

Determination

Cost pass through Essential Energy's Critical Infrastructure Licence Conditions

March 2022

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1 Summary of our assessment

During the regulatory control period, Essential Energy can apply to pass through to its customers, in the form of higher or lower network charges, certain material changes in its costs caused by pre-defined exogenous events. These events are called cost pass through events. Such events are limited to circumstances where the business can recover potential costs of defined yet unpredictable, high cost events that are outside the control of the business.

On 5 February 2019, the NSW Minister for Energy and Utilities varied Essential Energy's distribution licence, following Essential Energy's distribution network being classified as critical infrastructure by the Commonwealth Department of Home Affairs.¹ This variation introduced new licence conditions requiring Essential Energy to implement a higher degree of physical and cyber security across its distribution network (Critical Infrastructure Licence Conditions).²

In essence, the Critical Infrastructure Licence Conditions require Essential Energy to ensure that:

- its distribution network is only maintained by persons from within Australia
- its distribution network is only accessed, operated and controlled from within Australia; and
- all data relevant to the distribution network is held within Australia and only accessible by an authorised person within Australia and not exported.

On 28 September 2021, Essential Energy submitted a cost pass through application to us, seeking to recover \$33.2 million (\$nominal). This is the incremental revenue required as a result of the costs that Essential Energy claims it has incurred so far, and the costs it expects to incur, to comply with the Critical Infrastructure Licence Conditions, during the current regulatory control period.³ The costs are for property or physical security and for cyber security upgrades as required by the Critical Infrastructure Licence Conditions.

For a positive pass through to be determined in a cost pass through application, there must be a positive change event, that is:

- a pass through event specified in either the National Electricity Rules (NER) or in the current revenue determination for Essential Energy
- that event must entail Essential Energy incurring materially higher costs in providing direct control services than it would have incurred but for the event.⁴

Essential Energy may then submit a pass through application,⁵ which must address certain matters specified in the NER.⁶

¹ *Electricity Supply Act 1995* (NSW), Schedule 2, cl 5; Minister for Energy and Utilities (NSW), *Instrument of Variation of Conditions of Distributor's Licence, Electricity Supply Act 1995 (NSW), 5 February 2019* (Essential Energy's Distribution Licence), conditions 9, 10 and 11.

² Essential Energy's Distribution Licence, conditions 9, 10 and 11.

³ Essential Energy, *Cost Pass Through Application, Licence Condition Changes*, September 2021 (Essential Energy Cost Pass Through Application).

⁴ NER, cl 6.6.1(a1).

⁵ NER, cl 6.6.1(a).

⁶ NER, cl 6.6.1(c).

We must then make a determination on Essential Energy's cost pass through application and, if a positive change event occurred, determine the approved pass through amount and the regulatory years in which the pass through amount is to be recovered from electricity consumers. In making our determination on Essential Energy's pass through application, we must have regard to certain matters specified in the NER.⁷

Our consideration of these requirements is set out in sections 4 and 6 below

In summary, we have determined that the variation of Essential Energy's distribution licence through the introduction of the Critical Infrastructure Licence Conditions is a service standard event which is also a positive change event under the NER.

The Critical Infrastructure Licence Conditions require Essential Energy to prepare a plan setting out how it is to comply, for approval by the Independent Pricing and Regulatory Tribunal (IPART). This Approved Plan sets out 31 steps (including actions and deliverables associated with each step) that Essential Energy must undertake to comply with the Critical Infrastructure Licence Conditions by 30 June 2024.⁸ If Essential Energy implements the Approved Plan, it will be deemed to have complied with the Critical Infrastructure Licence Conditions.⁹

We are satisfied that Essential Energy is likely to incur materially higher costs to implement the IPART Approved Plan and comply with the Critical Infrastructure Licence Conditions than it would have incurred but for the pass through event.¹⁰

However, having assessed Essential Energy's application and taken into account the submissions we have received from stakeholders, we are not satisfied that Essential Energy's proposed positive pass through amount of \$33.2 million (\$nominal), recovered over the 2022-23 and 2023-24 regulatory years, meets the requirements of the NER.

Specifically, we have excluded the following proposed capex and opex costs that total \$4.5 million (\$2020–21) which Essential Energy included in its application for physical or property related measures as we are not satisfied these costs are clearly distinguishable from business as usual costs:

- to upgrade or replace non-compliant perimeter fences at 18 high-risk sites
- to undertake incremental tree trimming or removal and other vegetation management work to prevent physical barriers being easily compromised and unauthorised access, and
- for cost contingencies.

However, we are satisfied that the remainder of Essential Energy's proposed positive pass through amount reflects a necessary and efficient response to, and has been incurred solely as a consequence of, the Critical Infrastructure Licence Conditions. We are also satisfied with Essential Energy's proposal to recover the positive pass through amount over the 2022–23 and 2023–24 regulatory years. For the avoidance of doubt, we note that the measures and costs which are the subject of this cost pass through relate solely to the circumstances of Essential Energy, its compliance with the Critical Infrastructure Licence Conditions, and the IPART Approved Plan agreed with Essential Energy.

⁷ NER, cl 6.6.1(j).

⁸ Essential Energy, *Annual Compliance Report for 2020/21*, 22 September 2021, Table 5 (**Approved Plan**).

⁹ Essential Energy's Distribution Licence, conditions 9.6, 9.7, 10.5 and 10.6

¹⁰ NER, cl 6.6.1(a1) and ch 10 (definition of positive change event).

Our determination is to approve a positive pass through amount of \$30.6 million (\$nominal, smoothed) to be recovered over the two remaining regulatory years of Essential Energy's 2019–24 regulatory control period through the X-factors set in the PTRM:

- \$14.9 million (\$nominal) to be recovered in 2022–23; and
- \$15.7 million (\$nominal) to be recovered in 2023–24.

The approved cost pass through amount is estimated to increase annual electricity bills by about \$11 per annum for residential customers and \$41 per annum for small business customers in NSW over the period from 1 July 2022 to 30 June 2024.

2 Introduction

On 5 February 2019, the NSW Minister for Energy and Utilities varied Essential Energy's distribution licence, following Essential Energy's distribution network being classified as critical infrastructure by the Commonwealth Department of Home Affairs.

This variation introduced new licence conditions 9, 10 and 11 requiring Essential Energy to implement a higher degree of physical and cyber security across its distribution network (Critical Infrastructure Licence Conditions).¹¹ The key elements of the Critical Infrastructure Licence Conditions are summarised in Table 1.

Table 1: Key elements of the Critical Infrastructure Licence Conditions

Critical Infrastructure Licence Condition	Key elements
Condition 9	<ul style="list-style-type: none"> Maintenance of the distribution system must only be undertaken within Australia except where maintenance requires physical servicing offshore Any non-employee undertaking maintenance of the distribution system must have approval of the senior officer responsible for network operations Operation and control of its distribution system, including associated information communications technology (ICT) infrastructure, can be accessed, operated and controlled only from within Australia.
Condition 10	<ul style="list-style-type: none"> All operational technology (OT) information and associated ICT infrastructure must be held in Australia, and only accessible from within Australia by authorised personnel All load data, bulk personal data and sensitive data must be stored in Australia, not exported, and only accessible from within Australia.
Condition 11	Reporting requirements about compliance with Conditions 9 and 10.

Source: Essential Energy Cost Pass Through Application, pp 4-7; Essential Energy's Distribution Licence, conditions 9, 10 and 11.

In essence, the Critical Infrastructure Licence Conditions requires Essential Energy to ensure that:

- its distribution network is only maintained by persons from within Australia
- its distribution network is only accessed, operated and controlled from within Australia; and
- all data relevant to the distribution network is held within in Australia and only accessible by an authorised person within Australia and not exported.

The Critical Infrastructure Licence Conditions also require Essential Energy to prepare a plan about how it is to comply, for approval by the Independent Pricing and Regulatory Tribunal (IPART). That plan, referred to as the "approved plan", was prepared by Essential Energy and approved by IPART on 26 June 2019 (Approved Plan).¹² The Approved Plan sets out 31 steps (including actions and deliverables associated with each step) that Essential Energy must undertake to comply with the Critical Infrastructure Licence Conditions by 30 June

¹¹ Essential Energy's Distribution Licence, conditions 9, 10 and 11.

