

EVOENERGY DRAFT PROJECT ASSESSMENT REPORT FOR GOLD CREEK CAPACITY RIT-D PROJECT

Draft project assessment report for a project subject to the regulatory investment test for distribution in accordance with National Electricity Rules clause 5.17.4.

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Note

Printed versions of this document are “uncontrolled copies” - the latest version is available on the [Evoenergy website](#).

DEFINITIONS AND ABBREVIATIONS

Definitions

TABLE 1. DEFINITIONS

Evoenergy	Evoenergy is the ACT's principal Distribution Network Service Provider (DNSP) and is responsible for the distribution of electricity to all customers within the ACT
Network	Evoenergy's distribution network
Non-network provider	A person who provides non-network options
RIT-D proponent	The Network Service Provider applying the regulatory investment test for distribution to a RIT-D project to address an identified need ¹
Thermal constraint	A thermal limitation on the capability of a network, load or generating unit such that it is unacceptable to either transfer, consume or generate the level of electrical power that would occur if the limitation was removed
Value of Unserved Energy	A quantified measure of the resource availability to continuously serve all loads at all delivery points while satisfying all planning criteria. The results involve analysing all hours of a particular year and the calculations are presented as units of energy or currency
Weighted average cost of capital (WACC)	Relevant weighted average cost of capital for a network service provider for a regulatory control period, being the return on capital for that network service provider for that regulatory control period calculated in accordance with National Electricity Rules

Abbreviations

TABLE 2. ABBREVIATIONS

AC	Alternating Current
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AS	Australian Standard
AS/NZS	A jointly developed Australian and New Zealand Standard
BESS	Battery Energy Storage System
CPI	Consumer Price Index
CPI-X	Consumer Price Index minus expected efficiency savings
CT	Current Transformer
DER	Distributed Energy Resource
DNSP	Distribution Network Service Provider
DPAR	Draft Project Assessment Report
DSE-RIP	Demand Side Engagement Register of Interested Parties
FAQ	Frequently Asked Question
FPAR	Final Project Assessment Report
FY	Financial Year

¹ As per definition from National Electricity Rules for *RIT-D proponent*

MW	Megawatt
MWh	Megawatt-hour
NER	National Electricity Rules
NNOR	Non-network options report
POE	Probability of Exceedance
PV	Photovoltaics
RIT-D	Regulatory Investment Test for Distribution
STPIS	Service Target Performance Incentive Scheme
Tx	Transformer
UTR	Utilities Technical Regulation Team
V	Volt
VA	Volt-Ampere
VA_r	Volt-ampere-reactive
VCR	Value of Customer Reliability
W	Watt
WACC	Weighted Average Cost of Capital
ZS	Zone Substation

EXECUTIVE SUMMARY

Background

This Draft Project Assessment Report (DPAR) has been prepared to provide a cost-benefit analysis of submissions received from non-network providers to deliver services to defer or avoid the network augmentation project identified through the Gold Creek Non-Network Options Report (NNOR) published on 30 August 2022. The National Electricity Rules (NER) require a Regulatory Investment Test – Distribution (RIT-D) be completed for augmentation capex projects with a value greater than \$6m. The RIT-D requires a DPAR to be produced where Evoenergy wishes to proceed with a RIT-D project following the publication of the NNOR and consultation, having regard to the non-network option submissions received on the NNOR that may defer or avoid the augmentation project being considered by the RIT-D.

Gungahlin is the northernmost district of Canberra, and is divided into sixteen suburbs constructed between 1991 and 2022. Electricity is distributed to Gungahlin from the Gold Creek zone substation located in Ngunnawal. The substation was commissioned in 1994 with two 57 MVA power transformers. There were 31,952 dwellings in the district in 2021 and this has steadily risen in recent years from 26,150 in 2016 due to greenfield land releases and high-density residential developments.

Load in the Gungahlin district has grown substantially over this period, and is forecast to continue to grow primarily due to additional greenfield residential development, mixed-use urban infill, expansion of light commercial/industrial facilities and electrification including gas transition and decarbonisation of the transport sector.

To meet this increased demand at in the Gungahlin district, Evoenergy has identified a need to increase redundant capacity of the electrical supply. We have proposed installation of an additional (third) transformer at Gold Creek zone substation and connection to existing equipment. As this project crosses over into the 2024-29 regulatory period and EN24 funding will not be approved until April 2024, construction will commence in FY2024/25 with completion before summer FY2025/26.

Identified Network Need

There is currently insufficient redundant capacity at Gold Creek zone substation for short but increasing periods of time to meet N-1 obligations, and minimal coincident opportunity to transfer load to neighbouring zone substations. Table 1 presents forecast maximum demand for the central forecast scenario for winter and summer. Red values indicate demand is greater than the 2-hour emergency limits for a single transformer.

TABLE 1: GOLD CREEK ZONE SUBSTATION LOAD FORECAST – CENTRAL SCENARIO

SEASON	QUANTITY	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Summer	MD 50% PoE (MVA)	76	79	82	85	89	92	95	98	101	104
Winter	MD 50% PoE (MVA)	83	87	90	93	96	100	103	106	109	113

Preferred network option

The preferred network option is identified in the NNOR, and comprises the installation and commissioning of an additional (third) 57 MVA transformer at Gold Creek zone substation. This option utilises a spare bay built into the existing zone substation design. Installation and commissioning of the additional transformer and associated works are expected to be completed by before summer FY2025/26.

The total cost of this option is \$7.3M in FY2022/23 dollars.

Summary of Non-Network Option Submissions

Evoenergy initially received one submission from a non-network option provider in response to the NNOR. This submission was subsequently withdrawn by the provider.

Hence, no non-network option submissions are considered to be credible to meet the identified need.

Recommended Option

The recommended option is to proceed with the preferred network option to install and commission an additional (third) 57MVA transformer at Gold Creek zone substation. A single line diagram of the Gold Creek zone substation with this proposed third transformer is shown in Figure 1.

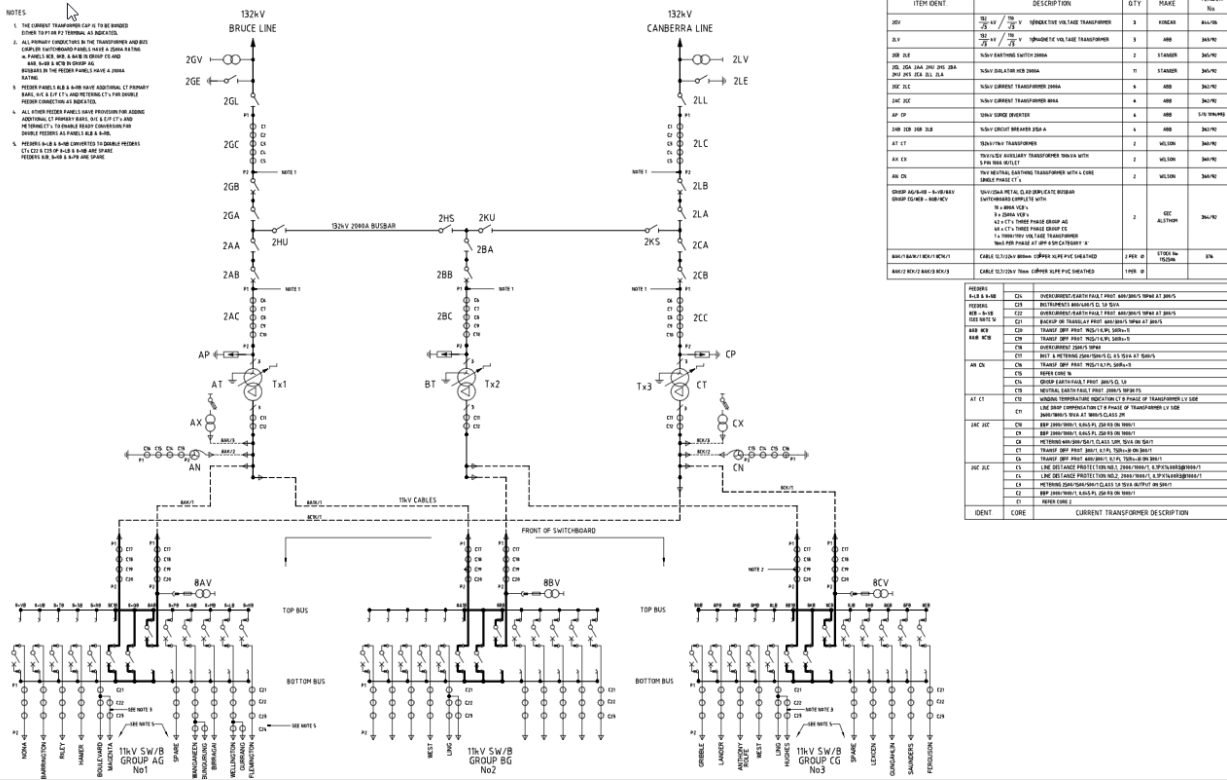


FIGURE 1: PROPOSED GOLD CREEK ZS SINGLE LINE DIAGRAM WITH THIRD TRANSFORMER

The scope of work includes connection to the existing 132kV bus, 132kV circuit breaker, current transformers (CTs) and surge diverters, 11kV transformer cables, switchboard and associated protection, monitoring, and communications equipment. These works are expected to be completed and commissioned prior to summer FY2025/26.

The total project cost of this recommended option for Evoenergy is estimated to be \$5.7M in present value terms.

Next Steps

Evoenergy is seeking submissions on matters set out in this DPAR including the proposed preferred option from Registered Participants, AEMO, non-network providers and interested parties.

