THE HON ANGUS TAYLOR MP

MINISTER FOR ENERGY AND EMISSIONS REDUCTION

MB22-000451

- 6 APR 2022

Ms Anna Collyer
Chair
Australian Energy Market Commission
Level 15, 60 Castlereagh Street
SYDNEY NSW 2000

Dear Ms Collyer

The National Electricity Market (NEM) is undergoing a period of rapid change. As this process unfolds, managing the orderly replacement of existing capacity is critical to keeping the system reliable and secure, and keeping power prices down for consumers.

The recent announcement from Origin Energy to bring forward the closure of the 2,880 megawatt (MW) Eraring coal fired power station in New South Wales (NSW) to mid-2025 – seven years ahead of schedule – is just the latest in an emerging trend of early coal closures. This includes AGL's closure of the Bayswater power station in NSW as early as 2030 (brought forward from 2035) and the Loy Yang A power station in Victoria as early as 2040 (brought forward from 2048).

Recent experience shows that retirements can cause undesirable consequences such as reliability impacts and material increases in wholesale prices, especially when closures are not paired with investment in replacement capacity. The early closures announced in recent months represent a significant amount of capacity leaving the system, highlighting the need for urgent action to address impending risks.

It is critical that the energy market responds to the exit of generation by delivering replacement capacity. A key part of this is ensuring that market participants have both the necessary information and lead time to respond to generator exit.

Against this backdrop, I am concerned the current generator notice of closure requirement, initially established as a recommendation following the Review into the Future Security of the NEM (the Finkel Review), is no longer strong enough to support the timely delivery of replacement capacity.

For almost all technology types, the average lead time required to commit to and construct a new project is far greater than the 3.5 year notice period currently in the rules. This is particularly the case for those technologies able to provide like-for-like on-demand dispatchable capacity and system services.

To address this concern, I request the AEMC consider the attached proposal to amend the National Electricity Rules (NER) to strengthen the notice of closure arrangements by:

a. Extending the notice period from 3.5 years to a minimum of 5 years;

b. Including 'longer term mothballing' in notice of closure arrangements to avoid potential gaming of notice of closure arrangements where owners of a plant are able to effectively close generation assets by mothballing them without providing sufficient notice;

c. Introducing a new rule aimed at preventing intentional gaming of the notice of closure arrangements where owners of a plant announce a closure date without the intention to close at that date, creating a risk for potential investors in new generation.

Enhanced notice of closure arrangements will hold energy companies to account for their stations' ongoing operation as long as it is necessary to safeguard the reliability, security and affordability of the system.

These amendments will supplement other measures introduced in recent years, and those being progressed through the Post-2025 Energy Market Reforms, such as the development of a capacity mechanism for the NEM.

Should you wish to discuss any of the matters raised in this submission, please contact James White, General Manager, Transition Branch at the Department of Industry, Science, Energy and Resources.

Yours sincerely.

Angus Taylor

ANGUS TAYLOR

DEPARTMENT OF INDUSTRY, SCIENCE, ENERGY AND RESOURCES

Australian Government Rule Change Proposal to the Australian Energy Market Commission

Amending generator notice of closure arrangements in the National Electricity Market

1. Name and address of the rule change proponent

Name of proponent: The Honourable Angus Taylor MP, Minister for Industry, Energy and Emissions Reduction, on behalf of the Australian Government.

Address of proponent: Parliament House, Canberra, ACT

2. Summary

The Australian Government submits this request to the Australian Energy Market Commission (AEMC) to make any requisite changes to the National Electricity Rules (NER) the AEMC considers necessary.

The proposed rule change is for amendments to generator notice of closure arrangements in the National Electricity Market (NEM) to improve their appropriateness and effectiveness, and deliver in the long-term interests of consumers.

