems, should develop a data collection framework (or other mechanism) to provide static and real-time data for all forms of distributed energy resources at a suitable level of aggregation. The project should be completed by mid-2018.

> ***WELCOME.*** *This is already necessary for better distribution and transmission planning, and will be important in the future for ancillary markets that deliver security and reliability.*

2.7 The Australian Government should lead a process to regularly assess the National Electricity Market's resilience to human and environmental threats. This should occur by mid-2019 and every three years thereafter.

2.8 By end-2018, the Australian Energy Market Commission should review and update the regulatory framework to facilitate proof-of-concept testing of innovative approaches and technologies.

2.9 Proof-of-concept testing of innovative grid-scale solutions will be required for as long as technology is continuing to rapidly evolve. A funding source for trials by the Australian Energy Market Operator and the Australian Renewable Energy Agency should be assured for the long-term.

> ***VERY WELCOME.*** *Technology continues to evolve and the transitioning energy system brings unanticipated challenges. Funding and a strategy for exploring new ways to drive and support the transition and deliver the necessary services to a more diverse grid is critical.*

2.10 An annual report into the cyber security preparedness of the National Electricity Market should be developed by the Energy Security Board, in consultation with the Australian Cyber Security Centre and the Secretary of the Commonwealth Department of the Environment and Energy.

The annual report should include:

- An assessment of the cyber maturity of all energy market participants to understand where there are vulnerabilities.
- A stocktake of current regulatory procedures to ensure they are sufficient to deal with any potential cyber incidents in the National Electricity Market.

- An assessment of the Australian Energy Market Operator's cyber security capabilities and third party testing.
- An update from all energy market participants on how they undertake routine testing and assessment of cyber security awareness and detection, including requirements for employee training before accessing key systems.

The initial report should be completed by end-2018.

2.11 In recognition of the increased severity of extreme weather, by end-2018 the COAG Energy Council should develop a strategy to improve the integrity of energy infrastructure and the accuracy of supply and demand forecasting.

> ***VERY WELCOME.*** *See **1.1** above. Forecasting is increasingly important in operating the grid and the whole energy system.*

2.12 By mid-2019, the COAG Energy Council should facilitate the development of a national assessment of the future workforce requirements for the electricity sector to ensure a properly skilled workforce is available.

A reliable and low emissions future – the need for an orderly transition.

3.1 By 2020, the Australian Government should develop a whole-of-economy emissions reduction strategy for 2050.

> ***VERY WELCOME.*** *This will underpin a host of other policy mechanisms and is a critical ingredient for policy certainty. In particular, is how different sectors' emissions reduction targets can be set in order to deliver the overall Paris target of 28% by 2030. Finkel notes that greater than 28% reduction is probably more feasible in the energy sector than some others, though it must be balanced against security, cost, and reliability.*

3.2 There is an urgent need for a clear and early decision to implement an **Orderly Transition** that includes an agreed emissions reduction trajectory, a credible and enduring emissions reduction mechanism and an obligation for generators to provide adequate notice of closure.

- The Panel **recommends** that the Australian and State and Territory governments agree to an emissions reduction trajectory for the National Electricity Market.
- Both a Clean Energy Target and an Emissions Intensity Scheme are credible emissions reduction mechanisms because they minimise costs for consumers, are flexible and adaptable, and satisfy security and reliability criteria. Both mechanisms are shown to deliver better price outcomes than business as usual.
- With the additional context that a Clean Energy Target can be implemented within an already well understood and functioning framework, and has better price outcomes, the Panel **recommends** a Clean Energy Target be adopted.
- To support the orderly transition, the Panel **recommends** a requirement for all large generators to provide at least three years' notice prior to closure. The Australian Energy Market Operator should also maintain and publish a register of long-term expected closure dates for large generators.

These recommendations are made in the context of the need for a Generator Reliability Obligation and the Energy Security Obligations. (Recommendations 3.3 and 2.1).

