

NSW Emergency Backstop Mechanism

Cost pass through application

June 2026



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Executive Summary

The Australian Energy Market Operator (“AEMO”) has identified a significant energy security and reliability risk caused by the complexities of managing Minimum System Load (“MSL”) – which occurs at times when demand for electricity is low and supply from solar is high.

AEMO has recommended that all mainland National Electricity Market (“NEM”) states and territories introduce an Emergency Backstop Mechanism to manage solar generation during Minimum System Load events.

In response to AEMO’s recommendation, the New South Wales (“NSW”) Government has developed the NSW Emergency Backstop Mechanism and placed a new regulatory obligation on Essential Energy and the other NSW Distribution Network Service Providers (“DNSPs”) to develop the capabilities to be able to increase operational demand, including through temporary curtailment of generation from rooftop and large-scale solar systems, when directed to by AEMO.

The Emergency Backstop Mechanism is a ‘last resort’ measure and only to be used after AEMO, Transgrid and NSW DNSPs have implemented other measures. Where AEMO issues a MSL 3 event direction, Essential Energy plans to respond sequentially through actions with least customer impact to higher customer impact.

On 10 December 2025, the NSW Minister for Energy amended Essential Energy’s distribution licence conditions to include the NSW Emergency Backstop Mechanism as a new regulatory obligation. These licence conditions were further amended by the NSW Minister for Energy in June 2026. Upgrading Essential Energy’s systems and processes to be able to comply with these new obligations involves increased costs. Essential Energy are submitting this cost pass through application to the Australian Energy Regulator (“AER”) to seek the recovery of the increased costs Essential Energy will incur.

Essential Energy’s current 2024-29 distribution determination included funding to implement Essential Energy’s planned Future Network Business Case, including the introduction of basic flexible export limits for a limited number of residential customers in this regulatory control period, with trials starting in 2026 and a full start in 2033. The new Emergency Backstop Mechanism regulatory obligations have fundamentally changed Essential Energy’s original plans as the new Emergency Backstop Mechanism obligations apply to a wider set of solar connections (from residential rooftop systems to large-scale solar farms) and require the application of a more mature solution much sooner than originally anticipated. Essential Energy has efficiently built off the base that was commenced under the original Future Network Business Case and pivoted these plans to address the scope and timing requirements of the Emergency Backstop Mechanism obligations.

The Emergency Backstop Mechanism regulatory obligations will result in Essential Energy incurring additional costs of \$46.98 million (real \$2023-24) this regulatory control period, with the majority of this being operating expenditure (opex). These costs are incremental to Essential Energy’s current 2024-29 regulatory allowances. This amount incorporates a reduction of \$13.8 million (real \$2023-24) to reflect Future Network Business Case funding in Essential Energy’s current 2024-29 regulatory allowances, that can be reallocated to the Emergency Backstop Mechanism program.

Essential Energy have implemented the preference of its Peoples Panel to recover the costs this regulatory control period. This results in total cost pass through amounts of \$29.3 million (nominal) in each of the last two years of the current regulatory control period. Essential Energy estimate this will increase a typical residential customer’s bill by approximately \$20 per annum (0.8%) and a typical small business customer’s bill by approximately \$40 (0.8%) per annum.

1. Event Details

1.1 Background and context

The NSW Emergency Backstop Mechanism (“EBM”) is a regulatory safeguard designed to protect electricity grid stability by temporarily curtailing rooftop and large-scale solar exports during periods of minimum operational demand, when system security is at risk¹. It applies to new or upgraded solar photovoltaic (“PV”) systems and uses Common Smart Inverter Profile – Australia (“CSIP-AUS”), and other communication methods, to enable remote interruption or curtailment of solar exports and generation by Distributed Network Service Providers (“DNSPs”) when directed by the Australian Energy Market Operator (“AEMO”). As the operational demand response provided by solar generating systems will only grow over time, the EBM also requires DNSPs to develop and maintain control over additional operational demand sufficient to deliver the forecast level of response required from the DNSP by AEMO under a Minimum System Load (“MSL”) event.

Why is it important?

- ▶ **Grid security:** The growing uptake of rooftop solar – now on ~943,000 homes and businesses across NSW, including ~310,000 in Essential Energy’s distribution area – and increasing number of embedded generator connections, means more non-scheduled electricity is being exported into the grid. When solar energy production is high, grid demand can fall below the minimum levels required to maintain system security and stability, posing challenges for AEMO in managing the grid effectively.
- ▶ **System limitations:** Most embedded generators, particularly rooftop solar systems, do not provide critical services like system strength or inertia, which are needed to stabilise frequency and voltage. Traditional power stations and other new sources of system strength like grid-forming large-scale batteries provide these services and must remain online even during low demand, creating a system imbalance.
- ▶ **Disruption avoidance:** Without the EBM, DNSPs may be forced to use more disruptive actions like shedding feeders with reverse flow (that is, those that are generating rather than consuming electricity), disconnecting entire neighbourhoods from the grid to restore balance.²

How does it work?