On-demand, dispatchable capacity exiting without replacement presents a significant risk to continued delivery of affordable, reliable power for consumers. We have seen the impact on prices in the past. The 2017 closure of the Hazelwood power plant saw average spot prices increase by 85 per cent on 2016 in Victoria. This had a cascading impact across the National Electricity Market, with prices up 32 per cent in South Australia for the same period, while New South Wales and Queensland were up 63 per cent and 53 per cent respectively. Consumers cannot afford to see a repeat of this.

It is critical that the energy market responds to the exit of generation by delivering replacement capacity. A key part of this is ensuring that market participants have both the necessary information and lead time to respond to generation exit.

For almost all technology types, the lead time required to make a final investment decision, obtain necessary approvals, and construct a new project is far greater than the 3.5 year notice period currently in the rules. This is particularly the case for those technologies able to provide like-for-like dispatchable capacity and system services.

The Government considers the current rule framework around notice of closure requirements and mothballing is weighted toward considering the impact on existing market participants. The risks to consumers of a gap in supply must be put first, and necessary steps taken to safeguard the uninterrupted delivery of affordable and reliable power.

The proposed rule change has 3 key elements:

I. <u>Extending the notice period from 3.5 years to a minimum of 5 years</u>

This rule change would extend the minimum notice period in cl 2.10.1(c2) of the NER (and cl 2.10.1(c3)(1)(i)) from 42 to 60 months (5 years) for all generators to which the current notice of closure requirements apply. This rule change is intended to ensure the market has sufficient notice to enable the most appropriate replacement of exiting generation. AEMO's 2021 Input and Assumptions workbook estimates the development lead time for a range of technologies, which includes time to undertake feasibility studies, secure necessary development approvals and construct the project. The lead time therefore reflects the shortest time before a technology can commence operation.

For almost all technology types, the lead time is far greater than 3.5 years, particularly those technologies able to provide like for like capacity and system services[1], such as gas (5 years, or 6 years if fitted with carbon capture and storage (CCS) capabilities) and pumped hydro (6 years). In separate advice prepared for the Government, the Infrastructure and Project Financing Agency (IPFA) suggests that the time to reach final investment decision and to complete construction can range from 6 to 9 years for gas and around 11 years for pumped hydro. Even solar (4-7 years), wind (6-8 years) and batteries greater than 100MW (2-4 years) commonly take far longer to come online than the 3.5 year notice period. The overall lead time is typically substantially greater than the construction time because it includes steps such as planning and environmental approvals, public and traditional owner consultation, completing connection agreements/approvals, securing offtake agreements and securing financing and a positive final investment decision.

Under the proposed rule, the minimum period would be extended from 3.5 years to 5 years – or from 42 months to 60 months. This provides the necessary longer lead time required to deliver replacement capacity. It reflects the minimum necessary to construct replacement projects, particularly those dispatchable generation projects relied upon to deliver the on-demand supply of energy and system services that will be lost upon the exit of existing thermal generation.

While increasing the lead time will impact the flexibility of existing generators, it is important to appropriately balance this against the needs of consumers and other market participants, to ensure they are protected from potential supply shortfalls and price shocks. Improved certainty about future significant changes in the market would be beneficial for many stakeholders.

The primary focus of this proposed rule change is to ensure replacement generation can provide the best outcomes for consumers in line with the National Electricity Objective, but there would also be benefits for the investors in replacement generation, and in allowing the Australian Energy Market Operator (AEMO) and other system planners to more accurately forecast future market conditions, ensuring reliability, affordability and security is maintained.

II. Including longer term mothballing within notice of closure arrangements

This amendment proposes to incorporate 'longer term mothballing' into existing notice of closure arrangements and separates mothballing into two definitions.