¹² Essential Energy's Distribution Licence, conditions 9.6, 9.7, 10.5 and 10.6.

2024.¹³ If Essential Energy implements the Approved Plan, it will be deemed to have complied with the Critical Infrastructure Licence Conditions.¹⁴

Following two roundtable discussions Essential Energy conducted with interested stakeholders,¹⁵ Essential Energy submitted a cost pass through application to us on 28 September 2021. The cost pass through application sought to recover \$33.2 million (nominal) as a positive pass through amount. These are the costs that Essential Energy claims it has incurred so far, and the costs it forecasts to incur, to comply with the Critical Infrastructure Licence Conditions during the current regulatory control period.¹⁶ The costs are for property or physical security and for cyber security upgrades as required by the Critical Infrastructure Licence Conditions.

Essential Energy has also proposed to recover the positive pass through amount over the 2022-23 and 2023-24 regulatory years.

2.1 Who we are and our role in the process

We, the Australian Energy Regulator (AER), exist to ensure all Australian energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable and affordable energy future for Australia. We are the economic regulator for electricity and gas distribution and transmission services in the National Electricity Market (NEM), and our electricity-related powers and functions are set out in the National Electricity Law (NEL) and the NER.¹⁷

Essential Energy's revenues are regulated by the AER through a five year distribution determination.¹⁸ The current distribution determination commenced on 1 July 2019 and will finish on 30 June 2024.¹⁹

We are responsible for assessing pass through applications. Under the pass through provisions in the NER, a distribution business may apply to us to seek the recovery of additional costs incurred during a regulatory control period arising from predefined events, specified in either the NER or in their respective revenue determination.²⁰

2.2 Essential Energy's application

To comply with the Critical Infrastructure Conditions, Essential Energy submitted that it has incurred and expects to incur \$39.7 million (\$2020-21) during the 2019–24 regulatory control period. The costs are to implement property or physical security and for cyber security measures and upgrades as required by the Critical Infrastructure Licence Conditions. Essential Energy submitted that this \$39.7 million (\$2020-21) comprises:

¹³ Essential Energy, *Annual Compliance Report for 2020/21*, 22 September 2021, Table 5 (**Approved Plan**).

¹⁴ Essential Energy's Distribution Licence, conditions 9.6, 9.7, 10.5 and 10.6

¹⁵ Essential Energy, *Cost Pass Through Applications – Roundtable One*, 9 June 2021; Essential Energy, *Cost Pass Through Applications – Roundtable Two*, 21 July 2021.

¹⁶ Essential Energy, *Cost Pass Through Application, Licence Condition Changes*, September 2021 (Essential Energy Cost Pass Through Application).

¹⁷ In addition to regulating transmission and distribution in the NEM and the Northern Territory, we also monitor the wholesale electricity market to ensure suppliers comply with the legislation and rules, taking enforcement action where necessary, and regulate retail energy markets in Queensland, New South Wales, South Australia, Tasmania (electricity only) and the ACT.

¹⁸ AER, *Final Decision, Essential Energy, Distribution Determination 2019 to 2024, Overview*, April 2019.

¹⁹ AER, *Final Decision, Essential Energy, Distribution Determination 2019 to 2024, Overview*, April 2019, p 8.

²⁰ NEL, s 15; NER, chapter 6.

- \$30.7 million for cyber security related measures (\$20.7 million of opex and \$10 million of capex), and
- \$9.0 million for property / physical security related measures (\$2.5 million of opex and \$6.5 million of capex).

Essential Energy's proposed costs are further detailed in Table 2 below.

Table 2: Essential Energy's costs resulting from the Critical Infrastructure Licence Conditions (\$million, real 2020-21)

\$ million, \$FY21		2019-20	2020-21	2021-22	2022-23	2023-24	2019-24
Operating expenditure (opex)	Cyber security	\$0.4	\$1.6	\$3.8	\$10.9	\$4.0	\$20.7
	Property	\$0.0	\$0.6	\$0.7	\$1.1	\$0.1	\$2.5
Total opex		\$0.4	\$2.2	\$4.5	\$12.0	\$4.1	\$23.2
Capital expenditure (capex)	Cyber security	\$1.8	\$1.7	\$3.4	\$2.8	\$0.4	\$10.0
	Property	\$0.0	\$6.2	\$0.4	-\$0.1	-\$0.1	\$6.5
Total capex		\$1.8	\$7.8	\$3.8	\$2.7	\$0.4	\$16.5
Total		\$2.2	\$10.1	\$8.3	\$14.7	\$4.5	\$39.7

Source: Essential Energy Cost Pass Through Application, p 7.²¹

Essential Energy has also submitted that the costs it has incurred in the 2020-21 regulatory year and expects to incur during the 2022-23 regulatory year exceed 1 per cent of its annual revenue requirement in those years.²² Therefore, the introduction of the Critical Infrastructure Licence Conditions has resulted in Essential Energy incurring materially higher costs than it otherwise would have. This is shown in Table 3 below.

²¹ On 10 December 2021, Essential Energy corrected its positive pass through amount by reducing it by \$73,035.00. However, due to rounding, this correction does not change the overall amount of \$39.7 million it specified in its cost pass through application.

²² Essential Energy Cost Pass Through Application, p 9.

Table 3: Materiality assessment of Essential Energy's proposed Critical Infrastructure Licence Conditions costs

\$m, nominal	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Proposed cost pass through opex	0.36	2.27	4.76	12.88	4.52	24.79
Proposed cost pass through capex	1.83	8.03	4.00	2.90	0.39	17.15
Total proposed capex and opex	2.19	10.30	8.76	15.78	4.91	41.93
AER approved unsmoothed revenue- as per 2021-22 RoD updated PTRM	938.5	1,003.5	1,020.3	1,058.1	1,043.6	5,064.04
Materiality	0.2%	1.0%	0.9%	1.5%	0.5%	0.8%

Source: Essential Energy Cost Pass Through Application, p 9.

Essential Energy's cost pass through application now seeks to recover \$33.2 million (nominal), which is the amount Essential Energy submits it would have required had these costs been included in its 2019-14 regulatory proposal.²³ This is shown in Table 4 below.

Table 4: Essential Energy's proposed change in smoothed revenue (\$million, nominal)

\$ million (nominal)	2019-20	2020-21	2021-22	2022-23	2023-24	2019-24
Approved annual revenue smoothed	\$1,001.7	\$1,006.8	\$1,007.6	\$1,014.6	\$1,021.7	\$5,052.4
PLUS Licence condition pass through	-	-	-	\$16.1	\$17.1	\$33.2
Updated annual revenue smoothed	\$1,001.7	\$1,006.8	\$1,007.6	\$1,030.7	\$1,038.8	\$5,085.6

Source: Essential Energy Cost Pass Through Application, p 10.

Essential Energy also submitted that recovering the proposed \$33.2 million during the 2022-23 and 2023-24 regulatory years would result in a typical residential customer paying an estimated average of \$12 each year, and a small business customer paying an estimated average of \$45 each year.²⁴

Due to the sensitive nature surrounding complying with the Critical Infrastructure Licence Conditions, Essential Energy has claimed confidentiality over several of the documents it submitted to us in support of its cost pass through application.²⁵ We have reviewed and accepted Essential Energy's confidentiality claims.

2.3 Structure of this document

This document details our assessment and determination, amongst other things, on whether a positive change event has occurred, the allowable amount to be recovered and the timeframe for recovery, and our reasons for the determination.

²³ Essential Energy Cost Pass Through Application, p 10.

²⁴ Essential Energy Cost Pass Through Application, p 10.

²⁵ Essential Energy, *Table 1 – Confidential Items*, September 2021.

The decision is structured as follows:

- Section 3 sets out our determination on Essential Energy's cost pass through application
- Section 4 sets out our reasons for the determination and our assessment of the proposed positive pass through amount
- Section 5 sets out our assessment of the proposed recovery period of the positive pass through amount
- Section 6 sets out our assessment of Essential Energy's cost pass through application against the NER requirements, including whether the materiality threshold is met, and consideration of stakeholder submissions.