Submissions can be lodged via email to: RIT@evoenergy.com.au

Submissions must be received by 19 January 2024 at 5pm.

Evoenergy will review each submission and may seek further information to better understand the comments received.

An overview of the timeline, from the publication of this DPAR to when the preferred option is required to be operational, is provided in Table 2.

TABLE 2: TIMELINE

ACTIVITIES	DATES	STATUS
Publish NNOR and request for submissions ²	30 August 2022	Completed
Consultation period ³ for non-network providers to provide submissions	30 August 2022 – 28 November 2022	Completed
Public briefing session during consultation period	September 2022	Completed
Evoenergy review of submissions received (non-network proposals)	November 2022 – June 2023	Completed
Draft project assessment report ⁴ is released	28 November 2023	Completed
Consultation period for preferred option and request for submissions ⁵	28 November 2023 – 19 January 2024	In progress
Evoenergy review of submissions received	January 2024 – February 2024	Planned
Publish final project assessment report ⁶	February 2024	Planned
Prepare draft contract(s) with preferred non-network provider(s) (where a non-network option or options are preferred)	N/A	N/A
Preferred option operational	Summer FY2025/26	Planned

² Evoenergy will notify registered parties on Demand Side Engagement Register of Interested Parties (DSE-RIP) form as per NER clause 5.17.4(g), available from <https://www.evoenergy.com.au/emerging-technology/demand-management>

³ Not less than 3 months in duration from notifying registered parties on DSE-RIP as per NER clause 5.17.4(h)

⁴ Within 12 months following the end of the consultation period on NNOR as per NER clause 5.17.4(i)

⁵ Not less than 6 weeks in duration from publication of the draft assessment report as per NER clause 5.17.4(m)

⁶ As soon as practicable after the end of the consultation period on the DAPR as per NER clause 5.17.4(o), unless NER clause 5.17.4(p) applies

1. INTRODUCTION

Gungahlin is the northernmost district of Canberra and is divided into sixteen suburbs constructed between 1991 and 2022. The district is predominately residential, supporting a population of >87,000 people based on the 2021 census⁷. The town centre is located in the suburb of Gungahlin and contains a mix of medium and high-density residential dwellings, retail and office space. The town centre is also the origin point of the Canberra light rail system. The district includes the light industrial suburb of Mitchell. The Gungahlin district can be seen in Figure 2.

Electricity is distributed to Gungahlin from the Gold Creek zone substation located in Ngunnawal. The substation was commissioned in 1994 with two 57 MVA power transformers. There were 31,952 dwellings in the district in 2021 and this has steadily risen in recent years from 26,150 in 2016 due to greenfield land releases and high-density residential developments.

Evoenergy has identified the need to increase the capacity of the electrical supply for the Gungahlin district in their Annual Planning Report (APR) in each edition from 2019 to 2022. We have proposed installation of an additional (third) transformer at Gold Creek zone substation and connection to existing equipment by summer FY2025/26. The capital expenditure expected for the works is greater than \$6m and therefore Evoenergy is required under the National Electricity Rules (NER) to undertake a RIT-D.

As Evoenergy's NNOR identified at least one potential credible option that is, or is comprised in significant part by, a non-network option, the RIT-D requires a DPAR. This DPAR has been prepared to inform all stakeholders and encourage them to make submissions on the recommended option for the provision of services to address the identified need.

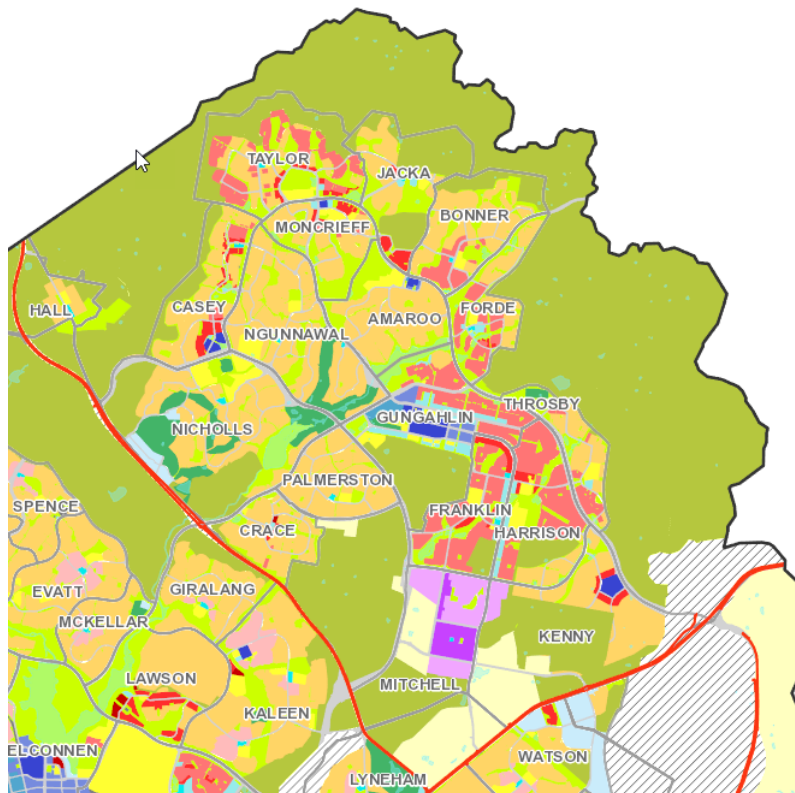


FIGURE 2: DISTRICT OF GUNGAHLIN CONSISTS ALL SUBURBS ABOVE THE RED BORDER⁸

⁷ Australian Bureau of Statistics (2021) *Gungahlin 2021 Census All persons QuickStats*, accessed 22 May 2023. Available from <https://www.abs.gov.au/census/find-census-data/quickstats/2021/80104>

⁸ Source: <https://www.actmapi.act.gov.au/>

1.1 Scope and Purpose

Under the RIT-D process, Evoenergy is required to consider all credible network and non-network options to meet future electricity demand. The RIT-D process^{9 10} involves the following key stages:

- Stage 1: Screening for non-network options and publishing a NNOR,
- Stage 2: Undertaking consultation on non-network options,
- Stage 3: Assessment of credible options,
- Stage 4: Publishing a draft project assessment report and undertaking consultation on the preferred option, and
- Stage 5: Publishing a final project assessment report.

As a part of Stage 4, Evoenergy has developed this DPAR in accordance with the requirements of Chapter 5 clause 5.17.4 of the NER. This report outlines the need for the proposed investment, the description of submissions received to the NNOR, assessment of non-network options to resolve the identified need and results, and the recommendation on the preferred option progress. Through the report, Evoenergy will formally request for submissions on the matters set out in the DPAR. The information contained within this report should enable stakeholders to provide informed submissions on the non-network solutions to Evoenergy to defer the requirement for a significant network augmentation.

Details regarding the process for stakeholders to make submissions on the non-network solutions are provided in Section 7.

1.2 Obligations

Evoenergy has obligations relating to this DPAR, including:

- To ensure that the DPAR gives regard to any submissions received on the NNOR,¹¹
- To ensure that the DPAR is published within 12 months of the end of the consultation period on the NNOR,¹²
- To ensure that the DPAR includes:
 - A description of the identified need for the investment,
 - Assumptions used in identifying the identified need,
 - Summary of submissions received to the NNOR,
 - Description of each credible option assessed,
 - Market benefits,
 - Quantification of each applicable cost for each credible option and a breakdown of operating and capital expenditure,
 - Methodologies for quantifying each class of cost and market benefit,
 - Reasons why a class or classes of market benefits or costs do not apply to a credible option,
 - Results of net present value analysis and explanatory statements regarding the results,

⁹ NER version 134 clause 5.17.4, available from <https://www.aemc.gov.au/sites/default/files/2020-03/NER%20v134%20full.pdf>

¹⁰ AER, Regulatory investment test for distribution application guidelines, December 2018, available from https://www.aer.gov.au/system/files/AER%20-%20Final%20RIT-D%20application%20guidelines%20-%202014%20December%202018_0.pdf

¹¹ As per NER clause 5.17.4 (i)

¹² As per NER clause 5.17.4 (i)(1)(i)

- Identification and description of the proposed preferred option, and
- Contact details within Evoenergy to whom queries on the draft report may be directed,¹³
- To publish a request for submissions on the matters set out in the DPAR,¹⁴
- To notify persons registered on its demand side engagement register of the report's publication,¹⁵ and
- To provide Registered Participants, the Australian Energy Market Operator (AEMO), interested parties, non-network providers and persons registered on Evoenergy's demand side engagement register with no less than six weeks in which to make submissions on the DPAR from the date that this report is published.¹⁶

1.3 Structure of Report

This document is structured as follows:

- Section 2 provides background information on the network location and the associated infrastructure,
- Section 3 describes the identified need that is to be addressed, and includes assumptions applied, limitations of the existing network and impacts of doing nothing,
- Section 4 describes the options, and includes a summary of the submissions received on the NNOR, credible options considered, and alternative options considered but not progressed,
- Section 5 describes the economic assessment of non-network options including the assessment methodology, results of the economic assessment and sensitivity analysis,
- Section 6 provides the recommendation on the preferred credible non-network option, and
- Section 7 provides guidance on next steps.