Mothballing is not defined in the NEL or the NER and there are a range of circumstances that could be construed as mothballing, from generators being offline for a short period of time to generators being offline indefinitely. Accordingly, this rule change proposes to provide greater clarity by having two separate definitions of mothballing:

- Seasonal mothballing: When a generator is not available to dispatch electricity into the NEM (other than for a forced outage or planned maintenance outage) as a result of its withdrawal due to fluctuations in demand over the year. This typically occurs in lower demand periods of the year. To meet this definition, a generator would be mothballed for no more than 9 months in any 12 month period.
- Longer term mothballing: When a generator is not available to dispatch electricity into the NEM (other than for a forced outage or planned maintenance outage) as a result of its longer term withdrawal, generally for reasons other than seasonal fluctuations and where it would typically take longer to restart the generator than seasonal mothballing. To meet this

[1] https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2022-integrated-system-plan-isp/current-inputs-assumptions-and-scenarios

definition, a generator would be mothballed for more than 9 months in any 12 month period.

Generators that are engaging in seasonal mothballing would not be subject to minimum notice of closure requirements. Issues with seasonal availability are being addressed through an existing rule change, *Enhancing Information on generator availability in MT PASA*[2], which is currently progressing as part of the ESB's Post-2025 reforms. The consultation period on the rule change closed on 3 March 2022. This rule change is designed to enhance information on generator availability it is expected to improve the granularity of the Medium Term Projected Assessment of System Adequacy (MT PASA) process by:

- Establishing the reporting of a unit's status through 'reason codes' for any lack of availability via MT PASA.
- Establishing the reporting of a unit's recall times to reach full availability after being offline via MT PASA.

While this additional information would enable AEMO to better maintain the reliability and security of the system, it is not sufficient to prevent possible gaming of the notice of closure provisions.

This proposed rule change would require generation owners that put units into longer term mothballing to meet notice of closure requirements. When providing notice, generators engaged in longer term mothballing will be required to specify the expected mothballing commencement and end date, the amount of time needed to bring the generator back to service. The generator will also be required to immediately notify AEMO of any change to these dates. This is to avoid potential sidestepping of the notice of closure requirements by generators, effectively closing generation assets by mothballing them indefinitely.

If a generator does not provide such notice, but it mothballs a unit for more than 9 months in any 12 month period, it would have breached the notice requirement and could be subject to a Tier 1 civil penalty.

Generators that fall within the definition of 'longer term mothballing' may be able to apply to the AER for an exemption from notice of closure requirements in limited circumstances. Criteria for the limited circumstances where an exemption may be granted will be developed by the AER.

III. Introducing a new rule prohibiting speculative notices

This rule would prohibit speculative closure notices and would also apply to notices under the proposed longer term mothballing rule change described above. Speculative notices of closure would be defined as notices that are provided to AEMO by the owner of a generator to gain the option to close or mothball on or after the date in the notification, but with no actual intention to close or mothball on that date.

The AER would investigate any notice that it suspected was speculative using its existing investigative and information gathering powers. In conducting its investigation the AER could take into account reasons why the generator is seeking to close or mothball, underlying evidence such as the date the formal decision was made and key analysis, evidence or supporting information relied on in making the decision. This could include technical condition reports and papers submitted to decision-making committees, relevant dates and records of considerations surrounding the formal decision, such as board or decision-making committee minutes, and any other relevant information.

[2] https://www.aemc.gov.au/rule-changes/enhancing-information-generator-availability-mt-pasa

This rule is intended to prevent generators from engaging in behaviour that could create uncertainty in the market and act as a deterrent to new investment. An example of this sort of behaviour is a generator providing the required notice period without a genuine intention to close or mothball on its specified date, and then amending its closure or mothball date and staying open. This would effectively give the generator the option to close or mothball at any point after the initial notice period.

Relevant Background

The Independent Review into the Future Security of the National Electricity Market (the Finkel Review) requested by the former COAG Energy Council in 2016 sought to take stock of the security and reliability of the NEM and provide advice to governments on a coordinated national reform blueprint. The Finkel Review highlighted a key challenge facing the NEM in the future would be the management of retiring coal fired generators as they reach the end of their lives.