When AEMO forecasts or detects MSL events, it issues a direction to DNSPs through relevant Transmission Network Service providers (TNSPs). DNSPs activate the EBM, prioritising a hierarchy of actions, depending on the DNSPs capability to increase operational demand.

For solar generating systems up to 200 kW, the EBM is enabled via CSIP-AUS-compatible solar systems. Devices that cannot establish communications may be assigned a low static export limit. For larger solar generating systems, the EBM is enabled either through CSIP-AUS or other communication methods. The EBM will serve as a last resort to ensure system security during MSL events, preventing reverse feeder shedding.

¹ NSW Department of Climate Change, Energy, the Environment and Water (“DCCEEW”), *NSW Emergency Backstop Mechanism and Consumer Energy Resources (“CER”) Installer Portal Consultation Paper*, February 2025, pg. 6

² NSW DCCEEW, *NSW Emergency Backstop Mechanism and CER Installer Portal Consultation Paper*, February 2025, pg. 5,9-10

Regulatory development and timeframe

In August 2024, AEMO's Chief Operations Officer wrote to Essential Energy's Chief Operating Officer advising of the "urgent need" for Essential Energy to implement emergency backstop measures.³ This message was reinforced in December 2024 by the NSW Minister for Energy writing to Essential Energy's Chief Executive Officer ("CEO") advising on the NSW Government's policy intent to introduce EBM regulations through amendments to distribution licence conditions, and requesting Essential Energy to begin work ahead of the licence changes being formalised.⁴

The EBM was initially planned for implementation in NSW from Spring 2025;⁵ however, in May 2025, this timeline was revised by the NSW Government to June 2026. This initial extension was driven by stakeholder concerns that implementation should not be rushed and that a high level of compliance should be achieved from the outset.⁶ The first formal version of the licence conditions gazetted in December 2025, amended these timeframes further adopting a staged implementation across June 2026, October 2026 and January 2027.

Shortly before the submission of this application to the AER, the NSW Minister for Energy wrote to Essential Energy informing Essential Energy that the Minister has made a further revision to the licence conditions to amend this implementation date. This delay in the implementation date was necessary to enable the NSW Government to first complete the Consumer Energy Resources (CER) Installer Portal before the requirements on Essential Energy commence. The revised licence conditions now state the EBM requirements will commence on a date that the NSW Government informs Essential Energy via written notice, following the completion of the CER Installer Portal. Essential Energy prepared this cost pass through application on the basis of the previous implementation dates and so parts of the application still refer to those dates. At this stage Essential Energy does not expect the change in implementation date to materially impact Essential Energy's costs. However, Essential Energy will keep the AER updated on this matter if this assessment changes as the revised implementation date becomes clearer.

1.2 Pass through event

1.2.1 SUMMARY OF LICENCE CONDITIONS

The EBM places new regulatory obligations on Essential Energy across solar curtailment operation, additional operational demand measures, connection agreements, customer communications, testing, monitoring and reporting. Some obligations apply uniformly across solar systems of all sizes, whereas other obligations apply differently to sites with solar systems below or above 200kW. Those obligations are summarised into 8 key requirements listed in the table below with a more detailed summary included in **Error! Reference source not found. Error! Reference source not found.** A number of these conditions refer to a "Launch Date" for when the requirements commence. The Launch Date will be communicated by the NSW Government to Essential Energy via written notice and will be a date that occurs after the NSW Government's completion of the CER Installer Portal.

Table 1: Key requirements of licence condition amendments

Requirement		Description
1	New Solar Emergency Backstop Mechanism (EBM) (C.1 Solar curtailment)	From the Launch Date and 90 days after the Launch Date, new obligations apply to new or amended connections and from 180 days after the Launch Date, Essential Energy must be capable of

³ AEMO, *Letter to Essential Energy CEO – 'Management of Minimum System Load conditions'*, 20 January 2026

⁴ NSW Minister for Energy, *Letter to Essential Energy CEO*, 10 December 2025

⁵ AEMO, *Supporting secure operation with high levels of distributed resources*, Q4 2024, pg. 55