¹³ As per NER clause 5.17.4 (j)

¹⁴ As per NER clause 5.17.4 (k)

¹⁵ As per NER clause 5.17.4 (k)(2)

¹⁶ As per NER clause 5.17.4 (m)

2. BACKGROUND

2.1 Existing Supply System

The Gungahlin District is supplied by the 132/11kV Gold Creek zone substation located in Ngunnawal. The substation has a continuous rating of 114 MVA and consists of two 57 MVA power transformers supplying 31,600 customers through 22 primarily underground 11kV feeders. The load supplied is primarily domestic, however includes the Gungahlin town Centre, light rail and the light industrial suburb of Mitchell. The Gungahlin district has significant solar PV penetration with 6,913 registered sites with combined capacity output up to 38,601 kW, mainly due to generous government incentive schemes. This has led to some over-voltage issues during peak generation times.¹⁷

Gold Creek zone substation was commissioned in 1994 and was constructed with provisions for the installation of a third transformer as the load in the Gungahlin district grew. Gold Creek zone substation location and the northern Canberra 132 kV transmission network can be seen in Figure 3.

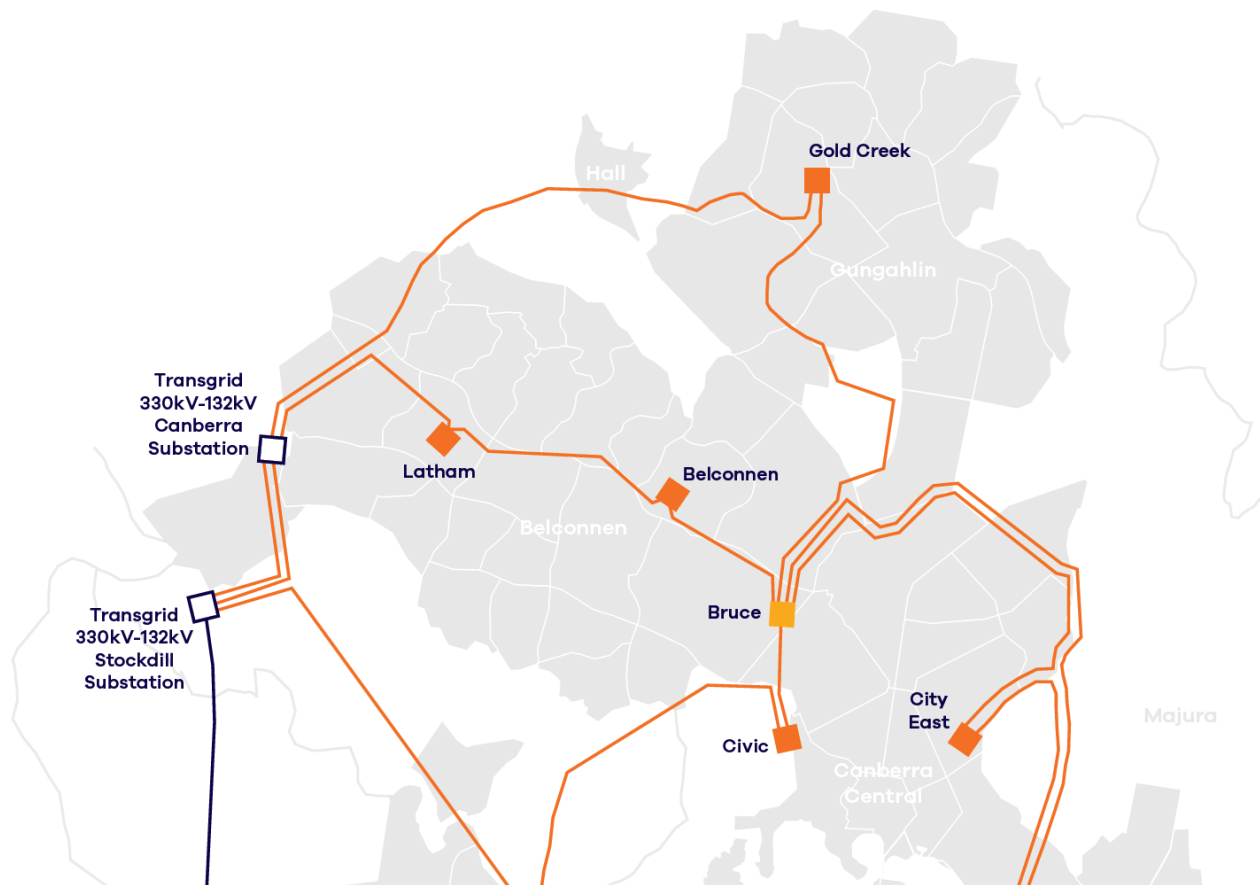


FIGURE 3: EVOENERGY 132 KV TRANSMISSION NETWORK NORTHERN SEGMENT

The development of new suburbs, infrastructure and associated growth in population has seen significant load growth in the Gungahlin District. This load growth has led to instances of Gold Creek zone substation exceeding the two-hour emergency rating. The projected load growth is forecast to exceed this rating with increasing occurrence and duration above ratings. The historical and 10-year maximum demand forecast can be seen in Figure 4, where the PoE 50 forecast shows exceedance of the two-hour emergency rating from summer 2022.

¹⁷ Customer and PV volumes correct as at August 2022.

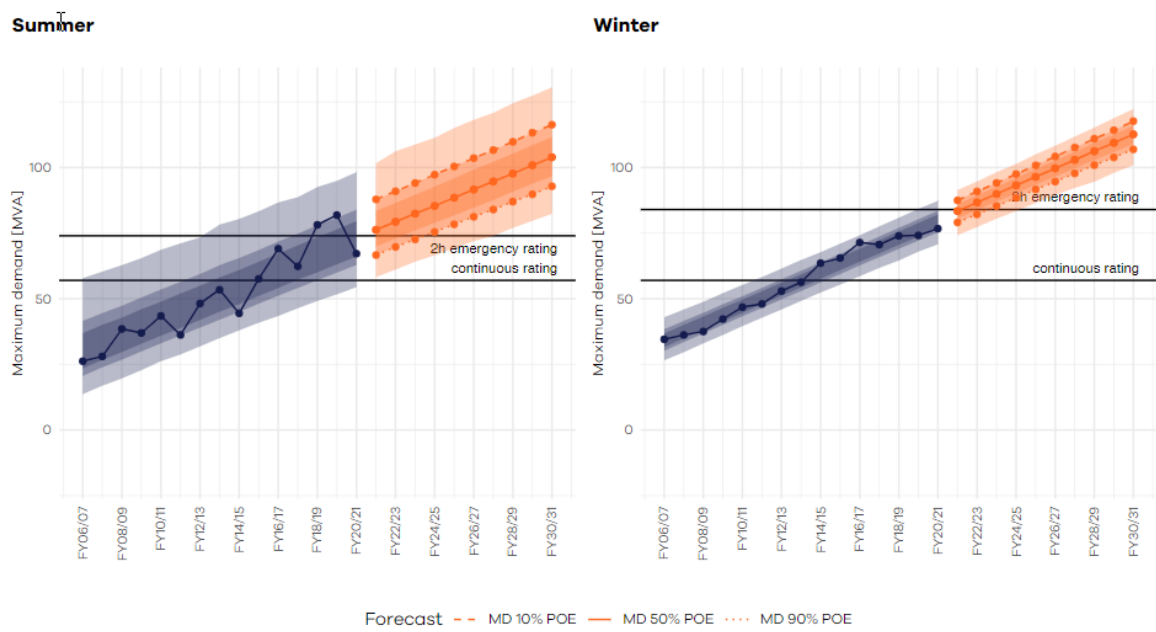


FIGURE 4: GOLD CREEK ZS HISTORICAL AND 10-YEAR MAXIMUM DEMAND FORECASTS. BANDS DENOTE BAYESIAN [20, 80]%, [10, 90]%, [1, 99]% (FROM INNER TO OUTER) POE FORECASTS¹⁸

2.2 Substation Continuous and Emergency Ratings

The primary objective of planning is to ensure that customers are able to receive reliable, safe and quality supply of electricity now and into the future. Evoenergy’s planning standards are set to ensure that peak demand can be met with an appropriate level of backup should a credible contingency event occur. A credible contingency event is the loss of a single network element that occurs sufficiently frequently, and has such consequences, as to justify the DNSP to take prudent precautions to mitigate. This is commonly referred to as an N-1 event.

Substations are rated according to two rating regimes:

- **Continuous rating** – substation N-1 rating capable of continuous reliable operation (24/7). This is further differentiated into oil natural, air natural (ONAN), oil directed, air natural (ODAN), and oil directed, air forced (ODAF).
- **Emergency rating** – substation N-1 rating above nameplate ratings capable of reliable operation for short duration. Operating assets at this rating accelerates loss of asset life thus exposure to these conditions is limited.

2.2.1 Gold Creek Zone Substation Ratings

Table 3 summarises the ratings for the transformers and entire Gold Creek Zone Substation

TABLE 3: GOLD CREEK ZS AND TRANSFORMER RATINGS (ALL VALUES IN MVA)

	TX1	TX3	ZS
Continuous ONAN	34.5	34.5	N/A
Continuous ODAN	40	40	N/A
Continuous ODAF	57	57	N/A
2-Hour Emergency (Summer)	74	77	74 [^]
2-Hour Emergency (Winter)	84	85	84 [^]

¹⁸ Evoenergy Annual Planning Report 2021, December 2021, available from <https://www.evoenergy.com.au/-/media/evoenergy/about-us/annual-planning-report-2021.pdf>

¹⁹Note: The ZS 2-Hour Emergency rating is defined as the maximum load the zone substation could thermally operate for a two-hour period in the event of a loss of a single power transformer at the ZSS

2.3 Relevant Statutory and Regulatory Obligations

2.3.1 National Electricity Rules

The RIT-D process assesses the economic efficiency of the proposed credible option investments. The process is defined by clauses 5.17.1 - 5.17.4 of the NER and the Australian Energy Regulator's (AER) RIT-D guideline¹⁹.