The Finkel Review found the existing framework was not well suited to coordinating this process because 'the NEM's energy-only market framework encourages new investment through scarcity price signals created by a gap between the exit and entry of new capacity'. However, generators could retire with much shorter notice to the market than the time it takes for new capacity to be planned, financed and constructed, presenting a problem to future system security and reliability. The Review found that existing large generators would need to do more to assist the market to adjust to the impacts of their retirement.

In this context, the Review included a recommendation that all existing large electricity generators be required to provide at least 3 years' notice prior to closure in order to provide time for replacement capacity to be built and for affected communities to plan for change. The Review also recommended that AEMO should maintain and publish a register of long-term expected closure dates for large generators.

The former COAG Energy Council agreed to implement the recommendations of the review and requested the Energy Security Board (ESB) consider how these recommendations could be addressed by legislative changes.

At the request of the former COAG Energy Council, Dr Kerry Schott, then Chair of the ESB, submitted a rule change request requiring generators to provide AEMO the expected closure year for all their scheduled and semi-scheduled generation units, and to provide at least 3 years' notice of their intention to permanently close a generating unit by notifying AEMO of the date they wish to terminate the classification of the generating unit.

After considering and consulting on the rule change, the AEMC made a final rule on 8 November 2017. On 1 July 2019, the minimum notice period was amended to 42 months as part of the Retailer Reliability Obligation rules package.

Under the rule, failure to provide at least 3.5 years notice of closure, or failure to provide updated notice of any change to a closure date, will incur a Tier 1 civil penalty. The current Tier 1 civil penalty amount is set out in section 2AB(1)(c) of the National Electricity Law, whereby if the breach is by a body corporate, the maximum civil penalty is the greater of:

- $10,000,000; or
- Three times the value of the benefit gained from the contravening conduct

- 10 per cent of annual turnover in the preceding 12 months, if a court cannot determine the benefit obtained from the breach.

3. Shortcomings with existing arrangements

3.1 *Length of period is insufficient to enable like-for-like replacement*

In determining the length of notice a generator should be required to provide, the Finkel Panel suggested that 3 years provided an appropriate trade-off between the benefit of providing additional certainty for investors and the cost of limiting the decision making flexibility for generators. While a longer period of 5 years was considered, the AEMC decided this could place an unrealistic expectation of foresight on existing generators.

This position is reasonable in circumstances when closures are spaced out evenly across both time and location. However the unpredictability associated with upcoming closures, and the trend of earlier than expected closures, has resulted in significant volumes of capacity exiting the market concurrently, and often from the same region. For example, in NSW, the Liddell, Eraring, Vales Point B and Bayswater coal fired power stations have all brought their closure dates forward, and are all scheduled to retire by as early as 2030 and no later than 2033. This represents the exit of 8865 MW of dispatchable capacity over a relatively short time, putting at risk the affordability, reliability and security of the system.

Different lead times are required to plan, design and build different types of new generation, with the lead times for most generation types far exceeding the 3.5 years allocated under current rules.

Pumped hydro, in particular, can provide many of the same services as exiting generators, and may be a significant part of the most cost-efficient option to deliver consumers the same reliability and system security benefits as exiting generation. However, it is very unlikely that pumped hydro projects, highly technical and complex projects, could be delivered with 3.5 years notice.

Even where individual replacement projects can be delivered quickly, large volumes of exiting generation could require coordinated build of multiple projects, resulting in additional delays.

How would the requested rule change address this issue?

The proposed rule change would ensure there is a more balanced approach which provides a more realistic timeframe for replacement capacity to be built that adequately replaces the services of exiting generation. The extra time will ensure the right mix of replacement technologies are brought in, instead of relying on potentially inefficient options that are available in short timeframes but do not deliver long term benefits to consumers.

3.2 The existing notice of closure arrangements could be subject to gaming

<u>Longer term mothballing</u>

Currently, generators are able to engage in longer term mothballing without falling under existing notice of closure arrangements. Longer term mothballing typically occurs where a plant is mothballed for an extended period of time or in a way that requires significant time or expense to bring the mothballed plant back to operation. By mothballing a plant instead of closing it, generators can potentially game notice of closure arrangements by effectively closing generation assets through longer term mothballing.