⁶ DCCEEW, *NSW Emergency Backstop Mechanism and CER Installer Portal Consultation Summary*, May 2025, pg. 5

		remotely interrupting or curtailing solar exports and generation via EBM when directed by AEMO
2	Updates to Connections Agreements (C.2 Connection agreements)	From the Launch Date, Essential Energy must update its connection agreements notifying customers generation may be remotely interrupted or curtailed in special circumstances via EBM or Flexible Exports
3	New Customer Notification Requirements (C.3 Notification of customers)	Essential Energy must contact customers when testing EBM or when EBM has been used in a Minimum System Load (“MSL”) event
4	New Operational Demand (C.4 Measures to deliver additional operational demand)	Essential Energy must maintain control over a level of additional operational demand capacity sufficient to deliver the forecast level of response required by AEMO under a MSL event. Essential Energy must consult with AEMO annually to determine the additional operational demand capacity that is sufficient.
5	New Flexible Export Limits (C.5 Flexible export limit capabilities)	From the Launch Date, Essential Energy must implement and maintain the technical capability to offer Flexible Export Limits for small-scale solar systems.
6	New Testing Requirements (C.6 Conformance Monitoring)	Essential Energy must regularly test its ability to remotely interrupt or curtail generation and report results.
7	New Reporting Requirements (C.7 Solar curtailment performance report)	Essential Energy must report on the performance and effectiveness of the EBM following and MSL event
8	New CER Installer Portal (D.1 Connection to NSW consumer energy resources portal)	Following its development, Essential Energy must integrate its connection application systems to the NSW CER Portal as soon as reasonably practicable.

1.2.2 TYPE OF PASS THROUGH EVENT

The change to Essential Energy’s distribution licence conditions to introduce the NSW EBM is a cost pass through event under the National Electricity Rules (“NER”), as it meets the criteria for either a regulatory change event or a service standard event.

Table 2: Pass through event definitions

Pass through event	EBM Qualification
Regulatory change	The EBM imposes a new regulatory obligation which is a distribution service standard, and an instrument issued under the Act of a participating jurisdiction (the NSW Government) that materially affects the provision of network services that are the subject of a distribution determination. Therefore, it satisfies the conditions to qualify as a regulatory change event.
Service standard	The EBM is a legislative act that imposes new minimum service standards regarding the curtailment of rooftop solar exports during emergency grid conditions and the management of minimum system load events. This substantially varies the manner in which Essential Energy is required to provide direct control service. The qualification of the EBM as a service standard pass through event is also consistent with the AER’s previous decisions on the Victorian EBM pass through applications. Therefore, it satisfies the conditions to qualify as a service standard event.

Essential Energy considers that this event most clearly falls under the service standard event, however, as the EBM satisfies both the regulatory change event and service standard event, Essential Energy therefore consider it is in the AER’s discretion to accept this application under either pass through event definition.

2. Additional Costs and Pass Through Amount

2.1 Summary of additional costs

The implementation of the NSW EBM introduces new licence obligations that were not anticipated at the time of submitting Essential Energy's 2024–29 regulatory proposal. These obligations require DNSPs to enable remote curtailment of distributed solar systems, following directions from AEMO, e.g., in response to MSL events.

These obligations impose a material increase in costs across a broad range of Essential Energy's technical and operational functions and are delivered through four distinct programs of work. The key obligations delivered under each program are outlined below:

- ▶ Backstop Control Capabilities ("BCC")
 - › Establishing and maintaining a CSIP-AUS utility server to communicate with inverters under 200kW and enable remote curtailment of solar exports and generation.
- ▶ Solar Switch
 - › Uplifting connections portal and processes to enable applications for the above and meet new reporting requirements
 - › Integrating with, maintaining connectivity to, and ongoing provision of required information through the NSW Consumer Energy Resources ("CER") portal
 - › Uplifting customer notification, self-service and support tools to align with regulatory expectations and provide required information during and after curtailment events
 - › Implementing new regulatory reporting and conformance monitoring procedures, including annual reporting to the NSW Minister for Energy and to AEMO.
- ▶ Supervisory Control and Data Acquisition ("SCADA") Backstop
 - › Enabling alternative communications capability for solar systems above 200kW, including integration with SCADA and telemetry systems
- ▶ Flexible Exports
 - › Enabling customer opt-in to flexible export limits, requiring enhanced data systems and customer-facing digital capabilities

These capabilities span multiple internal systems and business functions, including Information Communication & Technology (ICT), engineering, customer, compliance and regulatory.

The tables below summarise Essential Energy's total actual and forecast EBM costs by program and by cost category until the end of the current regulatory control period. Also outlined are the adjustments Essential Energy has made to reduce the EBM program costs. Essential Energy is seeking to account for similar costs that were already provided in Essential Energy's current distribution determination. The total amounts sought are therefore incremental costs above the current expenditure allowances and are solely as a consequence of the positive change event.