The RIT-D proponent, Evoenergy, is required to apply the RIT-D for all projects where the estimated capital cost of the most expensive potential credible option to address the identified need is greater than \$6 million.

All projects meeting the RIT-D threshold must be screened for potential credible non-network options that address the identified need. Where a non-network option is a potential credible option, or forms a significant part of a potential credible option, Evoenergy must, as per NER clause 5.17.4, prepare and publish a NNOR. Submissions received to the NNOR from non-network providers must be assessed by Evoenergy. Where Evoenergy wishes to proceed with a RIT-D project, Evoenergy must, as per NER clause 5.17.4(i)-(m), prepare and publish a DPAR.

The DPAR is intended to inform stakeholders of the non-network solution submissions received, assessment methodology, costs and market benefits associated with each credible option, the proposed preferred credible option, and provide an opportunity for stakeholders to make a submission on the matters set out in the DPAR and proposed preferred option.

Clause 5.17.4(j) of the NER requires the DPAR include:

- (1) A description of the *identified need* for the investment,
- (2) The assumptions used in identifying the *identified need* (including, in the case of proposed reliability corrective action, reasons that the RIT-D proponent considers reliability corrective action is necessary),
- (3) If applicable, a summary of, and commentary on, the submissions on the non-network options report,
- (4) A description of each credible option assessed,
- (5) Where a *Distribution Network Service Provider* has quantified market benefits in accordance with clause 5.17.1(d), a quantification of each applicable market benefit for each credible option,
- (6) A quantification of each applicable cost for each credible option, including a breakdown of operating and capital expenditure,
- (7) A detailed description of the methodologies used in quantifying each class of cost and market benefit,
- (8) Where relevant, the reasons why the RIT-D proponent has determined that a class or classes of market benefits or costs do not apply to a credible option,
- (9) The results of a net present value analysis of each credible option and accompanying explanatory statements regarding the results,
- (10) The identification of the proposed preferred option,
- (11) For the proposed preferred option, the RIT-D proponent must provide:
 - (i) details of the technical characteristics,
 - (ii) the estimated construction timetable and commissioning date (where relevant),
 - (iii) the indicative capital and operating cost (where relevant),
 - (iv) a statement and accompanying detailed analysis that the proposed preferred option satisfies the *regulatory investment test for distribution*, and
 - (v) if the proposed preferred option is for reliability corrective action and that option has a

¹⁹ AER Application Guidelines RIT-D, December 2018, available from https://www.aer.gov.au/system/files/AER%20-%20Final%20RIT-D%20application%20guidelines%20-%202014%20December%202018_0.pdf

- proponent, the name of the proponent, and
- (12) Contact details for a suitably qualified staff member of the RIT-D proponent to whom queries on the draft report may be directed.

Evoenergy must provide Registered Participants, AEMO, interested parties, non-network providers and persons registered on the demand side engagement register no less than six weeks in which to make submissions on the DPAR from the date that the DPAR is published.

3. DESCRIPTION OF IDENTIFIED NEED

The Gungahlin district is experiencing significant urban growth due to the development of new suburbs such as Jacka and Kenny as well as medium and high-density residential development in the town centre, light rail and light industrial development in Mitchell²⁰. These developments and subsequent load growth are expected to continue over the next ten years. Load forecast at PoE 10, 50 and 90 can be seen in Table 4.

TABLE 4: GOLD CREEK ZONE SUBSTATION LOAD FORECAST

SEASON	QUANTITY	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Summer	MD 10% PoE	88	91	94	97	100	104	107	110	113	116
Summer	MD 50% PoE	76	79	82	85	89	92	95	98	101	104
Summer	MD 90% PoE	67	70	73	75	78	81	84	87	90	93
Winter	MD 10% PoE	87	91	94	98	101	104	108	111	114	118
Winter	MD 50% PoE	83	87	90	93	96	100	103	106	109	113
Winter	MD 90% PoE	79	82	85	88	92	95	98	101	104	107

Note: Red denotes exceedance of 2-hour emergency limits for a single transformer (all values in MVA). Projections as at August 2022.

The ACT is moving to net zero emissions by 2045, which sees the phasing out of natural gas and internal combustion engine vehicles. These changes are expected to significantly increase the load on the electricity network across the ACT. Winter load is expected to increase as a result of the transition away from gas as a domestic energy source, with the Gungahlin district having a high reliance on natural gas for heating, hot water and cooking. Further detail on the forecasting scope is provided in Section 5.1.2.

The proliferation of both public and private electric vehicle (EV) charging is expected to significantly increase peak loads. The ACT Government Zero Emissions Vehicles Strategy 2022-30²¹ states: *By 2023 at the latest, enact regulation in the Territory Plan to require electric vehicle charging infrastructure for new multi-unit residential and commercial buildings.*

Evoenergy is already seeing the effect of this change as recent applications such as for Block 2 Section 11 Gungahlin with 53,000m² commercial development with 600 residential dwellings, 28,000m² of car parking with 600 EV chargers. The expected load for this development is approximately 9 MVA.

The ACT Electricity Transmission Supply Code 2016²², 4.1.2 states:

ActewAGL must plan, design, construct, test, commission, maintain, operate and manage its electricity transmission networks and connection points that supply customers and that will operate at 132 kV and 66 kV, to achieve the following:

²⁰ ACT indicative land release program 2022-23 to 2026-27 available here:

https://www.planning.act.gov.au/_data/assets/pdf_file/0006/2050179/Indicative-Land-Release-Program-2022-23-to-2026-27.pdf

²¹ Available here: https://www.climatechoices.act.gov.au/_data/assets/pdf_file/0006/2038497/2022_ZEV_Strategy.pdf

²² Available here: <https://www.legislation.act.gov.au/DownloadFile/di/2016-189/current/PDF/2016-189.PDF>

(2) continue to allow electricity supply at maximum demand to each ActewAGL substation (excluding Angle Crossing and Tennent Substations) immediately and automatically after a credible contingency event subject to supply availability from TransGrid.

Note: References to ActewAGL are applicable to Evoenergy.

There is currently insufficient redundant capacity at Gold Creek zone substation for short but increasing periods of time, and minimal coincident opportunity to transfer load to neighbouring zone substations. Figure 5 shows historic exceedance of N-1 emergency rating at Gold Creek zone substation and demonstrated both the frequency and duration of exceedance increasing annually. The transformer ratings are listed in Table 3.

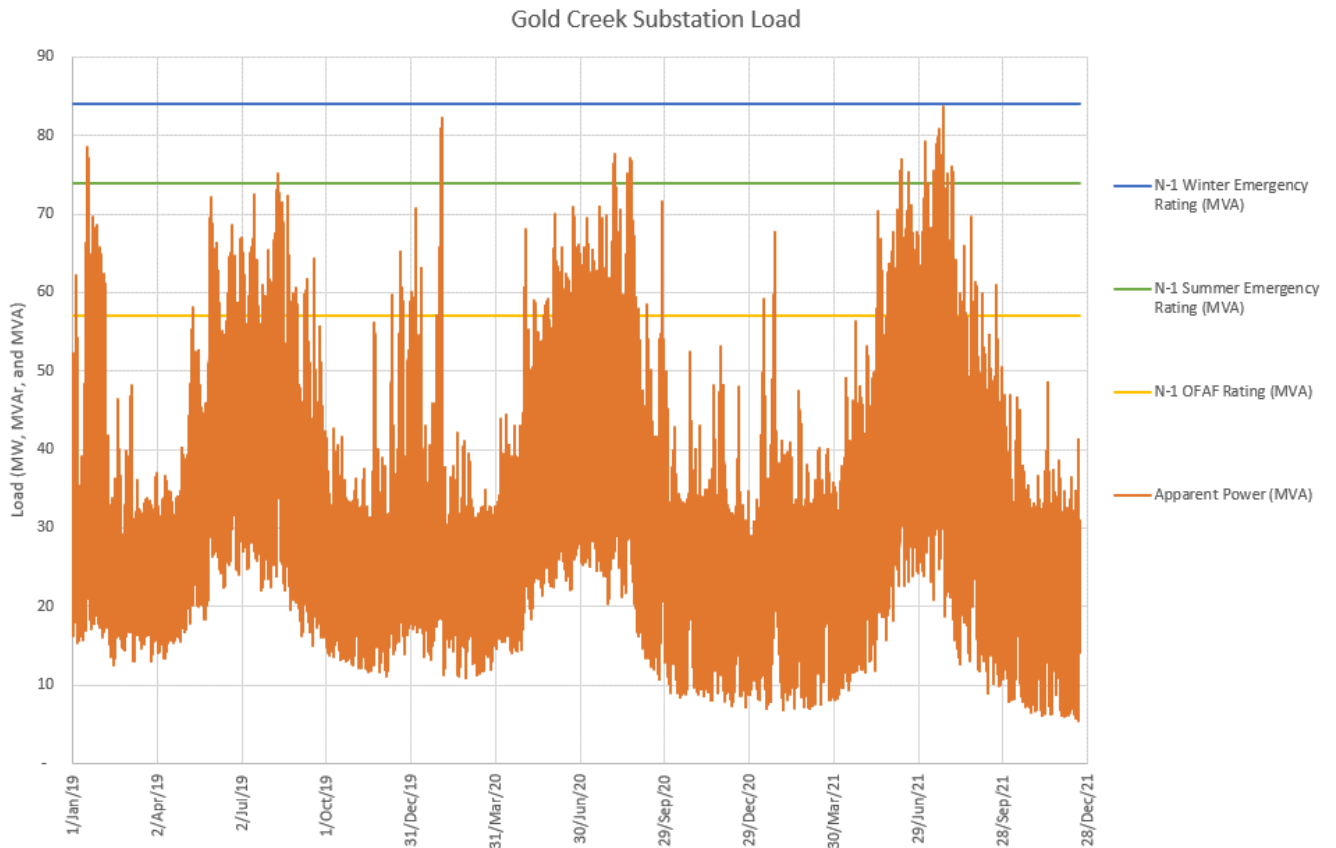


FIGURE 5: HISTORIC EXCEEDANCE OF N-1 RATING AT GOLD CREEK ZONE SUBSTATION

N-1 emergency rating exceedance events at Gold Creek zone substation have historically occurred in summer and in the late afternoon and early evening. June 2022 saw two winter exceedance events during the early evening. Significant (>1 hour) N-1 emergency rating exceedance events are listed in Table 5.