The potential for this phenomenon has been observed in South Australia, where in April 2012 the Playford B power station was effectively shut down through longer term mothballing before its official closure in March 2016.

Speculative notices

Generators could potentially game the system of early closure announcements by:

- Announcing the early closure of generators 3.5 years in advance, even when they do not expect to close the generator at this date.
- Providing an amended notice of closure that is at a later date than that originally specified, effectively enabling the date of closure to be continually pushed back.

This type of activity would provide the owners of generation assets increased flexibility in terms of when these assets can be closed. However, it goes against the intention of the early closure framework, which is to provide clarity on the expected timeframe for generation closures so that the market has adequate time to respond and minimise potentially undesirable consequences in the market, such as a material increase in wholesale prices or impacts to reliability.

How would the requested rule change address this issue?

Longer term mothballing

This rule change would incorporate 'longer term mothballing' into existing notice of closure arrangements. When providing this notice, generators will be required to specify the expected mothballing commencement and end date, the amount of time needed to bring the generator back to service. The generator will also be required to immediately notify AEMO of any change to these dates. Breach of the notice of closure rule carries a Tier 1 civil penalty. This would provide a financial disincentive for generators to game notice of closure arrangements by effectively closing generation assets through longer term mothballing without providing sufficient notice.

Speculative notices

The proposed rule change would prohibit speculative early closure or mothballing notices where owners of a plant notify AEMO of a closure or mothball date as a way to gain the flexibility to close or mothball at any point after that date by providing an amended notice.

This rule change would carry a Tier 1 civil penalty, subject to having it listed in the *National Electricity (South Australia) Regulations* as a Civil Penalty Provision (CPP) with the unanimous approval of Ministers of the participating jurisdictions.

This rule, in conjunction with its listing as a CPP, would provide a financial disincentive for generators to engage in speculative behaviour that could act as a deterrent to new investment. Instead generators will be incentivised to only specify closure dates if they genuinely expect a generator to close on that date.

Relationship to the National Electricity Objective:

The National Electricity Objective is

> *"[T]o promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:*

- *Price, quality, safety and reliability and security of supply of electricity*
- *The reliability, safety and security of the national electricity system."*

The Government strongly supports the National Electricity Objective and believes that the proposed changes to notice of closure arrangements is closely aligned with this objective.

The changes proposed in this rule change request are intended to work together to make notice of closure a trusted, reliable and informative tool that signals the impending exit of capacity in the NEM.

This will promote an efficient investment response, and avoid situations where closures lead to undesirable outcomes for consumers. As a result, both the market and the system will be better able to deliver affordable, reliable, secure electricity in line with the long term interests of consumers.

Explanation of the expected potential impacts of the proposed rule change on those likely to be affected including costs and benefits

Benefits

The primary beneficiary of this rule change will be energy consumers. The NEM is undergoing a period of rapid change. As this process unfolds, delivering clarity and certainty in the market, particularly in support of the delivery of like-for-like dispatchable replacement capacity, is critical to keeping the system reliable and secure, and keeping power prices down for consumers. Strengthening existing notice of closure arrangements will provide clearer signals for potential investors in new generation projects around when replacement generation is needed to enter the market. Investment in projects that supply additional energy is likely to benefit consumers by increasing competition and placing downward pressure on prices. Strengthened notice of closure requirements will safeguard the reliability, security and affordability of the energy system that consumers use.

Costs

Ensuring longer term mothballing is captured under notice of closure arrangements will place some additional administrative cost on generators. Strengthening notice of closure provisions and the introduction of speculative closure announcements may have an impact on the operational flexibility currently extended to generators.

However, these costs must be balanced against putting the interests of consumers first by ensuring an uninterrupted supply of affordable and reliable power, and it is the Government's view that the current framework does not get this balance right.