3 Our determination

Having taken into account all the matters set out in this decision, we determine that the Critical Infrastructure Licence Conditions have resulted in a positive change event for Essential Energy. Our assessment against the requirements of a positive change event is summarised in in section 6.

Our determination is to approve a total positive pass through amount of \$30.6 million (\$nominal, smoothed), to be recovered as follows over the two remaining regulatory years of Essential Energy's 2019–24 regulatory control period through the X-factors set in the PTRM:

- \$14.9 million (\$nominal) to be recovered in 2022–23
- \$15.7 million (\$nominal) to be recovered in 2023–24

Section 4 and 5, and Table 2 in section 6, set our assessment of Essential Energy's cost pass through application and the positive pass through amount.

4 Reasons for determination

4.1 Introduction of Critical Infrastructure Licence Conditions

The first step in our assessment is to determine whether a pass through event has occurred. A pass through event is defined as one of the following events:

- (a) a regulatory change event
- (b) a service standard event
- (c) a tax change event
- (d) a retailer insolvency event, or
- (e) any other event specified in a distribution determination as a pass through event for the determination (which concern insurance caps, insurer's credit risk, natural disasters and terrorism).²⁶

Essential Energy submitted that the introduction of the Critical Infrastructure Licence Conditions meets the criteria of a regulatory change event, but might also meet the criteria of a service standard event.²⁷ For the following reasons, we consider the introduction of the Critical Infrastructure Licence Conditions is a service standard event.

A service standard event is defined as:

A legislative or administrative act or decision that:

- (a) has the effect of:
 - (i) substantially varying, during the course of a regulatory control period, the manner in which a Transmission Network Service Provider is required to provide a prescribed transmission service, or a Distribution Network Service Provider is required to provide a direct control service; or
 - (ii) imposing, removing or varying, during the course of a regulatory control period, minimum service standards applicable to prescribed transmission services or direct control services; or
 - (iii) altering, during the course of a regulatory control period, the nature or scope of the prescribed transmission services or direct control services, provided by the service provider; and
- (b) materially increases or materially decreases the costs to the service provider of providing prescribed transmission services or direct control services.²⁸

The introduction of the Critical Infrastructure Licence Conditions satisfies the definition of a service standard event. The act of varying Essential Energy's distribution licence to introduce the Critical Infrastructure Licence Conditions is an 'administrative act or decision'. It also 'substantially varies' the manner in which Essential Energy provides its distribution service. In particular, the cyber security requirements that Essential Energy must now comply with to

²⁶ NER, cll 6.6.1(a1) and 6.12.1(14); AER, *Final Decision, Essential Energy, Distribution Determination 2019 to 2024, Overview*, April 2019, pp 44 and 45.

²⁷ Essential Energy, *Cost pass through application, Licence Condition changes*, September 2021, p 9.

²⁸ NER, ch 10 (definition of service standard event).

ensure that the distribution network is only maintained, operated and controlled from within Australia, is a substantial change to how Essential Energy was previously allowed to operate its distribution network. And as we discussed in section 4.2, the costs of Essential Energy providing the distribution service have also ‘materially’ increased.

For completeness, a regulatory change event is defined, among other things, as a pass through event that falls within no other category of pass through event.²⁹ The introduction of the Critical Infrastructure Licence Conditions is therefore not a regulatory change event because, for the reasons above, we consider it is a service standard event.

4.2 Positive change event

If we are satisfied that a pass through event has occurred, we must then determine whether the pass through event qualifies as a “positive change event”.³⁰ That is, whether Essential Energy, because of the introduction of the Critical Infrastructure Licence Conditions, has incurred or is likely to incur materially higher costs in providing direct control services than it otherwise would have incurred.

The NER defines “materially” as:³¹

For the purposes of the application of clause 6.6.1, an event results in a *Distribution Network Service Provider* incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the *Distribution Network Service Provider* has incurred and is likely to incur in any *regulatory year* of a *regulatory control period*, as a result of that event, exceeds 1% of the *annual revenue requirement* for the *Distribution Network Service Provider* for that regulatory year.

After accounting for the downward adjustments we discuss in section 4.4 below, we are satisfied that Essential Energy is likely to incur materially higher costs in providing direct control services as a result of the introduction of the Critical Infrastructure Licence Conditions. The additional costs likely to be incurred by Essential Energy exceed 1 per cent of Essential Energy’s annual revenue requirement in the 2022-23 regulatory year. This is set out in Table 5 below.

²⁹ NER, ch 10 (definition of regulatory change event).

³⁰ NER, ch 10 (definition of positive change event).

³¹ NER, ch 10 (definition of materially).

Table 5: AER materiality assessment of Essential Energy's proposed Critical Infrastructure Licence Conditions costs

\$m, nominal	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Approved cost pass through opex	0.4	2.0	3.4	12.8	4.5	23.1
Approved cost pass through capex	1.8	5.5	4.0	2.9	0.4	14.6
Total approved capex and opex	2.2	7.5	7.4	15.7	4.9	37.7
AER approved unsmoothed revenue- as per 2021-22 RoD updated PTRM	938.5	1003.5	1020.3	1058.1	1043.6	5064.0
Materiality	0.2%	0.7%	0.7%	1.5%	0.5%	0.7%

Source: AER analysis.

4.3 Timing of Essential Energy's application

The NER requires Essential Energy to submit a cost pass through application to us within 90 business days of the positive change event occurring.³²

The Critical Infrastructure Licence Conditions Event occurred on 5 February 2019, being the date the Minister varied Essential Energy's distribution licence. However, we extended the deadline for Essential Energy to submit its pass through application three times.³³ Most recently, on 8 May 2020, we extended the deadline to no later than 14 January 2022. These extensions were due to:

- the difficult of quantifying the associated costs, particularly given the complexity involved in Essential Energy complying with the Critical Infrastructure Licence Conditions Event and preparing and implementing the Approved Plan, and
- resourcing challenges faced by Essential Energy due to the 2019-20 bushfires and the COVID-19 pandemic.

As noted above, Essential Energy submitted its cost pass through application on 28 September 2021, prior to the final extended deadline of 14 January 2022.

On the basis that this decision involved complex issues, we extended the due date for this decision by 60 business days to 19 April 2022 under the NER.³⁴

4.4 Assessment of the pass through amount

In assessing a pass through application, the NER requires us to take into account a range of relevant factors,³⁵ including:

³² NER, cl 6.6.1(c).

³³ NER, cll 6.6.1(c) and 6.6.1(k); Essential Energy, *Cost pass through application, Licence Condition changes*, September 2021, pp 9 and 10.

³⁴ NER, cl 6.6.1(k1).

³⁵ NER, cl 6.6.1(j).

- the need to ensure that Essential Energy only recovers any actual or likely increment in costs, to the extent that such an increment is solely as a consequence of the pass through event,³⁶ and
- that Essential Energy does not recover costs that have been or will be factored into the annual revenue requirement in Essential Energy's current 2019-24 distribution determination or the forthcoming 2024-29 distribution determination.³⁷

In this case, we have approached our assessment of Essential Energy's cost pass through application by addressing three key questions, taking into account the submissions we received from stakeholders.³⁸

The first question is whether the incremental costs the subject of the proposed positive pass through amount have arisen solely as a consequence of Essential Energy complying with the Critical Infrastructure Licence Conditions.³⁹

Generally, we have addressed this question by assessing whether each cost component of the proposed positive pass through amount has been contemplated in, or required by, the Approved Plan. As mentioned above, this is because Essential Energy is deemed to have complied with the Critical Infrastructure Licence Conditions if it implements the Approved Plan. For example, conditions 9.6 and 9.7 of the Critical Infrastructure Licence Conditions provide:⁴⁰

9.6 Until 1 July 2019 and despite whether the *Licence Holder* is complying with condition 9, the *Licence Holder* will be taken to have complied with condition 9, if it has taken reasonable steps to developing an *approved plan* as contemplated by clause 9.7.

9.7 The Licence Holder will be taken to have satisfied condition 9 for the duration of the period set out in the approved plan if the Licence Holder

(a) has a plan approved by the Tribunal (IPART) by 1 July 2019; and

(b) is at the relevant time undertaking the steps that are required to be undertaken in that approved plan.

