

Advice regarding the Generator Engagement Project Agreement

On 22 May 2024, the NSW Government signed an Agreement with Origin Energy (Origin) to operate Eraring power station (Eraring) until August 2027. This is two years longer than the earliest closure date of August 2025 previously advised by Origin.

This document summarises the process and advice provided by the Department of Climate Change, Energy, the Environment and Water (Department) to the NSW Government on this Agreement.

Process

On 4 August 2023, the Electricity Supply and Reliability Check Up led by Cameron O'Reilly recommended the NSW Government engage with Origin on the closure of Eraring.

The NSW Government accepted this recommendation and approved an interagency steering committee to oversee engagement with Origin under the NSW <u>Direct Dealing Guidelines</u>.¹

NSW Government agencies followed the best practice set out in the Direct Dealing Guidelines for:

- Process, including formal discussions to invite a proposal, direct negotiation to develop a binding
 offer, and negotiations on a final binding offer with formal approval processes at each stage.
- Governance, including separating functions between a steering committee, an evaluation panel and a formal discussion / negotiation team.
- Evaluation, including seven evaluation criteria.

These groups were supported by a project team and external commercial, legal, technical, energy market, and probity advisors. Summaries of commercial and energy market advice are available at:

- ICA Partners Commercial advice.
- Endgame Economics Electricity market modelling.

A summary of the evaluation of Origin's proposal under each of the seven evaluation criteria is outlined below.

¹https://www.info.buy.nsw.gov.au/resources/direct-dealing-guidelines



Evaluation criteria 1: Justification

NSW Government agencies advised Origin's proposal met criteria for undertaking direct negotiations identified by the Independent Commission Against Corruption². These are:

- 1. Maintaining a temporary source of supply whilst a planned competitive process is yet to be finalised.
- 2. A counterparty is in a unique position to offer a solution that cannot be offered by competitors.

- The Australian Energy Market Operator (AEMO) forecasts a reliability gap if Eraring closes in 2025. The identified alternatives involve delivery risk or legislative risk, and are not certain to mitigate this risk.
- On 21 December 2023, the NSW Government released AEMO's 2023 Energy Security Target
 (EST) Monitor report. The report forecasts that if all committed and anticipated projects,
 including from the NSW Electricity Infrastructure Roadmap Tender 2 and Tender 3, are delivered
 on time, the EST is forecast to be met in each year with no breaches. However, the report notes
 AEMO has observed delays in projects' commissioning programmes. If delays are experienced,
 the report forecast a 757 megawatt breach in 2025-26.
- In March 2024, AEMO advised it would prepare a May Update to the 2023 Electricity Statement of Opportunities. In April, AEMO advised its outlook for NSW's reliability had significantly deteriorated in part because of more accurate assumptions about the location of peak demand.
- Committed and anticipated infrastructure projects are adequate to mitigate the electricity reliability risks from Eraring's closure. However, relying on timely delivery of replacement infrastructure would be a high-risk strategy given the observed delays in other projects.
- Tendering for additional firming infrastructure is unlikely to identify additional projects capable of operations before 2027-28.
- An extension of two of Eraring's four units is adequate to maintain reliability for NSW. There is uncertainty as to whether Origin will continue to operate Eraring without intervention.
- Origin is uniquely placed to extend Eraring's operations. Origin is the only party with a viable solution and who can address this reliability risk in the timeframe available.

² Independent Commission Against Corruption, 2018, *Direct Negotiations: Guidelines for Managing Risks*, accessed at https://www.icac.nsw.gov.au/ArticleDocuments/232/Direct%20Negotiations%20-%20guidelines%20for%20managing%20risks%20in%20direct%20negotiations%203Aug18.pdf.aspx



Evaluation criteria 2: Value for money

NSW Government agencies advised Origin's proposal represents value for money and is a costeffective and efficient option, which has appropriate regard to the allocation, management and mitigation of risks.