Table 3: Forecast EBM costs (\$M, real 2023-24)

Program		FY25	FY26	FY27	FY28	FY29	2024-29
Capex	Backstop Control Capabilities	\$5.10	\$3.11	\$0.09	\$0.00	\$0.00	\$8.30
	Solar Switch	\$0.20	\$0.27	\$0.00	\$0.00	\$0.00	\$0.47
	SCADA Backstop	\$0.35	\$0.15	\$0.00	\$0.00	\$0.00	\$0.50
	Flexible Exports	\$0.00	\$0.00	\$2.66	\$0.00	\$0.00	\$2.66
	Less regulatory allowance adjustment	-\$5.30	\$0.00	\$0.00	\$0.00	-\$1.64	-\$6.94
Total incremental capex		\$0.35	\$3.53	\$2.75	\$0.00	-\$1.64	\$4.99
Opex	Backstop Control Capabilities	\$4.07	\$2.45	\$2.84	\$1.79	\$1.98	\$13.13
	Solar Switch	\$2.44	\$9.55	\$8.89	\$1.54	\$1.52	\$23.95
	SCADA Backstop	\$0.00	\$0.08	\$0.38	\$0.00	\$0.00	\$0.45
	Flexible Exports	\$0.00	\$3.03	\$5.05	\$1.57	\$1.67	\$11.32
	Less regulatory allowance adjustment	-\$1.32	-\$2.66	-\$2.29	-\$0.36	-\$0.24	-\$6.87
Total incremental opex		\$5.19	\$12.46	\$14.86	\$4.54	\$4.93	\$41.99
Total incremental costs		\$5.54	\$15.99	\$17.61	\$4.54	\$3.29	\$46.98

2.2 Cost inclusions

The total actual and forecast EBM costs for each program include the following cost categories:

Labour

Includes costs required to undertake the following key tasks:

- Deliver emergency backstop capability, including control system enhancements to arm, trigger, and manage solar curtailment events
- Design and deploy a CSIP-AUS Utility Server to enable solar curtailment, telemetry integration, and Dynamic Operating Envelope (“DOE”) communication to solar systems
- Design and implement DOE calculation capability to establish technical capability to offer flexible exports to new and upgrading solar systems up to 200kW
- Integrate across core platforms (ADMS, CSIP-AUS Utility Server, Connections Portal, Enterprise Data Platform, Telemetry Hub, NSW CER Portal)
- Enable industry participation through Original Equipment Manufacturer (“OEM”)/aggregator onboarding, stakeholder engagement, installer training, and communications deliverables
- Establish sustainable operations, including end-to-end business processes, system maintenance, support model, and connections portal enhancements for EBM and flexible exports

Travel

Travel costs reflect staff and contractor travel required to support design and implementation, engagement, system testing, training delivery, and operational readiness activities associated with the EBM. This includes participation in cross-functional workshops, field verification of integration activities, attendance at industry and OEM engagement sessions for backstop capabilities.

Software (licence & contract)

This category includes the procurement and integration with a Public Key Infrastructure (“PKI”) solution for secure communication with CER, and the procurement from an external vendor to deliver the Utility Server and integrations.

Hardware (support & infrastructure)

Support and infrastructure activities include disaster recovery detailed processes, provisioning of environments to support the end-to-end software development lifecycle, and the set-up of a security authentication service.

Other

Other costs reflect costs not captured by the above cost categories or the contingency allowance below, such as legal fees and training costs.

Project risk allowance

Project risk allowance provisions for the Solar Switch and Flexible Exports programs have been included to account for scope variability, delivery risk and potential changes to regulatory or technical requirements. These reflect standard risk-based allowances applied to ICT development, integration activities, and stakeholder-facing systems, and are proportionate to the complexity and interdependencies identified. Based on support from Baringa, who advised on an appropriate risk-based framework in accordance with the AER’s requirements, Essential Energy has quantified the project risk allowance by following these steps:

- ▶ Identifying and describing the specific risks that give rise to the need for a contingency allowance
- ▶ Assessing potential risk mitigation actions to reduce the likelihood of the risk occurring
- ▶ Estimating the residual cost impact and likelihood of the risk occurring following any mitigation actions
- ▶ Quantifying the contingency allowance as a probability-based estimate and allocating the cost estimate between capex and opex.

2.3 Cost exclusions

The additional costs exclude the following items:

Administrative and office-based costs

Administrative and office-based costs related to the EBM, including BAU operational expenses incurred by internal support teams, such as finance, legal, and office administration have been excluded.

Corporate overheads

Corporate overheads have been excluded from all cost categories.

DERMS capabilities

Delivery of broader Distributed Energy Resource Management System (“DERMS”) functionality has been excluded. This includes interim solutions and associated integrations, and optimised functionality for DOE calculations. These will be delivered under separate programs.

Engagement and communications

General communications with customers, installers, inverter manufacturers, and other third parties not directly linked to EBM operational readiness have been excluded.