The Approved Plan sets out 31 steps Essential Energy must take to comply with the Critical Infrastructure Licence Conditions.⁴¹ It also sets out the timeframes Essential Energy must take these steps within, to ultimately comply with the Critical Infrastructure Licence Conditions by 30 June 2024. If Essential Energy takes these steps (and achieves the deliverables within the timeframes associated with each step), it will be deemed to have complied with the Critical Infrastructure Licence Conditions.

Importantly, our role is not to assess the merits of the steps set out in the Approved Plan. That is a matter for IPART. Our assessment is focussed on determining whether Essential Energy has incurred, or is likely to incur, materially higher costs as a result of the introduction of the Critical Infrastructure Licence Conditions and implementing the deliverables associated with the Approved Plan. We have therefore considered:

³⁶ NER, cl 6.6.1(j)(5).

³⁷ NER, cl 6.6.1(j)(7).

³⁸ Red Energy, *Re: Essential Energy's cost pass through applications*, 8 November 2021 (Red Energy Submission); Public Interest Advocacy Centre, *Essential Energy – Cost Pass Through Application – Critical Infrastructure Licence Conditions*, 19 November 2021 (PIAC Submission).

³⁹ NER, cl 6.6.1(j)(5).

⁴⁰ See also, Essential Energy's Distribution Licence, conditions 10.5 and 10.6.

⁴¹ Essential Energy Cost Pass Through Application, p 4.

- whether Essential Energy's actual and forecast costs reflect the scope and timeframes required to implement the steps in the Approved Plan, and
- whether those costs should fall within the scope of a positive pass through amount under the NER.

Any cost which is not associated with implementing a step of the Approved Plan is one which Essential Energy is not required to incur to comply with the Critical Infrastructure Licence Conditions. Accordingly, such a cost does not arise solely as a consequence of the positive change event.⁴² It also follows that the timing of the expenditure which Essential Energy has incurred and forecasts to incur should be consistent with the Approved Plan.

The second question is whether each component of cost that is required by the Approved Plan is properly characterised as being business as usual. Or alternatively, whether it has already been allowed for in Essential Energy's approved revenues that were determined in the 2019-24 distribution determination.⁴³ A cost that is properly characterised as being business as usual is likely to have already been allowed for in Essential Energy's approved revenues. To approve such a cost in a positive pass through amount would be to allow Essential Energy to double recover the same kind of costs.⁴⁴

The third question is, for each component of cost that is required by the Approved Plan and which has not been previously allowed for, whether there was any action or decision that could have been taken by Essential Energy to reduce the magnitude of that cost.⁴⁵ In addressing this question, we have assessed the efficiency of the decisions and actions Essential Energy took, including the procurement policies and procedures it applied, in arriving at the costs the subject of its proposed pass through amount.⁴⁶

Our assessment of the cyber security and property security costs proposed by Essential Energy in its cost pass through application is set out in turn below.

4.4.1 Proposed cyber security measures

4.4.1.1 Essential Energy's cyber security proposal

As we stated above in section 2.2, Essential Energy submitted that it has incurred and forecasts to incur a total of \$30.7 million for cyber security related measures (\$20.7 million of opex and \$10 million of capex) to comply with the Critical Infrastructure Licence Conditions.

As part of complying with the Critical Infrastructure Licence Conditions, the Approved Plan required Essential Energy to undertake an audit and gap analysis to identify any potential cyber security risks that could threaten its ability to provide a safe, reliable and dependable distribution service.⁴⁷ Essential Energy undertook that audit and gap analysis and submitted:

The gap analysis prepared as part of the Plan, highlighted potential cyber security risks which could threaten our ability to provide an electricity distribution service and impact our communication systems and data. Our customers rely on a safe and dependable electricity service, and if that service was destroyed, degraded or rendered unavailable for an extended period it could significantly impact the security, social or economic wellbeing of New South Wales and other States and Territories. There is a growing risk of domestic and foreign cyber-attacks and increasingly sophisticated methods are being deployed, meaning that Essential

⁴² NER, cl 6.6.1(j)(2).

⁴³ NER, cll 6.6.1(j)(7), 6.6.1(j)(7A) and 6.6.1(j)(8).

⁴⁴ NER, cl 6.6.2(j)(7).

⁴⁵ NER, cll 6.6.1(j)(3).

⁴⁶ NER, cl 6.6.1(j)(3).

⁴⁷ Essential Energy Cost Pass Through Application, pp 4 and 5.

Energy must improve, continually adapt and fortify its cyber security to prevent the unauthorised access and control of the electricity network. We also need to ensure that sensitive information is kept secure. While Essential Energy's cyber security practices and controls have proven effective until now, without the proposed investment moving forward, we will:

- Become non-compliant with the new conditions of our Distributor's licence; and
- Expose our network and the community to growing risk, given increasing threats posed through terrorism and by other malicious actors.⁴⁸

In response to its gap analysis, Essential Energy has proposed the option which progressively implements cyber security improvements to its distribution network. This option includes:

Network and Remote Access Controls

- Establish and implement controls and procedures to restrict distribution system access to authorised persons located within Australia, except in accordance with approved emergency access protocols agreed with the Australian Critical Infrastructure Centre. This also includes uplifting access security as well as a focus on eliminating potential for unauthorised remote access.

Vulnerability Management

- Upgrade processes and capability to mitigate the potential for exploitation of systems and network vulnerabilities. Suitable vulnerability scanning, assessment, patching and configuration management tools will be deployed as required within the OT and IT environments

Incident Detection and Management

- Implementing Security Information and Event Management processes and capability for detecting and responding to overseas threats and incidents. This will allow forensic analysis of events to continually improve identification and responses.

Change Management

- Improving controls and procedures to assess and manage the impact of changes to Operational Technology (OT) and Information Technology (IT) environments to prevent overseas access or control of the distribution system.

Device and Environment Hardening

- Implementing the use of cryptographic and key management standards for data network and device security to improve resilience.

Data Security

Identification and repatriation of sensitive data potentially accessible outside of Australia. We need to ensure that we protect sensitive data and this may include repatriation or migration of information repositories back to Australia.⁴⁹

4.4.1.2 Whether the proposed cyber security costs are required by the Approved Plan

We have determined that Essential Energy is required to incur its proposed cyber security costs to comply with the Critical Infrastructure Licence Conditions.

⁴⁸ Essential Energy Cost Pass Through Application, p 4.

⁴⁹ Essential Energy Cost Pass Through Application, p 5.

As part of its pass through application, Essential Energy provided us with a confidential breakdown of its proposed cyber security costs. That breakdown itemises each activity and its cost which together comprise its proposed cyber security costs of \$30.62 million (\$2020–21).⁵⁰

We have reviewed each itemised activity, its cost, and the proposed timeline for delivery in accordance with the steps of the Approved Plan. Each activity corresponds to achieving a deliverable of an item in the Approved Plan.⁵¹ For the reasons discussed above, it follows that Essential Energy is required to incur these costs to comply with the Critical Infrastructure Licence Conditions.

4.4.1.3 Whether the proposed cyber security costs are business as usual or have already been allowed for

We have determined that Essential Energy's proposed cyber security costs are not business as usual costs.

Relevantly, Essential Energy submitted:

From a cyber point of view, there was only a small allowance of approximately \$5M included in our 2019-24 allowance for cyber security, and that has been fully utilised in cyber security changes and maintenance unrelated to these licence condition requirements.⁵²

Despite us approving approximately \$5 million for cyber security purposes as part of the total forecast expenditure in the 2019-24 distribution determination, this amount was directed at matters of cyber security that were unrelated to complying with the Critical Infrastructure Licence Conditions. The proposed cyber security costs are directed at ensuring that the distribution network is only maintained, operated and controlled from within Australia, as required by condition 9 of the Critical Infrastructure Licence Conditions.