TABLE 5: HISTORIC N-1 EMERGENCY RATING EXCEEDANCE EVENTS AT GOLD CREEK ZSS (AS AT AUGUST 2022)

DATE AND TIME	DURATION (H:MM)	SEASON (RATING MVA)	MAXIMUM DEMAND (MVA)	ENERGY AT RISK (MWh)
Wed 16 Jan 2019 17:55	1:50	Summer (77)	78.6	4.6
Thu 17 Jan 2019 17:40	1:45	Summer (77)	77.1	3.8
Fri 31 Jan 2020 17:15	3:35	Summer (77)	80.9	15.0

Sat 1 Feb 2020 15:45	3:50	Summer (77)	82.3	23.1
Tue 7 Jun 2022 17:20	2:00	Winter (84)	87.4	10.4
Tue 14 Jun 2022 18:00	1:10	Winter (84)	85.6	2.9

4. OPTIONS ANALYSIS

In accordance with the RIT-D process outlined in Section 2.3.1, a description of each option, including the types of non-network solution submissions received in response to the NNOR consultation, must be provided within the DPAR.

4.1 Network Option

4.1.1 Network Option 1: Base Case (Preferred Network Option)

The base case is the preferred network option identified in the NNOR and 2022 APR. The base case will install and commission an additional (third) 57 MVA transformer at Gold Creek zone substation.

The scope of work includes connection to the existing 132kV bus, 132kV circuit breaker, CTs and surge diverters, 11kV transformer cables, switchboard and associated protection, monitoring and communications equipment. These works are expected to be completed and commissioned prior to summer FY2025/26. This is the preferred network option for the following reasons:

- Lowest NPC of acceptable network options
- Effectively doubles Gold Creek zone substation continuous and 2-hour emergency ratings
- Increases the capacity and flexibility of Gold Creek zone substation to manage the ACT government Net Zero by 2045 target and the associated load growth from full electrification and EV charging
- Lowest level of complication and community disruption from land access and construction/civil works
- Does not affect redundancy at nearby zone substations

Figure 6 displays an aerial view of Gold Creek zone substation, with the spare centre bay that would be utilised for the new transformer.



FIGURE 6: AERIAL VIEW OF GOLD CREEK ZONE SUBSTATION

4.1.1.1 Technical Definition and Characteristics

The Gold Creek zone substation was commissioned in 1994 with two 132/11kVA, 57 MVA power transformers supplying 22 11kV feeders supplying the Gungahlin district. The substation was constructed with extra civil infrastructure including transformer pad, apparatus footings, switch room and cable tunnels to allow the installation of a third transformer as the load in the Gungahlin district grew. The layout of the yard can be seen in Figure 7. Current and proposed single line diagrams can be seen in Figure 8 and Figure 9.

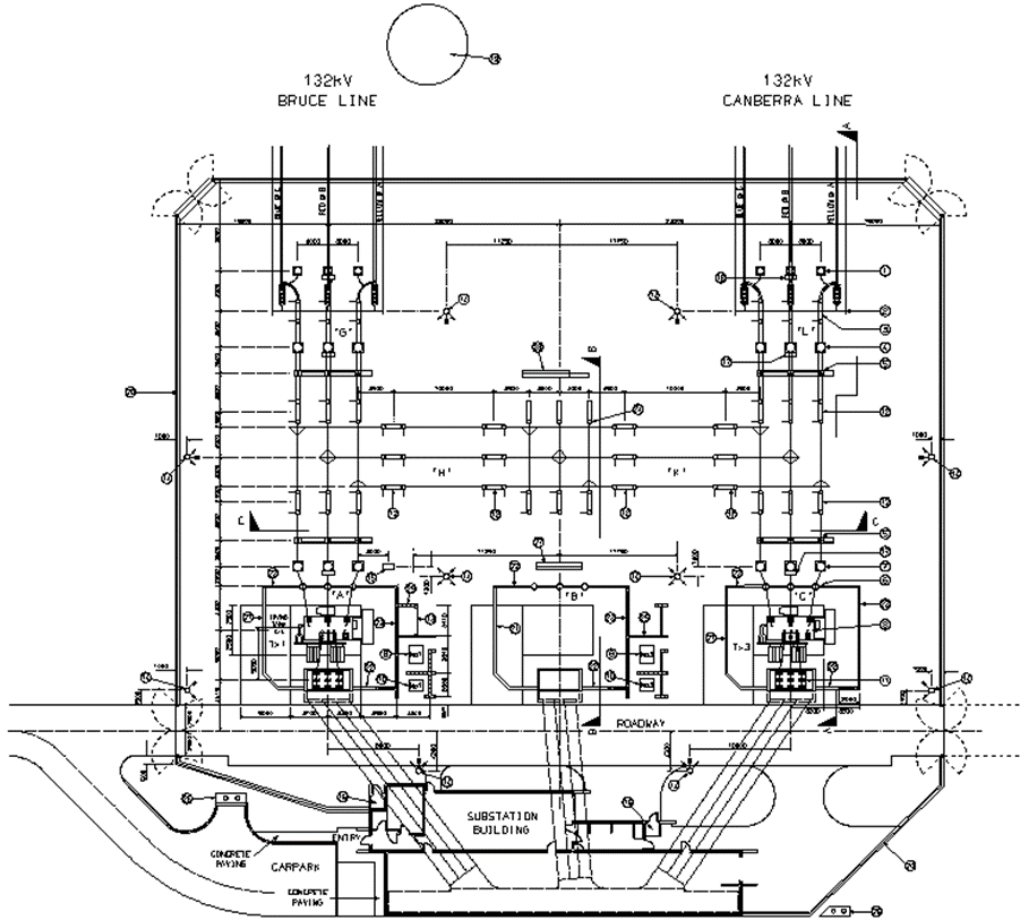


FIGURE 7: GOLD CREEK ZSS GENERAL ARRANGEMENT SHOWS SPARE CENTER BAY FOR FUTURE THIRD TRANSFORMER TX2.

4.1.1.2 Construction timeframes

As this project crosses over into the 2024-29 regulatory period and EN24 funding will not be approved until April 2024, construction will commence in FY2024/25 with completion before summer FY2025/26.

4.1.1.3 Costs

The cost estimate for this option is \$7.3M, in FY2022/23 dollars exclusive of contingency and GST. The preliminary cost of this option and timing of expenditures is outlined in Table 6.

TABLE 6: TOTAL COST BY YEAR (BASE CASE)

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	TOTAL
Transformer (\$M)	0	0	0	0	0	1.87	5.40	7.27
Total (\$M)	0	0	0	0	0	1.87	5.40	7.27

4.2 Non-Network Options

4.2.1 Summary of Submissions Received on the NNOR

As part of the RIT-D process outlined in section 2.3.1, Evoenergy issued a request for non-network solution submissions on the NNOR, and coordinated consultation including a public briefing session with potential non-network providers.

Evoenergy received one submission from a non-network provider in response to the NNOR, which was subsequently withdrawn. The submission detailed a proposal to provide demand management services in exchange for a fee from a BESS located opposite to the Gold Creek zone substation site. This submission was contingent on its inclusion in a successful bid for the Big Canberra Battery project run through the ACT Government's Environment, Planning and Sustainable Development Directorate. The proponent requested to withdraw this application during the non-network proposals review period.

4.2.2 Credible Non-Network Options

In order to be considered a credible option, the non-network option must meet the following criteria:

1. The option is able to meet the identified network need (in terms of size, location and timeliness)
2. The costs are well defined such that the option can be compared to the network option.
3. The option does not present any material commercial or technical risks that cannot be managed

Given that the only non-network option submission was withdrawn, no non-network option can be considered as a credible option.

5. ECONOMIC ASSESSMENT OF CREDIBLE OPTIONS

5.1 Methodology

This section outlines the methodology used to undertake the economic assessment of credible options, including where applicable; the approach to estimating project costs, market benefits, and modelling scenarios to address uncertainty.

Evoenergy applies a probabilistic planning methodology where the costs and benefits for each credible option are measured against a 'no investment' base case.

Evoenergy has shown that an investment to augment the network in Gungahlin has a higher NPC than a 'no investment' option. The 'do nothing' option breaches Evoenergy's obligations under the ACT Electricity Transmission Supply Code 201623, section 4.1.2: *continue to allow electricity supply at maximum demand immediately and automatically after a credible contingency event and the potential unserved energy risk*. In addition to this, in a contingency event the 'do nothing' option results in thermal limits of existing network assets being breached and the potential for large amounts of involuntary load-shedding, which drives large unserved energy costs that will be borne by customers (and Evoenergy through the Service Target Performance Incentive Scheme (STPIS) mechanism).