2.4 Assurance

Capture of EBM implementation costs

Discrete project codes were established to capture the costs associated with the EBM response, ensuring direct expenses are identifiable. Baringa Consulting (“Baringa”) was also engaged to undertake a quality assurance review to ensure the incremental costs included in this application are accurate, genuinely incremental to Essential Energy’s existing regulatory allowances and relate directly to the EBM requirements (see section 2.6).

2.5 Efficiency of costs

Breakdown of internal and external costs

Both external and internal costs have been managed prudently, with proportionate labour resourcing and competitive procurement underpinning the efficient delivery and operation of the EBM.

- ▶ **Internal costs** – Internal costs reflect the additional labour required to implement and operate the EBM. These costs were developed using a bottom-up approach, consistent with Essential Energy’s approved expenditure processes. Additional full-time equivalent (“FTE”) resources were proportionate to the workload across engineering, ICT, compliance, and customer service teams, based on the specific demands of each project phase. Labour volumes ramped up during the implementation phase to meet the demands of system design, implementation, testing, and stakeholder engagement. As the projects transition to steady-state operations, labour levels have been adjusted accordingly, reflecting ongoing operational requirements. This phased labour allocation will ensure that costs are efficiently aligned with the level of work required at each stage.
- ▶ **External costs** – A material amount of EBM implementation costs comprise external costs which have been tendered through competitive procurement processes. External costs, including the utility server, have been subject to competitive tender processes to ensure prudence, value for money and demonstrate cost efficiency. The utility server vendor selected also represented the most proven, secure, scalable, and lowest-risk solution which was considered critical due to its central role in EBM dispatch, required integrations with other mission critical systems and the large scale of CER integration. This approach guarantees that Essential Energy engaged suppliers under market-tested conditions, supporting the delivery of key project components such as the utility server, integration, and change management services at appropriate cost levels. Additional external costs were incurred to adapt baseline software solutions to Essential Energy’s highly distributed radial network topology, low customer density, and reduced communications availability.

Baringa supported Essential Energy in the development of this cost passthrough application including a review of Essential Energy’s costs. Further, L.E.K. Consulting (“LEK”) guided Essential Energy’s procurement process to run a competitive tender process for key external costs. The Baringa and LEK reports are attached as confidential appendices to this cost pass through application due to the detailed and commercially sensitive nature of the costs assessed.

Timing of the costs

The licence condition variations to formally require Essential Energy to implement the EBM were finalised on 10 December 2025. However, Essential Energy have been incurring EBM related costs since 2024-25. It was prudent and efficient for Essential Energy to commence work and start to incur costs to meet these regulatory obligations ahead of the formal licence conditions being issued for the reasons explained below.

In December 2024, the NSW Energy Minister wrote to Essential Energy’s CEO outlining the NSW Government’s policy intent to implement the EBM and made a direct request to Essential to begin

preparatory work *ahead* of the licence conditions being revised and formalised⁷. This correspondence made it clear that, although the regulatory instrument was still being finalised, the Government's position on introducing EBM requirements was firm and at the time aligned with AEMO's recommendation to implement the mechanism by Spring 2025.

Given this clear policy direction and the originally mandated implementation deadline, Essential Energy began incurring costs prior to the finalisation of the EBM licence conditions due to the originally requested implementation deadline of Spring 2025⁸. This required early planning and preparatory work to meet the expected deadline. The implementation date was later revised in May 2025 and revised again in December 2025, after key design, development, and stakeholder engagement activities were already underway. Given AEMO's recommendation and the Government's official policy at the time of implementing the EBM by Spring 2025, waiting until the licence conditions were formally varied would have left insufficient time to deliver the complex technical and operational requirements of the EBM, risking non-compliance and potential disruption to network operations.

2.6 Offsetting 2024-29 allowances

Essential Energy has made a material reduction of \$13.8 million (real \$2023-24) to its EBM program costs to reflect the relevant portion of Essential Energy's existing Future Network Business Case ("FNBC") regulatory allowances, where the planned activities have now been overtaken by the EBM regulatory obligations. Elements of the original FNBC program were not directly impacted by the EBM licence requirements (e.g. network visibility) and continue, whereas other elements of the FNBC have needed to be prudently altered to ensure compliance against the EBM licence requirements. This adjustment ensures the EBM costs Essential Energy is seeking to recover are incremental and there is no double counting with the existing FNBC regulatory allowances.

Table 4: Summary of FNBC related regulatory allowance adjustment

(\$M, real 2023-24)	Capex	Opex	Total
Adjustment for existing regulatory allowances	-\$6.9	-\$6.9	-\$13.8

The original FNBC and new EBM program are compared below, and detail how Essential Energy quantified this adjustment to avoid any double counting.