The Critical Infrastructure Licence Conditions did not exist at the time of the 2019-24 distribution determination. Having to now ensure that these tasks are only undertaken from within Australia (with certain exceptions) is a significant change from what was previously allowed. It follows that costs of the kind now proposed by Essential Energy were not contemplated (nor included) at the time of the 2019-24 distribution determination. Therefore, they are not business as usual costs. Rather, they are incremental costs to the approved revenues we determined in the 2019-24 distribution determination.⁵³

4.4.2 Proposed property or physical security measures

4.4.2.1 Essential Energy's property or physical security proposal

As we stated above in section 2.2, Essential Energy submitted that it has incurred and forecasts to incur a total of \$9.0 million for property / physical security related measures (\$2.5 million of opex and \$6.5 million of capex) to comply with the Critical Infrastructure Licence Conditions.

As part of complying with the Critical Infrastructure Licence Conditions, the Approved Plan also required Essential Energy to undertake a property/physical security audit and gap analysis to identify any potential property or physical security risks that could threaten its ability to provide a safe, reliable and dependable distribution service.⁵⁴

⁵⁰ Essential Energy, *G - Cyber Cost V2 - CONFIDENTIAL.xlsx*.

⁵¹ Approved Plan, items 6, 7, 8, 9, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 31.

⁵² Essential Energy Cost Pass Through Application, p 5.

⁵³ NER, cl 6.6.1(j)(5).

⁵⁴ Essential Energy Cost Pass Through Application, pp 5 and 6.

Essential Energy undertook that analysis which identified 369 property or physical risks. These are risks of unauthorised personnel potentially gaining access to Essential Energy's electricity network and operational technology (OT) and information technology (IT) systems. The audit and gap analysis categorised the severity of each risk and those risks which can be addressed under business as usual conditions.⁵⁵ This, in part, is how Essential Energy then determined that of these 369 risks, 281 relate to achieving compliance with the Critical Infrastructure Licence Conditions.⁵⁶

To this end, Essential Energy submitted:

It is evident from the findings that Essential Energy's current physical security measures must be improved as they do not meet the requirements of the varied licence conditions. Key risks include:

- access to many sites is currently via mechanical keys. 1,850 mechanical keys exist and currently we have no ability to remotely deactivate (or activate) the keys - this is important when they are lost or unaccounted for.
- there is no centralised access management and control system that allows Essential Energy to remotely monitor and control access to its sites.
- perimeter fencing and other physical barriers are, in some cases, non-existent or in poor condition resulting in the potential for unauthorised access of key sites.
- inconsistent tree and other vegetation management practices allow for unauthorised access and entry to key Essential Energy sites.⁵⁷

In response to its gap analysis, Essential Energy has proposed costs to:

- replace mechanical keys with a modern Assa Abloy electronic keying system that will allow remote activation and deactivation of electronic keys (Modern Key Replacement Works)
- install a new Tecom C4 electronic surveillance and management control system, to provide centralised intrusion detection, alarm, CCTV and access management control capabilities, that will integrate with the Assa Abloy electronic keying system (Electronic Security System Works)
- upgrade or replace non-compliant perimeter fences at 18 high-risk sites (Fencing Works), and
- incremental tree trimming or removal and other vegetation management work to prevent physical barriers being easily compromised. removing of vegetation to prevent unauthorised access (Vegetation Management Works).⁵⁸

4.4.2.2 Whether the proposed property or physical security costs are required by the Approved Plan

We have determined that the Electronic Key Replacement Works, the Electronic Security System Works, the Fencing Works and the Vegetation Management Works that constitute

⁵⁵ See generally, Property Business Case; Essential Energy, *Gap Analysis Report and Implementation Plan: Physical Security*, certified on 9 December 2020.

⁵⁶ Essential Energy Cost Pass Through Application, p 5.

⁵⁷ Essential Energy Cost Pass Through Application, pp 5 and 6; see also Property Business Case, pp 7 and 8.

⁵⁸ Essential Energy Cost Pass Through Application, p 6.

Essential Energy's proposed property or physical security costs all correspond to achieving deliverables associated with items in the Approved Plan.⁵⁹

4.4.2.3 Whether the proposed property or physical security costs are business as usual or have already been allowed for

We consider that the Electronic Key Replacement Works and the Electronic Security System Works part of Essential Energy's proposed physical security costs are not business as usual costs. However, we have also determined that the Fencing Works and the Vegetation Management Works are properly characterised as business as usual costs.

The Electronic Key Replacement Works and related Electronic Security System Works are directed at addressing conditions 9.2(a) and 10.1 of the Critical Infrastructure Licence Conditions. These conditions require Essential Energy to ensure that the distribution system is only accessed and controlled from within Australia, and that only a "relevant person" within Australia has access to information about its operational technology and associated ICT infrastructure.⁶⁰

This requirement did not exist at the time of the 2019-24 distribution determination. Having to now ensure that control occurs only from within Australia, and that only a relevant person from within Australia has access, is a significant change from what was previously allowed at the time of the 2019-24 distribution determination, with an associated cost. Ensuring this is the case has required Essential Energy to address certain risks identified by its gap analysis, as required by the deliverable of some of the items in the Approved Plan. Relevantly, Essential Energy submitted, a key risk includes:

- access to many sites is currently via mechanical keys. 1,850 mechanical keys exist and currently we have no ability to remotely deactivate (or activate) the keys - this is important when they are lost or unaccounted for.
- there is no centralised access management and control system that allows Essential Energy to remotely monitor and control access to its sites.⁶¹

Essential Energy's proposal is to address these risks by implementing the Assa Abloy electronic keying system, integrated with the Tecom C4 electronic surveillance and management control system. We note that the Critical Infrastructure Licence Conditions do not specifically require Essential Energy to install an electronic keying system and centralised access control system. However, given Essential Energy's current

⁵⁹ Essential Energy, *Annual Compliance Report for 2020/21*, 22 September 2021, Table 5. Specifically:

- the Electronic Key Replacement Works, corresponds to the deliverables associated with items 10 (Emergency Remote Access Protocol) and 11 (Access Management) of the Approved Plan
- the Electronic Security System Works, corresponds to the deliverables associated with items 8 (Incident Detection) and 9 (Incident Response) of the Approved Plan
- the Fencing Works, corresponds to the deliverable associated with item 13 (Physical Access / Security) of the Approved Plan, and
- the Vegetation Management Works, corresponds to the deliverable associated with associated with item 13 (Physical Access / Security) of the Approved Plan.

⁶⁰ A "relevant person" is defined as "the *Licence Holder* (Essential Energy), any other network operator of the *distribution system* (Essential Energy's distribution network), and any other person who is contracted or sub contracted by the *Licence Holder* to work on the *distribution system*: Minister for Energy and Utilities, *Instrument of Variation of Conditions of Distributor's Licence, Electricity Supply Act 1995 (NSW), Schedule A (Ministerially Imposed Licence Conditions for the Operator of a Distribution System, Interpretation and Definitions*.

⁶¹ Essential Energy Cost Pass Through Application, p 5.

circumstances, the implementation of these systems is likely to be an efficient approach to addressing the identified risks and implementing the Approved Plan because:

- the Critical Infrastructure Licence Conditions have emphasised the importance of physical security as a protection for critical infrastructure
- the size and significance of the risks to be addressed justifies a 'project' approach to return security to a compliant level, over and above a business as usual maintenance and replacement program
- it is likely that the roll out of electronic keys and integrated access control systems is the most efficient approach which will best ensure that Essential Energy is able to maintain the physical security of critical infrastructure into the future.

Costs of the kind now proposed by Essential Energy for electronic keys and associated access control systems were not included, nor contemplated, in the approved revenue determined in the 2019-24 distribution determination, or previous regulatory control periods. We therefore consider these cost to be incremental to business as usual costs, and not previously provided for in Essential Energy's revenue determination.

However, the same conclusion cannot be drawn for the Fencing Works and the Vegetation Management Works.