The NNOR outlined a methodology to assess non-network options against three demand forecast scenarios. Under this methodology the costs and risks (predominantly the risk of unserved energy) are calculated for each scenario and weighted by the probability assigned to the scenario. As the network option is considered to be the credible baseline, its relative benefits are set to zero.

No credible non-network options were identified, so there are no non-network options assessed using this methodology.

5.1.1 Economic Assessment Timeframe

Evoenergy's initial analysis of the identified need used a 10-year period that covered multiple future stages of investment. The long-term forecast for growth in the Gungahlin district that is driving the need for investment has not changed since the initial analysis was undertaken so a 10-year period continues to be used, covering the period 2021-2031.

5.1.2 Electrical Demand

The sections below cover the forecasts used by Evoenergy to assess options that may meet the identified need.

Recent ACT Government initiatives to meet Net Zero by 2045 have been excluded from the forecasting scope including:

- Transition away from natural gas to full electrification of the ACT as a result of future ACT Government initiatives²⁴
- Acceleration of take-up of privately owned electric vehicles and associated residential charging infrastructure as a result of the recent ACT Zero Emissions Vehicles Strategy 2022-2030²⁵

The following reasons are provided for exclusion from the forecasting:

1. Targets are not yet legislated and future incentive programs have not been released,

²³ Available here: <https://www.legislation.act.gov.au/DownloadFile/di/2016-189/current/PDF/2016-189.PDF>

²⁴ Media release available here:

https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/barr/2022/powering-canberra-our-pathway-to-electrification#:~:text=The%20ACT%20Government%20today%20announced,over%20the%20next%20two%20decades.

²⁵ Available here: https://www.climatechoices.act.gov.au/_data/assets/pdf_file/0006/2038497/2022_ZEV_Strategy.pdf

2. Evoenergy has performed extensive modelling around net-zero pathways and with current legislation and incentive schemes in place we do not believe that there will be a significant change in maximum demand forecasts over the next 3 years – which is the timeframe for this project.

5.1.2.1 Scenarios

Evoenergy has modelled three load Probability of Exceedance (PoE) forecasts to reflect the uncertainty in actual peak demand in any given year. These are the 90%, 50% and 10% levels, where the percentage refers to the likelihood that actual peak demand exceeds the forecast in any given year. This variability is usually attributed to weather, where cold winters and hot summers result in higher than forecast peak demand (PoE 10) and mild winters and summers result in lower than forecast demand (PoE 90).

The probabilities applied to the PoE scenarios are derived from the likelihood of demand being more extreme than the scenario. A 10% probability is attached to the PoE 90 and PoE 10 scenarios and the remaining 80% to the central PoE50 scenario.

Evoenergy considers the PoE 50 scenario the most applicable to Gold Creek zone substation and have used the PoE 50 to calculate unserved energy values for the purpose of this report.

5.1.2.2 Maximum Demand

Maximum demand forecasts are driven by the expected new load attributable to new developments each year. Evoenergy has based the maximum demand forecast for the Gungahlin district on the latest ACT Land Release data, which provides the number of residential lots and square meters of commercial space released each year. Evoenergy has also considered developer applications in forming the number of new premises connected in the Gungahlin district.

Evoenergy has applied a one-year lag between land release and connection of a lot to the electricity network. Each residential lot is assumed to add 2.2kVA to coincident maximum demand in a PoE 50 scenario and each square meter of commercial/other space is assumed to add 0.1kVA. The residential lot estimate is an average of single dwellings and multi-unit blocks. The forecast uses very conservative estimates of coincident maximum demand and assumes very high energy efficiency of the homes and commercial spaces that will be built in the Gungahlin district. The ACT Government has requirements and incentives for developers to include EV charging points in medium and high-density developments and a plan to phase out new fossil fuel powered vehicles being purchased by 2030 as well as full electrification of the ACT by 2045 which is likely contribute to higher demand growth than forecast by Evoenergy.

Additional diversity factors have been applied on a case-by-case basis for some large loads with special characteristics. These values are based on Evoenergy's historic experience with new developments, expectations for energy efficiency of the new premises and expectation for rooftop solar PV to reduce grid electricity consumption, especially in summer months.

The maximum demand forecast increase each year is used to create a forecast annual load profile. Each 15-minute interval increased proportionally based on maximum demand growth.

The PoE 50 forecasts are developed first and the PoE 90 and PoE 10 forecasts calculated using the approach outlined in section 4.3.1 above.

For financial modelling purposes, the alignment of financial years to seasonal peaks is: FY2022/23 = 2022 winter and 2022/23 summer. The maximum demand forecast can be seen in Table 4.

5.1.2.3 Load Profile

When assessing the financial costs and unserved energy implications of non-network submissions, Evoenergy uses the actual load profiles of Gold Creek zone substation during a 12 month period covering the 2018/19 summer and 2019 winter. This year was chosen as it represents a "normal" year and does not include years with major weather events or load impacts due to the COVID-19 pandemic. This load profile approximately aligns with FY19 and is treated as a financial year for the assessment of options.

The use of this load profile is reasonable for forecasting because it represents actual customer electricity usage characteristics in the area, the makeup of the new developments is expected to largely reflect the existing load uses in the area and because FY19 was a typical year with no unusual or major demand events during the year.