Future Network Business Case⁹

Essential Energy's FNBC was developed to underpin its DER integration strategy. It includes a suite of investments aimed at enhancing hosting capacity, managing voltage and thermal constraints, and enabling flexible exports. It outlines investments aimed at addressing the increasing integration of CER and the shift towards a two-way energy flow within the network. The business case included the implementation of DOEs for flexible exports, investments in network visibility and a series of network augmentations to increase CER hosting capacity.

Emergency Backstop Mechanism

Compared to the original FNBC program, the EBM requires a more mature solution, sooner, and applied to a wider cohort of customers. Each of these elements brings forward more costs into the current regulatory control period. For example, advanced DOEs under the FNBC have trial and implementation dates extending

⁷ Minster Sharpe letter to John Cleland, dated 20 December, 2024

⁸ AEMO, *Supporting secure operation with high levels of distributed resources*, Q4 2024, pg. 55

⁹ Essential Energy, 10.05 Future Network Business Case Overview, January 2023, p. 4

into 2030-2035¹⁰, in contrast to the EBM's required implementation dates for a mature solution is across 2026 and 2027.

In contrast to the flexible exports referenced in the FNBC, the EBM represents a distinct and more immediate intervention. It aligns with the advice and expectations of AEMO and the NSW Government to support AEMO to manage critical grid stability issues during periods of high solar generation and low demand, aiming to prevent blackouts by flexibly curtailing solar exports as a last resort.¹¹

Essential Energy has undertaken a detailed assessment to determine whether projected program costs associated with the EBM can be accommodated within existing allowances under the 2024–29 regulatory period, particularly in relation to the FNBC.

Essential Energy's existing allowances do not include provisions for the technical, operational, and compliance requirements introduced by the EBM. When compared against the current 2024–29 allowances, it is evident that the EBM program represents a material and unforeseen cost that was not anticipated at the time of the revenue determination. The pass through application therefore seeks to recover the efficient and prudent incremental costs incurred in meeting this new regulatory obligation. The EBM has brought forward or reshaped a number of capability areas that were previously expected to develop more gradually through flexible export enablement. Several planning, operational, and customer-facing functions have required accelerated investment and scope redefinition to meet regulatory obligations within the current period and lay foundations for future compliance.

FNBC regulatory allowance adjustment

While the requirement to implement the EBM has increased Essential Energy's costs, it has also overtaken and displaced components of the original FNBC plans, especially in relation to flexible export limits. Accordingly, Essential Energy has reduced the EBM costs for the portion of the FNBC allowances that related to flexible export limits and have been overtaken by the EBM obligations. Other elements of the FNBC, such as initiatives to increase network visibility and network investments to increase CER hosting capacity, are not impacted by the EBM and so have not been included in either the EBM costs or FNBC regulatory allowance adjustment.

Essential Energy have removed \$13.8 million (real \$2023-24) from the EBM costs to account for the relevant components of the existing FNBC regulatory allowances. This is comprised of a \$6.9 million (real \$2023-24) opex adjustment and a \$6.9 million (real \$2023-24) capex adjustment. An explanation of these offset adjustments is set out in the table below.

Table 5: Calculation of FNBC regulated regulatory allowance adjustment (\$M, real 2023-24)

Cost category		Existing regulatory allowance	Regulatory allowance offset	Description
Opex	Base opex	\$30.5	\$5.3	Bottom-up estimate of resources already within the business who are now being used for the Backstop program.
	Step change	\$13.7	\$1.6	Line-by-line assessment of FNBC funded opex cost categories. Overlap with EBM program identified for system control, network connections and ICT. Adjustment based on degree of overlap.

¹⁰ Essential Energy, 10.05 Future Network Business Case Overview, January 2023, p. 4

¹¹ DCCEE, NSW Emergency Backstop Mechanism and CER Installer Portal Consultation Paper, February 2025, pg. 6

Cost category		Existing regulatory allowance	Regulatory allowance offset	Description
Total opex	\$44.2	\$6.9		
Capex	Network capex	\$28.3	\$0.0	No direct overlap with EBM program. Essential Energy's investments in network capex (e.g. tap changers) to increase CER hosting capacity sits outside the EBM program and are continuing to be deployed and funded by the existing regulatory allowance.
	ICT and project management	\$51.2	\$6.9	Line-by-line assessment of FNBC funded ICT capex cost categories. Overlap assessment based on criteria of degree that ICT capex allowance had either a primary or secondary purpose of supporting flexible exports with some exceptions. Same proportional reduction also applied to project management costs.
	Network visibility	\$13.0	-	No direct overlap with EBM program. Essential Energy's works on network visibility sit outside the EBM program and are continuing to be deployed and funded by the existing regulatory allowance.
Total capex	\$92.5	\$6.9		
Total		\$136.6	\$13.8	

2.7 Materiality of the costs

For the AER to approve Essential Energy's cost pass through application, Essential Energy must demonstrate that the cost pass through event – in this case, the introduction of the new EBM regulatory obligations as reflected in Essential Energy's distribution licence conditions – has materially increased the costs of providing direct control services.