The approved revenue in the 2019-24 distribution determination does provide for vegetation management and general maintenance costs (which covers fencing repairs and upgrades). Despite this, Essential Energy has submitted that the Fencing Works and the Vegetation Management Works are now required to reduce the potential for unauthorised access to key sites. Specifically, Essential Energy submitted:

- perimeter fencing and other physical barriers are, in some cases, non-existent or in poor condition resulting in the potential for unauthorised access of key sites.
- inconsistent tree and other vegetation management practices allow for unauthorised access and entry to key Essential Energy sites.⁶²

We accept that the Fencing Works and the Vegetation Management Works are required for Essential Energy to now comply with the Critical Infrastructure Licence Conditions. Indeed, we have recognised above that that these works correspond to deliverables in the Approved Plan. However, Essential Energy has submitted that the Fencing Works and the Vegetation Management Works cannot be managed under business as usual costs.⁶³ Relevantly, Essential Energy submitted:

The timing of the introduction of the new licence conditions in February 2019, meant that we were unable to include them in our 2019-24 regulatory proposal (produced in April 2018) or revised regulatory proposal (December 2018), and the only opportunity to recover the shortfall in revenue allowance for this regulatory period, is via this cost pass through application.⁶⁴

In our view, the Fencing Works and the Vegetation Management Works should be managed by Essential Energy as business as usual costs under the overall approved revenue determined in the 2019-24 distribution determination.

The risk or potential of unauthorised access to key sites due to poorly kept or missing fencing, or inconsistent vegetation management practices, is a risk that needs to be

⁶² Essential Energy Cost Pass Through Application, p 6.

⁶³ Property Business Case, p 6.

⁶⁴ Essential Energy Cost Pass Through Application, p 8.

addressed. However, it is not a risk that needs to be addressed solely as a result of the Critical Infrastructure Licence Conditions. It is a risk that Essential Energy needs to address generally, in maintaining reasonable levels of safety and security across its distribution network. Activities of this kind were contemplated in the approved revenue determined in the 2019-24 distribution determination.⁶⁵

We are not satisfied that the timing of the introduction of the Critical Infrastructure Licence Conditions, in February 2019, and Essential Energy's claim that it was unable to include costs for the Fencing Works and the Vegetation Management Works in its 2019-24 regulatory proposal now justifies these costs forming part of a positive pass through amount. We expect that Essential Energy could have already addressed poorly kept or missing fencing and inconsistent vegetation management practices through its ongoing maintenance program, as would be expected of a prudent network business in maintaining its network. We would also have expected that these works could have been appropriately identified, managed and prioritised in earlier regulatory control periods as well. In any case, the opportunity remains for Essential Energy to address the matters by prioritising funding for them under the revenues already approved under the 2019-24 distribution determination.

For these reasons, we have excluded Essential Energy's proposed costs of \$3.64 million (\$2020–21) for the Fencing Works and the Vegetation Management Works from the positive pass through amount.

4.4.3 Decisions or actions to reduce magnitude of costs

For the reasons discussed above, we have determined to exclude Essential Energy's proposed costs associated with the Fencing Works and the Vegetation Management Works. We now turn to assessing whether Essential Energy could have reasonably taken any other decision or action to reduce the magnitude of the remaining costs that constitute Essential Energy's proposal (its proposed cyber security costs, Electronic Key Replacement Works and electronic Security System Works).

In summary, there is only one decision or action that we have identified that Essential Energy could have reasonably taken to reduce the magnitude of its proposed positive pass through amount. We consider that Essential Energy should not include a 10 per cent cost contingency across some of the physical security cost components that comprise its proposed positive pass through amount. Other than this, we are satisfied that the decisions and actions taken by Essential Energy in estimating the proposed pass through costs have been prudent and efficient.⁶⁶ We have drawn this conclusion for the following reasons.

Firstly, Essential Energy has undertaken a thorough review of what it considers is required to implement the Approved Plan. This is evident following our review of Essential Energy's business cases for its proposed cyber security measures (Cyber Business Case) and proposed property or physical security measures (Property Business Case), and the various associated company policies and assurance reports that Essential Energy has provided us with.⁶⁷ The Cyber Business Case and the Property Business Case comprehensively set out

⁶⁵ We made the 2019-24 distribution determination in a manner that would or is likely to contribute to the achievement of the National Electricity Objective. The National Electricity Objective, in part, requires us to promote the long-term interest of consumers with respect to the safety, reliability and security of the supply of electricity: NEL, ss 7 and 16; see generally, AER, *Final Decision, Essential Energy, Distribution Determination 2019 to 2024, Overview*, April 2019.

⁶⁶ NER, cl 6.6.1(j)(3).

⁶⁷ Essential Energy, *Business Case Fact Sheet Cyber Security Compliance*, August 2021 (Cyber Business Case Fact Sheet); Essential Energy, *Cyber Security Business Case, Critical Infrastructure Licence Conditions Cost Pass Through*, August 2021 (Cyber Business Case); Essential Energy, *Business Case Fact Sheet Physical / Property Security Compliance*, August 2021 (Property Business Case Fact Sheet);

the rationale, objectives, risks, actions required to achieve compliance, scope of required works and reasons, and costs for each of the 31 items in the Approved Plan.

Further, in the Cyber Business Case and the Property Business Case, Essential Energy also considers the following three potential overall options to achieve compliance with the Critical Infrastructure Licence Conditions, despite there being no express requirement to do so under the Critical Infrastructure Licence Conditions or the Approved Plan:

- option 1: a base case plan, which maintains the status quo and existing cyber security controls
- option 2: a plan to comply with the Approved Plan, and
- option 3: a plan which goes beyond complying with the Approved Plan, as part of a broader strategy of cyber security redesign for long term sustainability and for uplift in cyber security practice maturity.⁶⁸

The Cyber Business Case and the Property Business Case reflect that Essential Energy has chosen option 2, which sets out doing no more than is necessary to address the gaps it had identified to comply with the Critical Infrastructure Licence Conditions. This is also evidenced by the various costs that Essential Energy has absorbed in managing its implementation of the Approved Plan.⁶⁹

Secondly, Essential Energy submitted:

Where goods or services have been procured as part of this project, we have followed our procurement policies and processes which ensure value for money, competitive tendering and strong governance. The business cases attached, outline the alternatives we considered and the reasons for the recommended course of action.⁷⁰

We have reviewed Essential Energy's procurement and contract and supply management policies and procedures that it applied in identifying its proposed positive pass through

Essential Energy, *Property Business, Critical Infrastructure Licence Conditions Cost Pass Through*, August 2021 (Property Business Case); Essential Energy, *Company Policy: Security Strategy CECP0016, Original Issue*, 25 September 2020; Essential Energy, *Company Policy: Physical Security Framework CECP7029, Original Issue*, 24 June 2020; Essential Energy, *Company Policy: Business Resilience CECP0002.06, Issue 6*, 22 June 2021; Essential Energy, *Company Manual CEOM7031 – Protective Security Manual*, 17 October 2014; KPMG, *Independent Reasonable Assurance Report to the Directors of Essential Energy*, 22 September 2021.

⁶⁸ Cyber Business Case Fact Sheet, pp 1 and 3; Property Business Case Fact Sheet, pp 1 and 2; Property Business Case, pp 11-15; Cyber Business Case, p. 8.

⁶⁹ Essential Energy Cost Pass Through Application, pp 7 and 8. Specifically, the costs that Essential Energy has absorbed in terms of labour costs corporate overheads, and:

- development of the Approved Plan
- project management costs to ensure delivery of the Approved Plan
- additional auditing against the Approved Plan
- updating systems and reporting for compliance with the NSW Public Lighting Code
- additional reliability data and reporting on individual customer reliability standards
- analysis of data repositories
- amendments to customer contracts
- compliance of our asset management system with ISO55001 as required under Licence Condition 12
- required training of staff in the new licence conditions.

⁷⁰ Essential Energy Cost Pass Through Application, p 8.

amount.⁷¹ These policies and procedures are comprehensive and reflect good industry practice. Having applied these policies and procedures provides us with a level of confidence that the quantum of the proposed cyber security costs reflect value for money and are the result of an open and effective tendering process that prudently manages any relevant risks.

Thirdly, as noted above, Essential Energy has included a contingency of 10 per cent across the cost components for its proposed physical / property measures.⁷² This contingency totals \$0.86 million (\$2020–21). Essential Energy has applied this across both costs it has already incurred, and forecast it is likely to incur. As to the costs Essential Energy has already incurred, including a contingency in a positive pass through amount is not justified. Either Essential Energy incurred those costs, or it did not.