> ***WELCOME OVERALL*** *but a bit of a mixed bag.*
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> *An **orderly transition** is absolutely critical – it requires policy certainty to improve market and investment certainty and enable planning to minimise the impacts of a changing generation mix on security and reliability*
>
> ***Emissions reduction trajectory for the NEM** is essential for to guide policy settings for Clean Energy Targets and other emissions reduction mechanisms.*

Clean Energy Target (CET) is less than ideal. An emissions intensity scheme (or trading scheme or a simple carbon tax) would likely be more effective at phasing out coal – because those mechanisms penalise high-emission generation – and probably more able to provide a revenue stream to compensate vulnerable consumers for increased energy costs. The (CET) doesn't penalise dirty generators, it just rewards clean (and almost-clean) ones. Still, by rewarding zero-emission more than very-low emission generators it will help drive the generation mix and emissions reduction we need. The questions are how thoroughly and how quickly.
Finkel's note that the CET can be implemented within an existing framework (that for the Renewable Energy Target) is significant, and – given the poisonous political climate around emissions reduction –when combined with its light touch on coal generation, it's probably more implementable than any of the other options.

Requiring three-year notification of closure of generators will better enable governments and communities to develop and implement transition plans for workers and related industries, give time for the Australian Energy Market Operator (AEMO) to plan for the change in order to mitigate impacts on capacity and reliability, and provide more investment certainty for other existing or new generators to scale up to fill the gap. It's difficult though to imagine how this could be implemented and work in practice. But some generators' submissions to the review noted that planning timeframes for generation assets are longer than this, so it seems feasible.

3.3 To complement the orderly transition policy package, by mid-2018 the Australian Energy Market Commission and the Australian Energy Market Operator should develop and implement a **Generator Reliability Obligation**.

The Generator Reliability Obligation should include undertaking a forward looking regional reliability assessment, taking into account emerging system needs, to inform requirements on new generators to ensure adequate dispatchable capacity is present in each region.

SATISFACTORY. Having the right mix of energy resources to deliver the necessary supply and meet demand with certainty is critical for sufficient reliability and security. This is one way to do it. Finkel's recommendation is for this obligation to apply only in regions without a sufficient surplus dispatchable generation, so it won't apply to all intermittent generators. Modelling in the report suggests that the additional cost still keeps wind and solar competitive with gas and coal.

There are probably other ways to meet this need. For example, ensuring the market appropriately incentivises grid-scale storage to provide a range of ancillary services as well as backup dispatchable energy resources might spread the additional cost more evenly around different generation technologies. But the Finkel recommendation will probably work pretty well; and some or more of the additional cost to renewable generators may be offset by market advantages of being able to offer more firm generation.

3.4 By mid-2018, the Australian Energy Market Operator and the Australian Energy Market Commission should assess:

- The need for a Strategic Reserve to act as a safety net in exceptional circumstances as an enhancement or replacement to the existing Reliability and Emergency Reserve Trader (RERT) mechanism.
- The effectiveness of the new licensing arrangements being developed for generators in South Australia and whether they should be applied in other National Electricity Market regions.
- The suitability of a 'day-ahead' market to assist in maintaining system reliability.

WELCOME. *Additional* ***off-market capacity*** *that can be dispatched by AEMO as needed through a more nuanced RERT mechanism, as proposed in the report, is an appropriate way to address periodic supply shortage issues while the market is evolving. The new South Australian* ***requirements for generators*** *to control the rate of change for power output are a direct response to some of the reliability and security challenges of high penetration of non-synchronous and intermittent generation and are worth exploring for their applicability in the larger market. A day-ahead market could reduce gaming of the pool price (by minimising late re-bidding) and help encourage more demand management.*

More efficient gas markets.

4.1 By end-2017, the Australian Energy Market Operator should require generators to provide information on their fuel resource adequacy and fuel supply contracts, to enable it to better assess fuel availability.