- Under certain price environments, Origin's proposal may not result in any financial assistance
 from the NSW Government. Noting this, the insurance provided by the State has an inherent
 value to Origin, even if it does not opt in. The proposal provides Origin with confidence to operate
 Eraring beyond August 2025, knowing there is potential downside protection.
- Origin's proposal is expected to provide a \$3.2 billion to \$3.5 billion net economic benefit in present value terms. Economic benefits include reductions in wholesale electricity generation costs (\$4.4 billion), increases in electricity reliability (\$0.3 billion) and avoided costs of providing system strength services (\$0.2 billion). These benefits outweigh the economic cost of increasing carbon emissions (\$1.1 billion), increased NSW Electricity Infrastructure Roadmap costs (\$0.2 billion) and potential payments to Origin (up to \$0.4 billion).
- Delaying Eraring's closure will place downward pressure on wholesale electricity prices. Energy
 market modelling price forecasts indicates that if Eraring continues to operate to August 2027,
 time-weighted average wholesale electricity prices are expected to be around \$55 per
 megawatt-hour lower in 2025-26 and \$40 per megawatt-hour lower in 2026-27 than if Eraring
 were to close in August 2025.
- The electricity market modelling indicates negligible impacts on new renewable and storage investment as a result, given the existing support for investment in new renewable generation and storage through the NSW Electricity Infrastructure Roadmap and Commonwealth's Capacity Investment Scheme.
- For projects in operation, the reduction in prices could have a material impact on the revenues
 they earn from merchant operations during the extension period. Most renewables projects in
 NSW have some component of merchant revenues as the Power Purchase Agreements are only
 written over a portion of the output.
- For projects in development or construction, it is unlikely that government intervention would have a significant impact as it typically takes 2-3 years to bring a project to operation.
- Investors may perceive Government intervention as risky and increase the perception of risk for new projects, addressing the uncertainty around the closure date of Eraring is likely to provide benefits to the energy transition.



Evaluation criteria 3: Whole-of-government impact

NSW Government agencies advised Origin's proposal was consistent with the NSW Government's plans and priorities.

Advice provided to the NSW Government included:

- The NSW Government is committed to achieving a net 50 per cent reduction in greenhouse gas
 emissions on 2005 levels by 2030. The Climate Change (Net Zero Future) Act 2023 has legislated
 this target. The extension of Eraring is consistent with the NSW Government's 2030 emissions
 reduction target, as Origin must deregister Eraring from the National Electricity Market by
 30 April 2029.
- Extending the operation of Eraring is estimated to increase net carbon emissions by around
 9.2 million tonnes across the National Electricity Market and around 14 million tonnes in NSW
 from 2025 to 2027. This will not impact the achievement of the NSW Government's 2030
 emissions reduction target. The gas, solar, wind and hydro generation that would have replaced
 Eraring's output is less emissions intensive, so emissions in NSW increase relative to the
 announced closure case if Eraring is extended.
- Restoring the State's fiscal position is a key priority for the State. In this context, there are two
 key factors that could drive a payment to Origin under its proposal: low wholesale electricity
 prices and high coal prices. The NSW Government is partially hedged against these scenarios as
 higher coal prices could lead to higher coal royalties for the NSW Government, and lower energy
 prices would be good for consumers (including NSW Government agencies).
- Ongoing implementation of the NSW Electricity Infrastructure Roadmap is a strategic priority for the NSW Government. Under the Roadmap, Eraring's generation capacity will be replaced by renewable generation, storage and transmission. Origin's proposal represents temporary supply while replacement generation is being built.
- The extension of Eraring is expected to have only a minimal impact on private investment in electricity infrastructure in NSW and across the National Electricity Market.
- Origin will work with the State to minimise the cost of managing ash from Eraring with a preference for reuse opportunities. Origin will use reasonable endeavours to maintain its ash reuse rate at the same (or better) level than its ash reuse rate as at the signing date.

Evaluation criteria 4: Counterparty returns / return on investment

NSW Government agencies advised Origin's proposal provides a return on investment to Origin which is proportionate to the risk exposure and industry standards.

Fact sheet



- Origin's proposal will share risks and profits to support a temporary extension to the operation of half of Eraring.
- Origin's proposal includes strong incentives for Origin to operate Eraring without government support if it is commercially viable to do so. If market conditions change (spike in coal prices or drop in electricity futures prices), Origin's proposal mitigates its financial losses from operating Eraring.
- The only scenario under which Government would pay is if Origin has opted-in, and then makes a loss. In this case, support will be provided for the equivalent of two of four units at Eraring.
- Origin retains the rehabilitation costs of Eraring from when it was purchased from the State.