As to the costs Essential Energy forecasts to incur, including a contingency to address the risks of potentially incorrect cost estimates may be appropriate in some circumstances. For example, a contingency may be appropriate where an inherent or contingent risk associated with a particular cost estimate, which is beyond the service provider's control, is specifically identified and justified. However, even if such a risk is justified, this must be balanced against reducing the incentive of a service provider properly applying risk management strategies to mitigate the risks associated with general cost uncertainties.

In this case, Essential Energy did not justify a contingency for specific quantified risks, but instead has applied a generic 10 per cent cost contingency. Further, in light of how comprehensive the Property Business Case is, and our level of confidence in Essential Energy's procurement process, policies and procedures, we have been unable to identify any material risk associated with cost uncertainties that Essential Energy would not have already substantively addressed.

In conclusion, other than the 10 per cent cost contingency Essential Energy has applied across the cost components for its physical / property measures, we have not identified any other reasonable decision or action that Essential Energy, acting efficiently, could have taken to reduce the magnitude of its proposed costs, having regard to:

- our level of confidence in Essential Energy's company policies and assurance reports, and procurement and contract and supply management policies and procedures, and
- the comprehensive nature of the Cyber Business Case and the Property Business Case.

4.4.4 Approved positive pass through amount

For the reasons set out above, we have determined to not accept Essential Energy's proposed positive pass through amount of \$33.2 million (nominal).

Instead, we have determined a positive pass through amount that:

- reflects us accepting the \$30.7 million for cyber security related measures (\$20.7 million of opex and \$10 million of capex) proposed by Essential Energy, and
- does not reflect the \$9.0 million for property / physical security related measures (\$2.5 million of opex and \$6.5 million of capex) proposed by Essential Energy because

⁷¹ Essential Energy, *Company Policy: Procurement – CECF0009.04*, Issue 9, 14 August 2020; Essential Energy, *Company Procedure: Source to Contract – CEOP0009.06*, Issue 14, 15 October 2020; Essential Energy, *Company Policy: Contract and Supplier Management – CEOP0009.00*, Issue 12, 9 July 2020.

⁷² Essential Energy, *G – Cyber costs V2 – CONFIDENTIAL.xlsx*; Essential Energy, *G – Property costs V3 – CONFIDENTIAL.xlsx*.

we have excluded a total of \$4.5 million (\$2020-21) from Essential Energy's proposed pass through costs, being:

- \$2.28 million of capex and \$1.36 million of opex for the Fencing Works and Vegetation Management Works, and
- \$0.6 million of capex and \$0.25 million of opex for cost contingencies for property / physical measures.

Our determination is therefore to approve a positive pass through amount of \$30.6 million (nominal, smoothed). Our determination on the incremental revenue resulting from this positive pass through amount is detailed in Table 6 below.

Table 6: AER – approved incremental revenue for the Critical Infrastructure Licence Conditions costs

\$m, nominal	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Return on capital	-	0.1	0.4	0.6	0.6	1.7
Return of capital (regulatory depreciation)	-	0.3	0.8	1.5	2.2	4.9
Operating expenditure	0.4	2.0	3.4	12.8	4.5	23.1
Net tax allowance	0.0	0.0	0.0	-0.1	-0.0	-0.1
Incremental annual revenue requirement (unsmoothed)	0.4	2.5	4.6	14.9	7.2	29.6
Incremental annual expected revenue (smoothed)	-	-	-	14.9	15.7	30.6

Source: AER analysis

Note: '0.0' and '-0.0' represent small nonzero number and '-' represents zero.

5 Timing of cost pass through recovery

Essential Energy has proposed to recover the incremental revenue arising from its cost pass through application over the remaining two years of its 2019–24 regulatory control period.⁷³ This timeframe is based on feedback received by Essential Energy through its consumer roundtable forums, where consumers showed preference for Essential Energy to recover the additional costs in network charges over two years of the current regulatory period rather than a longer period because:

- despite a two year cost recovery having a larger pricing impact in the short run, it was nevertheless considered to be slightly cheaper in the long run and a more practical option, and
- concerns and uncertainty existed regarding the 2024–29 price path, including potential bill impacts arising from wholesale electricity prices, the NSW Electricity Infrastructure Roadmap, or increased costs/frequencies of natural disasters resulting from climate change.

Relevantly, Essential Energy submitted:

As discussed in section 5, consumer advocates who attended the roundtable in July 2021, were asked for their preference on cost recovery - they told us that they preferred to have us recover these additional costs in network charges over two years. Despite having a larger pricing impact than if recovery was done over a longer recovery period, it will be slightly cheaper in the long run, and more importantly gets this out of the way. There were concerns of uncertainty surrounding the 2024-29 price path, as well as potential external impacts affecting customers' bills; from wholesale electricity prices, the NSW Electricity Infrastructure Roadmap, or increased costs/frequencies of natural disasters from climate change.⁷⁴

And Red Energy submitted:

Should the AER determine that Essential Energy is permitted to recover the additional costs, they should not be permitted to recover these costs immediately. Essential Energy must consider the pass through as part of their next annual pricing proposal and vary their tariffs accordingly. This will allow the AER to account for the pass through in the Default Market Offer (DMO).

It is currently unclear how the AER will manage an intra-period pass through event that it approves. The AER must ensure that any new network charges as a result of a cost pass through event are included in the DMO. Therefore, it is appropriate that Essential Energy's pass through occurs at the same time as their standard network cost reset.⁷⁵

We are supportive of stakeholders' views and preferred cost recovery choices, and determine that Essential Energy recover the approved amounts over the final two years of its current regulatory control period, namely financial years 2022–23 and 2023–24. This smoothing profile will incrementally increase the average annual bill of residential customers by approximately \$11 (\$ nominal) per year, and by \$41 (\$ nominal) per year for small businesses over 1 July 2022 to 30 June 2024.

⁷³ Essential Energy Cost Pass Through Application, pp 9 and 10.

⁷⁴ Essential Energy Cost Pass Through Application, p 10.

⁷⁵ Red Energy Submission, p 1.

6 NER requirements and stakeholder submissions

For a cost pass through to be determined there must be a positive change event that results in an eligible pass through amount.⁷⁶ Essential Energy can then submit a pass through application, which must address certain matters specified in the NER.⁷⁷ We make a determination on Essential Energy's pass through application and determine the approved pass through amount and the regulatory years in which that pass through amount is to be recovered.⁷⁸ For the reasons set out in table 6 below, we are satisfied that a positive change event has occurred, and that Essential Energy's pass through application specifies all the matters required by the NER.

In making our determination on Essential Energy's approved pass through amount, we must take into account certain matters specified in the NER (see Table 6). Additionally, we have also taken into account the feedback Essential Energy received from the stakeholder roundtables it conducted and the submissions we received on Essential Energy's cost pass through application from Red Energy and the Public Interest Advocacy Centre (PIAC).

Our consideration of them is set out in Table 7 below. After having regard to all of the matters in Table 7 below and throughout this decision, we make the determination set out in section 3 above.

Table 6: Requirements for determining a positive change event has occurred

#	Requirement of the NER	Our consideration
1	Is the pass through event a regulatory change event, service standard event, tax change event or retailer insolvency event? ⁷⁹	Yes, the pass through event (the Minister varying Essential Energy's distribution licence to introduce the Critical Infrastructure Licence Conditions) meets the criteria of a service standard event: see section 4.1 of this decision.
2	Is the pass through event a contingent project or a trigger event associated with a contingent project? ⁸⁰	No, the introduction of the Critical Infrastructure Licence Conditions is not a contingent project or a trigger event associated with a contingent project: see section 4.1 of this determination.
3	Does the pass through relate to any other event specified in Essential Energy's 2019-24 distribution determination as a pass through event for that determination? ⁸¹	No. This event does not relate to any of the nominated pass through events specified in Essential Energy's 2019-24 distribution determination: see section 4.1 of this determination.
4	Was the pass through event a consequence of acts or omissions of Essential Energy? ⁸²	No, the Critical Infrastructure Licence Conditions were a result of the Commonwealth Government classifying Essential Energy's distribution network as critical infrastructure, and the Minister subsequently varying its distribution licence on 5 February 2019: see section 2 of this determination.