A "material" increase in costs is demonstrated if the pass through event leads to higher incremental costs in any regulatory year of the current regulatory control period that, as a result of that event, exceeds one per cent of Essential Energy's annual revenue requirement for that regulatory year. The cost to implement the EBM obligations exceeds the one per cent threshold in both 2025-26 and 2026-27, so the materiality threshold to seek a cost pass through application is met.

Table 6: Materiality threshold of the pass through event (\$M, nominal)

	FY25	FY26	FY27	FY28	FY29	2024-29
Current PTRM annual revenue requirement (unsmoothed)	\$1,117.5	\$1,189.2	\$1,279.4	\$1,307.6	\$1,412.8	\$6,306.4
Incremental EBM costs	\$5.7	\$16.9	\$19.1	\$5.0	\$3.8	\$50.4
Materiality (%)	0.51%	1.42%	1.49%	0.39%	0.27%	

2.8 Amount Essential Energy is looking to recover

Essential Energy is seeking approval to increase its total allowed revenue by \$58.5 million (nominal) over the current 2024-29 regulatory control period.

Table 7 sets out the proposed schedule to recover this amount over the following two remaining years of the regulatory control period. Feedback was sought from Essential Energy's Peoples Panel on the timing of this cost recovery, and the proposed schedule in this application reflects the outcome from that engagement (see Section 2.9 for details on that engagement).

Essential Energy estimates this will increase a typical residential customer's annual bill by approximately \$20 on average over these two years, compared to what they would otherwise be paying. For a typical small business customer, Essential Energy estimates this annual average bill impact to be approximately \$40. This represents a bill increase of approximately 0.8% for both residential customers and small business customers.

Table 7: Proposed change to expected revenue (\$M, nominal smoothed)

	FY25	FY26	FY27	FY28	FY29	2024-29
Current annual revenue cap (smoothed)	1,145.6	1,187.1	1,251.9	1,321.8	1,395.6	6,301.9
plus Proposed EBM cost pass through				29.3	29.3	58.5
Proposed amended annual revenue cap (smoothed)	1,145.6	1,187.1	1,251.9	1,351.1	1,424.9	6,360.4

2.9 Customer and stakeholder engagement

Essential Energy is conscious of the added cost-of-living pressure this puts on Essential Energy's customers' electricity bills. In September 2025, Essential Energy consulted with its Peoples Panel on the profile of when Essential Energy should recover these costs, considering different profiles for cost recovery this regulatory control period and another option where Essential Energy defers some of the cost recovery until the next regulatory control period.

Essential Energy has implemented the preference of its Peoples Panel to recover the costs this regulatory control period.¹² This results in average total cost pass through amounts of \$29.3 million (nominal) per annum across the remaining two years of the current regulatory control period.

Preceding this, the process to introduce the NSW Emergency Backstop Mechanism has been a public and consultative process run by the NSW DCCEEW. This has included:

- ▶ In **September 2024**, NSW DCCEEW published the **NSW Consumer Energy Strategy**¹³, in which the Government committed to begin public consultation on introducing new measures to restrict solar export during emergencies when necessary (Action 43) and implement a new digital smart compliance system to support monitoring and compliance with a range of standards (Action 37)¹⁴.

¹² Essential Energy consulted on, and its Peoples Panel preferred recovering the costs over the final three years of the regulatory control period. With the licence condition amendments being finalised later than expected, this now involved recovering the costs over the remaining two years of the regulatory control period – this shorter recovery period was tested and re-confirmed with customers in May 2026.

¹³ NSW DCCEEW, *NSW Consumer Energy Strategy*, September 2024

¹⁴ NSW DCCEEW, *NSW Consumer Energy Strategy*, September 2024, pages 63 and 67

- ▶ In **February 2025**, NSW DCCEEW published a **consultation paper** on introducing these two measures, now referred to as the NSW EBM and CER Installer Portal. The consultation paper explained why these measures are needed and their proposed design and implementation. Feedback was received from 27 organisations.
- ▶ In **May 2025**, NSW DCCEEW published a **consultation report** which summarised the stakeholder feedback received on the consultation paper and the changes to the design and implementation the Government planned to make in response to stakeholder feedback¹⁵. The Government noted the EBM was “strongly supported” by stakeholders as a last resort measure to manage MSL events as part of a toolkit of measures. The Government also announced an extended implementation timeframe.

¹⁵ NSW DCCEEW, *NSW Emergency Backstop Mechanism and Consumer Energy Resources Installer Portal – Consultation Summary*, May 2025

3. Compliance Check

In Table 8 below, Essential Energy lists the National Electricity Rules (“NER”) requirements for cost pass through applications, summarise how this application is compliant with these requirements, and explain where further supporting information can be found in this application.