Evaluation criteria 5: Capability and capacity

NSW Government agencies advised Eraring can safely and reliably produce a minimum of 6 terawatt hours each year over the underwrite period.

Advice provided to the NSW Government included:

- Eraring's condition makes it possible for Origin to operate it safely and reliably until at least August 2027, provided a series of identified risks are managed.
- Origin's forecasts suggest the Eraring ash dam has adequate capacity up to at least August 2027 without additional expansion beyond planned works commencing in 2024-25.
- While there is ongoing rectification works at the ash dam to address issues with its structural integrity, capital works relating to the stability of the ash dam are always at Origin's cost.
- The capital and operating budget proposed by Origin is appropriate for the maintenance required to ensure safe operations of all four Eraring generating units to August 2027.
- Coal unloading infrastructure has adequate capacity to operate to August 2027. Origin has procedures in place to procure coal at sufficient volumes and quality.
- Origin has committed to target the procurement of sufficient supply of coal to generate 6 terawatt hours in each opt-in year by the end of the prior calendar year.
- Origin has also committed to maintaining the workforce at substantially the same level, which means experienced resources are available to continue operations.

Evaluation criteria 6: Affordability

NSW Government agencies advised Origin's proposal can be reasonably accommodated within NSW Government's fiscal strategy.

Fact sheet



- The State's payment cap is clearly defined under Origin's proposal and can only be increased under specific circumstances.
- Under Origin's proposal, Origin must mitigate additional costs and make commercially reasonable decisions.
- Under certain scenarios the State may not need to make any payments to Origin, and some scenarios the State could receive a portion of Eraring's profits.
- Even if the State were to pay Origin the maximum amount in both years under Origin's proposal, it would still be regarded as manageable within the NSW budget.
- If Eraring was not extended from 2025 to 2027, and electricity prices increased, consequential intervention measures (such as bill relief) could far outweigh the maximum amounts under Origin's proposal.
- The requirement for Origin to opt-in gives the NSW Government sufficient time to include in the following year's budget an appropriation to cover anticipated payments.
- Electricity price decreases, as a key driver of an underwrite payment, would represent savings to the NSW Government as it is a material electricity consumer. Conversely, coal prices increasing, as another potential driver of an underwrite payment, would represent positive impacts to the NSW budget by increasing coal royalties.

Evaluation criteria 7: Risk allocation

NSW Government agencies advised Origin's proposal presents an acceptable risk allocation and that there are limited risks associated with Origin's proposal creating a precedent for other power station owners going forward.

- A key area of risk is technical failure of Eraring, given its age. There is a risk that an unplanned unit failure could occur. The State's risk is mitigated by the reinstatement regime only applying if the failure occurs in an underwrite year (2025-26 or 2026-27). If repair costs are less than \$50 million, Origin bears the first \$10 million and the State's share of costs are subject to the payment cap. If total repair costs are greater than \$50 million, it is within the State's control as to whether Origin repairs the failure.
- Payments by the NSW Government related to an Eraring loss are capped at \$225 million per annum until 30 June 2027, which limits risk to the State.
- Origin has pass-through rights in respect of certain changes in law, including Commonwealth
 laws, to the extent such a change in law increases or decreases Origin's costs by more than
 \$10 million. In such circumstances, the payment cap would also be increased to reflect the
 State's share of the increase in Origin's costs (including the first \$10 million). However, increases



to the payment cap are limited to \$100 million in aggregate in each opt-in year and must apply only to costs associated with the applicable change in law. There are a range of exclusions for changes in law like taxation, announced increases to coal royalties and compliance with environmental licences.

Origin is required to comply with National Electricity Rules' good electricity industry practice, and applicable laws and authorisations in delivering the Eraring maintenance plan. However, Origin does not have any liability to NSW Government for breaches of these laws under the agreement. Origin has an incentive to maintain Eraring to support its retail customers. The State can audit compliance with the plan and terminate for a breach (subject to cure regimes) and exercise injunctive relief for any incremental non-fixed costs caused by the breach. Force majeure events are broadly defined, but within market standards and include events affecting the actual power station as well as events outside the power station's control such as supply chain events. However, Origin does not get force majeure relief until the capacity of more than one unit is affected.