⁷⁶ NER, cl 6.6.1(a).

⁷⁷ NER, cl 6.6.1(c).

⁷⁸ NER, cl 6.6.1(d).

⁷⁹ NER, cl 6.6.1(a1).

⁸⁰ NER, ch 10 (definition of "positive change event").

⁸¹ AER, *Final Decision, Essential Energy, Distribution Determination 2019 to 2024, Overview*, April 2019, pp 44 and 45.

⁸² NER, cl 6.6.1(j)(3).

Essential Energy Critical Infrastructure Licence Condition cost pass through

5	Did the pass through event entail Essential Energy incurring materially higher costs in providing prescribed transmission services than it would have incurred but for the event? ⁸³	Yes, the pass through event has resulted in Essential Energy incurring materially higher costs in the 2022-23 regulatory year, being in excess of 1 per cent of Essential Energy's annual revenue requirement (unsmoothed) under the 2019-24 distribution determination: see section 4.2 of this determination.
6	Does the pass through application relate to one event or multiple events?	One event, being the variation of Essential Energy's distribution licence by the Minister.
7	What is the date on which the positive change event occurred?	Essential Energy nominated 5 February 2019 as the date the positive change event occurred.
8	Did Essential Energy submit a written statement of its pass through application within 90 business days of the positive change event occurring? ⁸⁴	No, but we extended the deadline for Essential Energy to submit its cost pass through application to no later than 14 January 2022: see section 4.3 of this decision.
9	Did Essential Energy specify details of the positive change event, including the date on which the event occurred, in its written statement? ⁸⁵	Yes. Essential Energy's written statement is available on our website. ⁸⁶
10	Did Essential Energy specify in its written statement the eligible pass through amount, the proposed positive pass through amount, and the amounts proposed to be recovered from customers in each regulatory year? ⁸⁷	Yes. Essential Energy proposed a positive pass through amount of \$33.2 million (nominal) to be recovered equally over regulatory years 2022-23 and 2023-24.
11	Did Essential Energy specify in its written statement evidence of the actual and likely increase in costs that occurred solely as a consequence of the positive change event? ⁸⁸	Yes. Essential Energy's written statement sets out the costs it submits it incurred and expects to incur as a sole consequence of the introduction of the Critical Infrastructure Licence Conditions.
12	Was there a regulatory information instrument applicable to the pass through application? ⁸⁹	No.
13	Is the pass through amount, in whole or in part, in respect of expenditure for a restricted asset? ⁹⁰	No.

⁸³ NER, ch 10 (definition of positive change event and materially).

⁸⁴ NER, cl 6.6.1(c).

⁸⁵ NER, cll 6.6.1(c)(1) and 6.6.1(c)(2).

⁸⁶ Essential Energy, *Cost Pass Through Application, Licence Condition Changes*, September 2021 available at <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/cost-pass-throughs/essential-energy-cost-pass-through-critical-infrastructure-licence-conditions>.

⁸⁷ NER, cll. 6.6.1(c)(3), 6.6.1(c)(4) and 6.6.1(c)(5).

⁸⁸ NER, cl 6.6.1(c)(6).

⁸⁹ NER, cl 6.6.1(c)(7).

⁹⁰ NER, cll 6.6.1(c1) and 6.6.1(d2).

Table 7: Relevant matters the AER must take into account to determine the pass through amount

#	Requirement of the NER	Our consideration
14.	In making the pass through determination we must take into account the matters and proposals set out in Essential Energy's written statement. ⁹¹	This decision sets out how we have taken into account the matters and proposals set out in Essential Energy's cost pass through application (written statement).
15.	We must take into account the increase in costs in the provision of direct control services resulting from the positive change event. ⁹²	We have taken into account the increase in costs that have resulted from the introduction of the Critical Infrastructure Licence Conditions: see section 4.4 of this determination.
16.	We must take into account the efficiency of Essential Energy's decisions and actions in relation to the risk of the event. ⁹³	<p>We are generally satisfied with the efficiency of the decisions and actions which Essential Energy took in response to the introduction of the Critical Infrastructure Licence Conditions. This is reflected in the Cyber Business Case, Property Business Case and the procurement policies and procedures which Essential Energy applied in arriving at its proposed positive pass through amount.</p> <p>However, we are not satisfied with the decision of Essential Energy to include a 10 per cent contingency across the cost components for its proposed physical / property measures in its proposed positive pass through amount.</p> <p>See section 4.4.3 of this determination.</p>
17.	We must take into account the time cost of money. ⁹⁴	We have taken into account the time cost of money in determining to accept Essential Energy's proposal to recover the positive pass through amount over the 2022-23 and 2023-24 regulatory years: see section 4.4.3 of this determination.
18.	We must take into account the need to ensure that Essential Energy only recovers any actual or likely increment in costs resulting from the pass through event and that such increment is solely as a consequence of a pass through event. ⁹⁵	We are satisfied that the costs reflected in the positive pass through amount that we have determined will only allow Essential Energy to recover the incremental actual costs it has incurred, and is likely to incur, solely as a consequence of the introduction of the Critical Infrastructure Licence Conditions: see section 4.4 of this determination.
19.	We must take into account costs already funded by customers through our five-yearly regulatory determinations. ⁹⁶	We have identified that the proposed costs for the Fencing Works and the Vegetation Management Works that forms part of Essential Energy's proposed positive pass through amount should already be funded by the approved revenue in the 2019-24 distribution determination. We would also have expected that these works were appropriately managed and prioritised in earlier regulatory

⁹¹ NER, cl 6.6.1(j)(1).

⁹² NER, cl 6.6.1(j)(2).

⁹³ NER, cl 6.6.1(j)(3).

⁹⁴ NER, cl 6.6.1(j)(4).

⁹⁵ NER, cl 6.6.1(j)(5).

⁹⁶ NER, cl 6.6.1(j)(7).

		control periods as well: see section 4.4 of this determination.
20.	We must take into account the extent to which the costs that Essential Energy has incurred and is likely to incur are the subject of a previous pass through determination. ⁹⁷	Not applicable, there is no relevant previous pass through determination in which costs of the kind sought by Essential Energy to comply with the Critical Infrastructure Licence Conditions are the subject of.
21.	We must take into account any other factors that we consider relevant	<p>Stakeholder submissions</p> <p>We published Essential Energy’s pass through application on our website and sought submissions from interested stakeholders. We received submissions from Red Energy and the Public Interest Advocacy Centre (PIAC). We have considered the issues raised in submissions in making this decision.</p> <p>Red Energy submitted that Essential Energy’s cost pass through should be varied in the same timeframe as the distribution network tariff resets such that the AER may account for it in determining the Default Market Offer (DMO).⁹⁸</p> <p>As discussed in section 5, our determination is to allow Essential Energy to recover the approved pass through amount over two years commencing from FY 2022-23. The DMO for FY 2022-23 will in effect incorporate the approved pass through amount provided under this determination when Essential Energy publishes its network tariff for FY 2022-23 by 15 March 2022.</p> <p>PIAC submitted that it supported Essential Energy’s being able to recover efficient costs that it has incurred as a result of the Critical Infrastructure Licence Conditions, which were unforeseen at the time of the 2019-24 distribution determination.⁹⁹</p> <p><i>Additional information</i></p> <p>We issued an information notice to Essential Energy under clause 6.6.1(e1) of the NER seeking further information on Essential Energy’s cost pass through application, including details on how Essential Energy estimated its proposed pass through amount. We received information in response to this notice on 22 November 2021. We also received further information from Essential Energy on 14 December 2021, following a meeting between Essential Energy and us on 8 December 2021, and on 16, 17 and 21 February 2022 in response to requests for information from us about the supporting financial models Essential Energy provided as part of its cost pass through application. We have taken this information into account in our assessment of the positive pass through amount.</p>

⁹⁷ NER, cl 6.6.1(j)(7A).

⁹⁸ Red Energy Submission, p 1.

⁹⁹ PIAC Submission, p 1.

Glossary

Term	Definition
Capex	Capital expenditure
DMO	Default Market Offer
ICT	Information communications technology
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
Opex	Operating expenditure
OT	Operational technology
WACC	Weighted average cost of capital