Table 8: Compliance check against NER requirements for cost pass through applications

NER CLAUSE	REQUIREMENT	THIS PROPOSAL	SECTION OF APPLICATION
6.6.1(a1)	To qualify as a pass through event, the event must meet the definition of one of the event definitions specified in the NER or the DNSP’s distribution determination.	✓	Section 1.2
6.6.1(a)	A DNSP may seek AER approval for the pass through for a positive change event. To qualify as a positive change event the DNSP must have incurred materially higher costs in providing direct control services. This threshold requires the DNSP to incur higher costs in a regulatory year that, as a result of that event, exceeds one per cent of the annual revenue requirement for the DNSP for that regulatory year. Further, the positive change event must not be a trigger event for a contingent project.	✓	Section 2.7
6.6.1(c)	To seek approval of the AER to pass through a positive pass through amount, a DNSP must submit a written statement to the AER within 90 business days of the relevant positive change event occurring	✓	This application constitutes Essential Energy’s written statement seeking approval to pass through a positive pass through amount. Whilst the pass through event occurred on 10 December 2025, this submission is made prior to the date agreed with the AER as an extension – 30 June 2026, as per clause 6.6.1(k)
6.6.1(c)(1)	The statement must specify: The details of the positive change event	✓	Sections 1.1 & 1.2
6.6.1(c)(2)	The date on which the positive change event occurred	✓	Section 1.1
6.6.1(c)(3)	The eligible pass through amount in respect of that positive change event	✓	Section 2.8

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NER CLAUSE	REQUIREMENT	THIS PROPOSAL	SECTION OF APPLICATION
6.6.1(c)(4)	The positive pass through amount the DNSP Provider proposes in relation to the positive change event, which cannot exceed the eligible pass through amount	✓	Section 2.8 The proposed positive pass through amount equals the eligible pass through amount and therefore meets this requirement.
6.6.1(c)(5)	The amount of the positive pass through amount that the DNSP proposes should be passed through to Distribution Network Users in the regulatory year in which, and each regulatory year after that in which, the positive change event occurred	✓	Section 2.8
6.6.1(c)(6)(i)	Evidence of the actual and likely increase in costs	✓	Section 2.1 - 2.6, Attachment C-D and I-J
6.6.1(c)(6)(ii)	Evidence that the costs occur solely as a consequence of the positive change event.	✓	Section 2.1 - 2.6, Attachment C-D and I-J
6.6.1(c)(6)(iii)	Additional information requirements are specified for a retailer insolvency event.	N/A	N/A
6.6.1(c)(7)	Such other information as may be required under any relevant regulatory information instrument.	N/A	N/A
6.6.1(c1)	The positive pass through amount must not be for expenditure for a restricted asset, unless the DNSP has submitted an exemption application to the AER	N/A	N/A

4. Attachment List

Table 9 below lists the attachments included in this cost pass through application.

Table 9: List of attachments included in this cost pass through application

ATTACHMENT	TITLE	DESCRIPTION
A	Summary of licence condition amendments	Summarises the final licence condition amendments including explaining the differences that apply to solar generating systems below and above 200kW.
B	Confidentiality template	Identification and explanation of the confidential elements of this cost pass through application.
C	Cost build-up spreadsheet	Cost build-up of Essential Energy's actual and forecast costs to implement the NSW Emergency Backstop Mechanism regulatory requirements.
D	Amended PTRM – Incremental Backstop costs	Amended version of Essential Energy's latest PTRM adding in the proposed incremental EBM capex and opex for the 2024-29 regulatory control period with adjustments for Essential Energy's existing FNBC regulatory allowance. Also includes calculation of the materiality threshold and customer bill impacts.
E	Letter from NSW Minister for Energy to Essential Energy CEO on licence conditions_Dec2025	NSW Minister for Energy advising Essential Energy of the final EBM licence amendments
F	Letter from AEMO to Essential Energy COO_Jan2026	AEMO letter to Essential Energy regarding the EBM program
G	Letter from NSW Minister for Energy to Essential Energy CEO on licence conditions_Jun2026	NSW Minister for Energy advising Essential Energy of updates to the final EBM licence amendments – received just prior to lodging this document.
H	Attachment to letter from NSW Minister for Energy to Essential Energy CEO_Instrument of variation_June2026	A copy of the revised licence conditions amended by the NSW Minister for Energy on 19 June 2026 (received on 24 June 2026).
I	Baringa, <i>Essential Energy emergency backstop mechanism cost pass through</i> - Confidential	Independent verification and quality assurance of the cost pass through application.
J	Emergency backstop mechanism business case - Confidential	Internal Essential Energy business case document for approval of the backstop program.

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