4.2 By mid-2018, the Australian Energy Market Operator should be given a last resort power to procure or enter into commercial arrangements to have gas-fired generators available to maintain reliability of electricity supply in emergency situations.

4.3 Governments should adopt evidence based regulatory regimes to manage the risk of individual gas projects on a case-by-case basis. This should include an outline on how governments will adopt means to ensure that landholders receive fair compensation.

4.4 By mid-2019, the COAG Energy Council should bring together relevant regulatory and scientific data on gas in an informative and easily accessible format.

SATISFACTORY. *Gas markets are certainly causing problems in the electricity market. But the report seems to assume too much that gas will have a significant ongoing role as a generation fuel, though that seems far from certain. It also seems to view supply expansion as the key to stabilising gas prices, despite the high cost of doing so (via unconventional gas) and the role of the export market in diverting domestic supply from domestic markets.*

Recommendation 4.3 targets the blanket bans on unconventional gas projects by some state governments. State governments have considerable scope to set policies that reshape or limit the ambit of national policy, in response to local conditions or policy priorities. We support the role of state governments to continue to do so.

Overall, most of these recommendations – creating better information and more transparency –are positive steps that will help manage the unfortunate but probably necessary presence of gas as a complementary electricity generation fuel during the transformation of the energy system,.

Improved system planning.

5.1 By mid-2018, the Australian Energy Market Operator, supported by transmission network service providers and relevant stakeholders, should develop an integrated grid plan to facilitate the efficient development and connection of renewable energy zones across the National Electricity Market.

5.2 By mid-2019, the Australian Energy Market Operator, in consultation with transmission network service providers and consistent with the integrated grid plan, should develop a list of potential priority projects in each region that governments could support if the market is unable to deliver the investment required to enable the development of renewable energy zones.

The Australian Energy Market Commission should develop a rigorous framework to evaluate the priority projects, including guidance for governments on the combination of circumstances that would warrant a government intervention to facilitate specific transmission investments.

5.3 The COAG Energy Council, in consultation with the Energy Security Board, should review ways in which the Australian Energy Market Operator's role in national transmission planning can be enhanced.

5.4 By end-2017, the COAG Energy Council should finalise and implement the proposed reforms to the Limited Merits Review regime.

5.5 By mid-2020, the COAG Energy Council should commission a further review of the Regulatory Investment Test for Transmission to ensure the suite of reforms implemented following the 2017 COAG Energy Council review have been effective in addressing stakeholder concerns.

A review of the Regulatory Investment Test for Distribution should be conducted at the same time.

> ***VERY WELCOME.*** *These are all really important. Holistic planning and forward-looking reform are critical if the market rules and structures are to support the network of the future. Done right, this will result in a National Energy Market that will readily support integration of new technologies, demand responses, and more distributed generation. In particular, system planning could be informed by updated modelling of future 100 per cent renewable scenarios, as undertaken by AEMO in 2012 but not since repeated.*

Rewarding consumers.

6.1 As part of its inquiry into the electricity retail market, the Australian Competition and Consumer Commission should make recommendations on improving the transparency and clarity of electricity retail prices to make it easier for customers to:

- Understand and compare prices.
- Be aware when the terms of their offer change or their discounts expire.
- Make more informed decisions about investing in rooftop solar photovoltaic, batteries or energy efficiency measures.

The Australian Competition and Consumer Commission should also consider whether the Australian Energy Regulator requires further powers to collect and publish and share retail price data.

> ***VERY WELCOME.*** *Price transparency is critical to help consumers keep their energy costs down. If households are already getting fair pricing, any cost impacts from market transformation will be softened.*

6.2 The Energy Security Board's annual *Health of the NEM* report to the COAG Energy Council should include the impact of changes in the market on the price and availability of long-term retail contracts for commercial and industrial customers.

6.3 By mid-2020, the COAG Energy Council should facilitate measures to remove complexities and improve consumers' access to, and rights to share, their energy data.