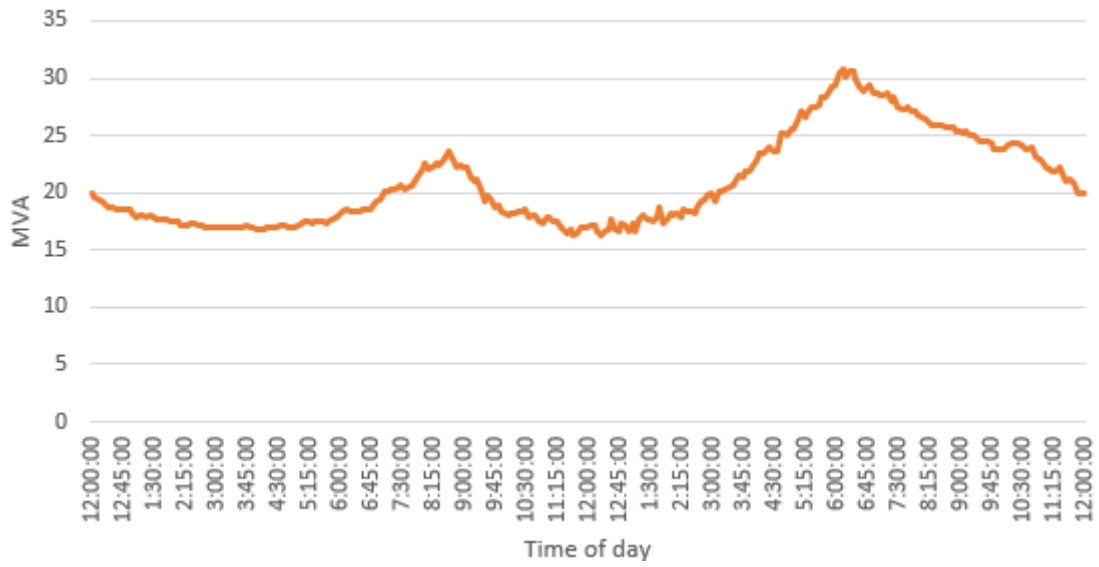


FIGURE 10: DEMAND PROFILE OF AN AVERAGE DAY

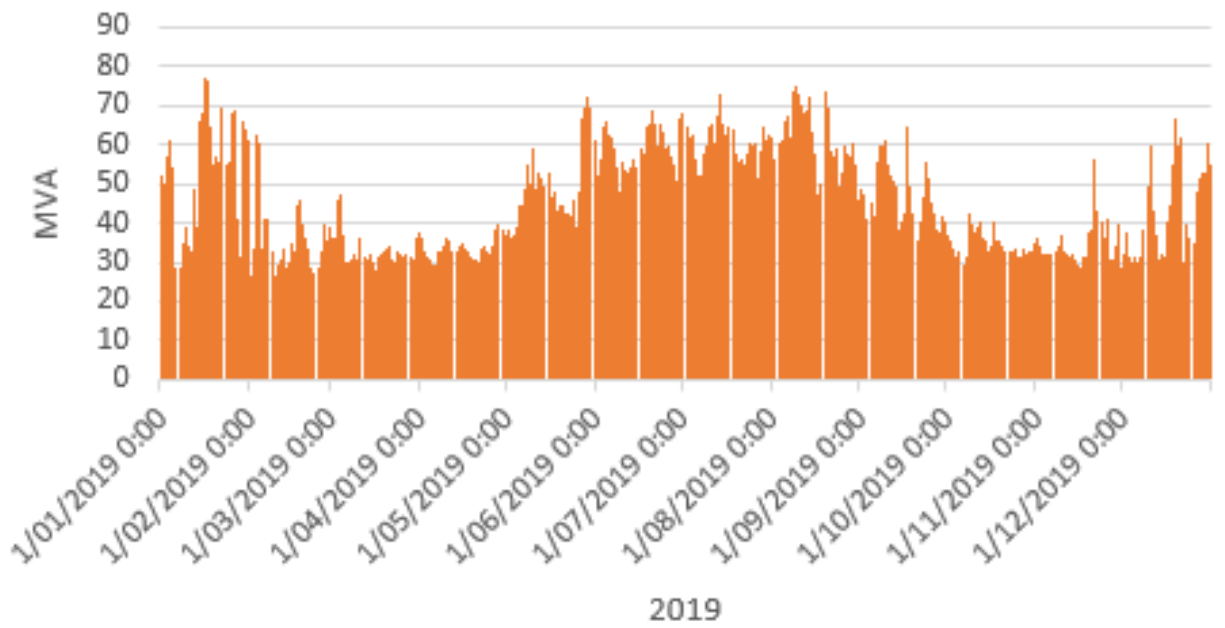


FIGURE 11: GOLD CREEK ZS ANNUAL LOAD PROFILE

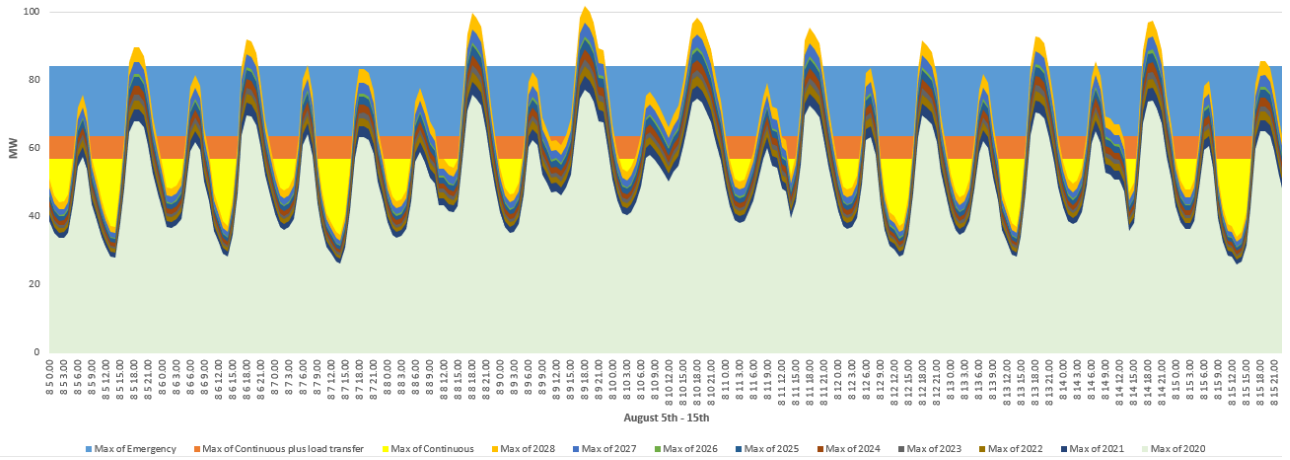


FIGURE 12: WEEK OF WINTER MAXIMUM DEMAND AT POE 50

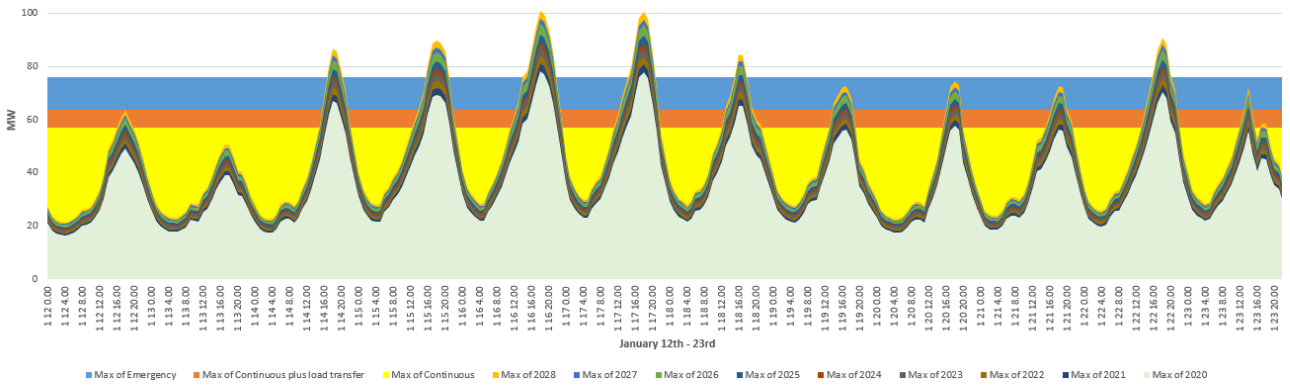


FIGURE 13: WEEK OF SUMMER MAXIMUM DEMAND AT POE 50

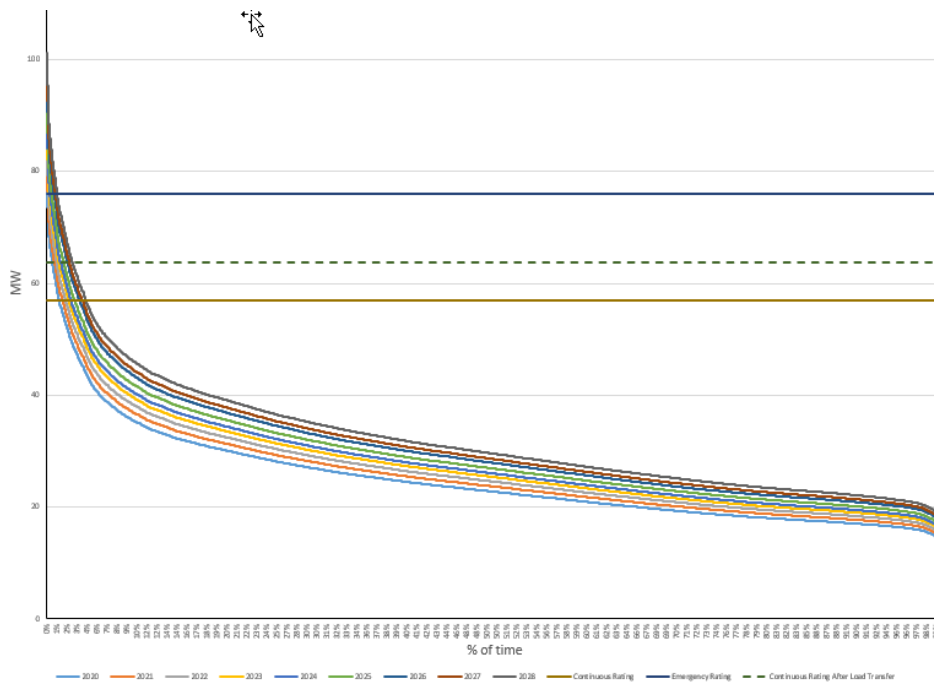


FIGURE 14: LOAD DURATION CURVE AT POE 50

5.1.3 Load Transfer Capability and Supply Restoration

The forecasts for maximum demand at Gold Creek zone substation include all feasible load transfers to defer the exceedance of two-hour emergency ratings. No additional load transfers are possible. Table 7 shows available load transfers.

TABLE 7: GOLD CREEK LOAD TRANSFERS²⁶

FROM	TO	SUMMER (MVA)	WINTER (MVA)
Gold Creek	Belconnen	3.17	14.37
Gold Creek	Civic	2.78	3.25
Gold Creek	Latham	1.79	2.10

Minimal spare capacity at nearby zone substations couple with thermal feeder constraints in summer to provide inadequate support to Gold Creek zone substation in the event of a single contingency event.

5.1.4 Network Asset Failure Rate and Outage Duration

The primary driver of this project is to provide redundancy in the case of a single contingency event such as a transformer failure.

The failure of a single transformer at Gold Creek zone substation may result in load shedding on some feeders in the Gungahlin district. Nearby zone substations do not have enough spare capacity to supply the resultant load.

Where a non-network solution can provide redundancy, the value of that redundancy to Evoenergy is quantified using the asset failure and outage restoration assumptions in Table 8.

TABLE 8: NETWORK ASSET FAILURE RATE AND OUTAGE DURATION

ASSUMPTION	VALUE
Probability of feeder failure (per annum) ²⁷	1%
Expected outage duration (continuous rating exceeded)	6 months
Expected outage duration (load below continuous rating)	4 hours

Outage duration is dependent on failure mode, for example, a tap changer or bushing fault may be repaired in days to weeks. Winding and other significant failures requiring rebuild or replacement of transformer could potentially take 6 months or greater.

5.1.5 Discount Rate

A discount rate of 6.33% has been applied in the initial assessment of options considered in this report. This corresponds to the rate in Evoenergy's 2024-29 revised regulatory proposal. This rate is a regulated WACC²⁸ and all values discounted using this rate are in real FY2022/23 dollar terms.

5.1.6 Value of Customer Reliability

Evoenergy uses a Value of Customer Reliability (VCR) of \$32.96/kWh of unserved energy. This value was derived from the AER 2019 final report on VCR²⁹ values using the ACT residential value of \$21.39/kWh and

²⁶ Evoenergy Annual Planning Report 2021, December 2021, available from <https://www.evoenergy.com.au/-/media/evoenergy/about-us/annual-planning-report-2021.pdf>

²⁷ 1% chance of failure per annum is based on worst case scenario – CIGRE Transformer Reliability Survey Interim Report 2012 [TOR-WG A2_62 Analysis of AC Transformer Reliability.pdf \(cigre.org\)](https://www.cigre.org/~/media/2012/TOR-WG_A2_62_Analysis_of_AC_Transformer_Reliability.pdf)

²⁸ Based on a simple historical 10 year average of the time-varying nominal vanilla WACC.

²⁹ Available here: <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/values-of-customer-reliability>

commercial value of \$44.52/kWh. A weighting of 50% residential and 50% commercial is used in line with the Evoenergy Risk Value Framework.

The AER proposes annual escalation of VCR values using the CPI-X approach, where X is an adjustment for changes in customer preferences. Evoenergy assumes that there will be no changes in customer preferences and VCR values will increase by CPI. Evoenergy’s assessment is in real terms so there is no change in VCR values over the assessment period.