> ***VERY WELCOME.*** *Customers' rights to their data are not much help if access is difficult. Customer data will be more important in the future as more and more people use energy services that need to access customer data to serve them.*

6.4 The Energy Security Board's annual *Health of the NEM* report to the COAG Energy Council should report on affordability issues and proactively identify emerging issues.

6.5 By mid-2018, the COAG Energy Council should accelerate its work on applying consumer protections under the National Energy Retail Law and National Energy Retail Rules to new energy services, and also consider safety issues as part of that work.

> ***VERY WELCOME.*** *Customers using new energy services are vulnerable to poor market outcomes because these services fall outside the remit of energy-specific regulation. Expanding the consumer protection framework to apply to all energy services, not just the retail sale of energy, is essential. (Further discussion of this is in our paper* Empowering the Future: Appropriate Regulation and Consumer Protections in Emerging Energy Markets*.)*

6.6 The COAG Energy Council should engage with relevant portfolio areas including housing, and with state, territory and local governments, to identify:

- Opportunities to accelerate the roll out of programs that improve access by low-income households to distributed energy resources and improvements in energy efficiency.
- Options for subsidised funding mechanisms for the supply of energy efficient appliances, rooftop solar photovoltaic and battery storage systems for low-income consumers.

> ***VERY WELCOME.*** *As energy efficiency and home generation become more important in managing energy costs, low-income consumers risk being left further behind, and paying a larger share of the cost of the energy grid. Government intervention is needed to solve this social policy problem.*

6.7 The COAG Energy Council should direct the Australian Energy Market Commission to undertake a review to recommend a mechanism that facilitates demand response in the wholesale energy market. This review should be completed by mid-2018 and include a draft rule change proposal for consideration by the COAG Energy Council.

> ***VERY WELCOME.*** *A well-designed demand response mechanism would enable demand responses to be sold in the wholesale market in direct competition with generation. This can lower demand, lower emissions, and lower customers' energy consumption and costs. A good demand response mechanism will be one of the most important reforms in the history of the NEM.*

6.8 By mid-2018, the COAG Energy Council or the Australian Energy Market Commission should commission financial modelling of the incentives for investments by distribution network businesses, to test if there is a preference for capital investments in network assets over operational expenditure on demand-side measures.

If this work demonstrates that there is a bias towards capital expenditure, the COAG Energy Council should direct the Australian Energy Market Commission to assess alternative models for network incentives and revenue-setting, including a total expenditure approach. This should be completed by end-2019.

> ***VERY WELCOME.*** *Network costs are very significant in the NEM, and will become more significant as generation is diversified and distributed. Regulatory incentives should encourage the best response in every situation.*

6.9 By mid-2018, the COAG Energy Council should direct the Australian Energy Market Commission to undertake a review of the regulation of individual power systems and microgrids so that these systems can be used where it is efficient to do so while retaining appropriate consumer protections.

The Australian Energy Market Commission should draft a proposed rule change to support this recommendation.

> ***VERY WELCOME.*** *This aligns with 6.5 and 6.8. In circumstances where a microgrid or stand-alone system is the most appropriate solution, it should be achievable under the same framework and with equivalent consumer protections as the mainstream grid.*

6.10 Governments should accelerate the roll out of broader energy efficiency measures to complement the reforms recommended in this Review.

> ***VERY WELCOME.*** *Energy efficiency is more than a complement to the other reforms proposed here: it's a key part of meeting emissions reduction targets, and also has a critical role in lowering household energy costs and lowering peak demand. Ideally, there would be several parts to a comprehensive energy efficiency strategy: clear consumer information; stronger minimum standards for appliances and buildings (including mandatory standards for existing rental properties); and funded programs*

to help low-income and vulnerable consumers acquire new, efficient appliances and fixtures.

Stronger governance.

7.1 By mid-2018, the COAG Energy Council should develop and maintain a strategic energy plan informed by the Panel's blueprint to guide the operation and evolution of the National Electricity Market.

7.2 The COAG Energy Council should immediately agree to establish an **Energy Security Board** to have responsibility for the implementation of the blueprint and for providing whole-of-system oversight for energy security and reliability.

- The Energy Security Board should be provided with the necessary funding to operate.
- The Energy Security Board should be comprised of an independent Chair, supported by an independent Deputy Chair, with the Chief Executive of the Australian Energy Market Operator and the Chairs of the Australian Energy Regulator and the Australian Energy Market Commission as members.
- Administrative support for the Energy Security Board should be provided by the Australian Energy Market Operator.

7.3 By mid-2018, COAG leaders should agree to a new Australian Energy Market Agreement that recommits all parties to:

- Taking a nationally consistent approach to energy policy that recognises Australia's commitment in Paris to reduce emissions and governments' commitment to align efforts to meet this target with energy market frameworks.
- Notifying the COAG Energy Council if they propose to take a unilateral action that falls within the scope of Australian Energy Market Agreement prior to taking the action.
- Within 28 days of notification, the Energy Security Board will provide advice to the COAG Energy Council on the impacts of the proposed action taking into account the objectives of Australian Energy Market Agreement.

7.4 By end-2017, the COAG Energy Council should commence annual public reporting to COAG leaders on its priorities for the next 12 months and progress against the strategic energy plan.

7.5 By mid-2018, the COAG Energy Council, in consultation with the Energy Security Board, should issue new Statements of Expectations to the Australian Energy Regulator and the Australian Energy Market Commission, and a Statement of Role to the Australian Energy Market Operator containing a comprehensive set of outcomes-based performance indicators.

7.6 By end-2017, the Energy Security Board should provide an inaugural, annual *Health of the NEM* Report to the COAG Energy Council describing:

- The performance of the system.
- Performance against whole-of-system key performance indicators.
- Opportunities for market development including actual and emerging risks.
- Progress against a Statement of Expectations.

7.7 The COAG Energy Council should request that the Australian Energy Market Commission, or alternatively the Energy Security Board or other suitable body, complete by end-2020 a comprehensive review of the National Electricity Rules with a view to streamlining them in light of changing technologies and conditions.

7.8 Recommendations of the Vertigan Review to expedite the rule-making process should be implemented by end-2017.

7.9 The Energy Security Board should prioritise work with energy market bodies, the COAG Energy Council, and other relevant stakeholders to further optimise the end-to-end rule change process.

7.10 By mid-2018, the COAG Energy Council should issue a Statement of Policy Principles to the Australian Energy Market Commission to provide further clarification and policy guidance on applying the National Electricity Objective in the rule-making process.

7.11 The COAG Energy Council should ensure that the Australian Energy Regulator and the Energy Security Board are adequately funded to undertake their responsibilities, including implementing the blueprint.

7.12 By end-2017, the Australian Energy Market Operator should update its Constitution by developing a new skills matrix for directors that will ensure appropriate representation of professional power systems engineering or equivalent expertise.

7.13 The three-year cooling off period for independent directors of the Australian Energy Market Operator should be reduced to six months.

7.14 By end-2018, the Energy Security Board, in collaboration with the Australian Energy Regulator, should develop a data strategy for the National Electricity Market.

- The initial design of the data strategy must be developed in consultation with industry bodies and consumer bodies, and be consistent with open government data principles.
- The Energy Security Board must report to the COAG Energy Council on the completion of the first stage. This should include costs for design and implementation for initial set up, plus indicative costs for ongoing maintenance of the key deliverables under the data strategy.
- The first phase of the data strategy must be completed by end-2017, with the functionality of the components of the strategy reviewed annually to ensure that they continue to be fit-for-purpose.

VERY WELCOME. *Governance has long been an issue in the NEM. These reforms could lead to more integrated and comprehensive planning and decision-making.*