5.1.7 Approach to Estimating Project Costs

Evoenergy conducted a preliminary bottom-up assessment of the capital costs of all potential network options in the NNOR. For the preferred network option carried forward into the DPAR, this cost was updated during the assessment phase of the RIT-D process.

Operating costs for new assets, such as zone substations, are estimated as a percentage of capital expenditure. The standard value used by Evoenergy is 1% of capital costs. This amount is typically used for comparison of long-lived capital asset options and is an average rate over the life of the asset. Evoenergy expects a similar amount of dollar operating costs (excluding payments to the non-network solution provider) for the management of non-network solutions and can therefore exclude these operating costs from the assessment of alternative options.

5.1.8 Market Benefits

In the absence of a credible non-network option to assess, Evoenergy has determined that there are no relevant market benefits to include in the assessment.

5.2 Assessment Outcomes of Credible Options

5.2.1 Estimated Costs for each Credible Option

Table 9 shows the total costs (capex and opex) incurred for each option but excludes unserved energy risk and avoided depreciation benefits.

TABLE 9 TOTAL COSTS (CAPEX AND OPEX) INCURRED FOR EACH OPTION

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	TOTAL
Network option (\$M)	0	0	0	0	0	1.87	5.40	7.27

5.2.2 Results of Net Present Value Analysis

Table 10 shows the present value of costs incurred for each option, along with any benefits relative to the base network option case of non-network options, including differences in unserved energy risk and avoided depreciation.

TABLE 10 NPV ANALYSIS RESULTS FOR EACH OPTION

	PV – CAPEX	PV – OPEX	PV – BENEFITS*	PV – RISK	NPV
Network option (\$M)	-5.74	0	0	0	-5.74

*Benefits cover avoided depreciation costs for deferral options

The preferred network option has the highest (least negative) NPV of all credible options, given that this is the only credible option.

5.2.3 Sensitivity Analysis Results

Evoenergy has applied a probabilistic forecasting approach with three possible demand growth scenarios. The selection of the preferred option uses the weighted average NPV over all three scenarios as shown in Table 11.

TABLE 11 SENSITIVITY ANALYSIS RESULTS FOR EACH OPTION

	LOWEST GROWTH SCENARIO (LOW POE90)	MIDDLE SCENARIO (BASE POE50)	HIGHEST GROWTH SCENARIO (HIGH POE10)	WEIGHTED AVERAGE
Network option (\$M)	-5.74	-5.74	-5.74	-5.74
Scenario Probability (%)	10%	80%	10%	-

The network option has no sensitivity to the demand forecast, as its capacity is sufficient to meet demand in all cases and its costs are independent of loading.

Under all three scenarios, the network option retains the highest (least negative) NPV of all credible options.

6. RECOMMENDATION ON PREFERRED OPTION (NETWORK OPTION)

The recommended option is to proceed with the preferred network option to install and commission an additional (third) 57MVA transformer at Gold Creek zone substation. The scope of work includes connection to the existing 132kV bus, 132kV circuit breaker, current transformers (CTs) and surge diverters, 11kV transformer cables, switchboard and associated protection, monitoring and communications equipment. The estimated construction timeline is provided in Table 12, with works expected to be completed and commissioned prior to summer peak 2026.

TABLE 12 ESTIMATED CONSTRUCTION TIMELINE

ACTIVITIES	DATES
Design & Development	June 2024
Build & Execute	March 2025
Project Closure	Summer FY2025/26

This is the preferred network solution identified in the NNOR and meets the need to provide additional redundant capacity at Gold Creek zone substation to accommodate expected demand growth. The total project cost of this recommended option for Evoenergy is estimated to be \$5.7M in present value terms.

Based on the economic assessment outcomes, the proposed preferred option (network option) satisfies the RIT-D.

7. SUBMISSIONS

This section provides an invitation for submissions, guidance on how to make submissions, and supporting information. Submissions are intended to provide Registered Participants, AEMO, non-network providers and interested parties with an opportunity to comment on the matters set out within this DPAR, including the proposed preferred option.

7.1 Invitation for submissions

Evoenergy is seeking submission from interested parties to gather input on the DPAR that may inform the development of the final project assessment report (FPAR).

Submissions may include comments on any matters set out within this DPAR, for example, clarifications required or areas of the report that require further elaboration. We are not requesting further proposals from non-network providers (other than on the matters described) and at this stage intend to proceed with the preferred option based on the proposal(s) already received.

Lodgement of submissions should be directed to:

Email: RIT@evoenergy.com.au

The period for requests for additional information closes on 5 January 2024 at 5pm.

Submissions must be lodged by 19 January 2024 at 5pm.

All submissions will be published on the Evoenergy website unless otherwise requested. Please indicate if you do not wish to have your submission published in part or in full.

Evoenergy will review each submission and may seek further information to better understand the comments received.

7.2 Next steps

Following the publication of the DPAR, stakeholders will have a period of 6 weeks to collate the information required and provide submissions to Evoenergy on the matters set out within this DPAR, including the proposed preferred option.

The RIT-D process from this point involves the following upcoming activities:

1. A draft project assessment report³⁰ is released.
2. Consultation with the preferred option provider(s) is undertaken.
3. Submissions close for submissions on this DPAR.
4. A final project assessment report³¹ is released.
5. Contracts with non-network providers are confirmed (where applicable) or a network option is progressed.

Evoenergy strongly recommends that any relevant non-network providers commence engaging in the connection process early, to optimise alignment of timing with the identified need as well as with processing times.

³⁰ As per NER clause 5.17.4(i)-(n)

³¹ As per NER clause 5.17.4(o)-(s)

7.2.1 Timeline

An overview of the timeline, from the publication of this DPAR to when the preferred option is required to be operational, is provided in Table 13.

TABLE 13: TIMELINE

ACTIVITIES	DATES	STATUS
Publish NNOR and request for submissions ³²	30 August 2022	Completed
Consultation period ³³ for non-network providers to provide submissions	30 August 2022 – 28 November 2022	Completed
Public briefing session during consultation period	September 2022	Completed
Evoenergy review of submissions received (non-network proposals)	November 2022 – June 2023	Completed
Draft project assessment report ³⁴ is released	28 November 2023	Completed
Consultation period for preferred option and request for submissions ³⁵	28 November 2023 – 19 January 2024	In progress
Evoenergy review of submissions received	January 2024 – February 2024	Planned
Publish final project assessment report ³⁶	February 2024	Planned
Prepare draft contract(s) with preferred non-network provider(s) (where a non-network option or options are preferred)	N/A	N/A
Preferred option operational	Summer FY2025/26	Planned

The FPAR represents the final stage of the consultation process in relation to the application of the formal RIT-D process. Evoenergy will endeavour to publish the FPAR by February 2024.

7.2.2 Documents

Documents that are intended to be released include:

- Draft project assessment report, and
- Final project assessment report.

³² Evoenergy will notify registered parties on Demand Side Engagement Register of Interested Parties (DSE-RIP) form as per NER clause 5.17.4(g), available from <https://www.evoenergy.com.au/emerging-technology/demand-management>

³³ Not less than 3 months in duration from notifying registered parties on DSE-RIP as per NER clause 5.17.4(h)

³⁴ Within 12 months following the end of the consultation period on NNOR as per NER clause 5.17.4(i)

³⁵ Not less than 6 weeks in duration from publication of the draft assessment report as per NER clause 5.17.4(m)

³⁶ As soon as practicable after the end of the consultation period on the DAPR as per NER clause 5.17.4(o), unless NER clause 5.17.4(p) applies

8. APPENDIX A – CHECKLIST OF COMPLIANCE CLAUSES

This DPAR complies with the requirements of NER Clause 5.17.4(j) as demonstrated in Table 14.

TABLE 14 – REGULATION COMPLIANCE CROSS REFERENCE

REFERENCE	DESCRIPTION	REPORT SECTION
5.17.4 (j)(1)	<ul style="list-style-type: none"> A description of the identified need 	3
5.17.4 (j)(2)	<ul style="list-style-type: none"> The assumptions used in identifying the identified need (including, in the case of proposed reliability corrective action, why the RIT-D proponent considers reliability corrective action is necessary) 	3
5.17.4 (j)(3)	<ul style="list-style-type: none"> If applicable, a summary of, and commentary on, the submissions on the non-network options report 	4.2.1
5.17.4 (j)(4)	<ul style="list-style-type: none"> A description of each credible option assessed 	4.2
5.17.4 (j)(5)	<ul style="list-style-type: none"> Where a Distribution Network Service Provider has quantified market benefits in accordance with clause 5.17.1(d), a quantification of each applicable market benefit for each credible option 	N/A
5.17.4 (j)(6)	<ul style="list-style-type: none"> A quantification of each applicable cost for each credible option, including a breakdown of operating and capital expenditure 	5.2.1
5.17.4 (j)(7)	<ul style="list-style-type: none"> A detailed description of the methodologies used in quantifying each class of cost and market benefit 	5.1
5.17.4 (j)(8)	<ul style="list-style-type: none"> Where relevant, the reasons why the RIT-D proponent has determined that a class or classes of market benefits or costs do not apply to a credible option 	5.1.11
5.17.4 (j)(9)	<ul style="list-style-type: none"> The results of a net present value analysis of each credible option and accompanying explanatory statements regarding the results 	5.2.2
5.17.4 (j)(10)	<ul style="list-style-type: none"> The identification of the proposed preferred option 	6
5.17.4 (j)(11)	<ul style="list-style-type: none"> For the proposed preferred option, the RIT-D proponent must provide: <ul style="list-style-type: none"> (i) details of the technical characteristics; (ii) the estimated construction (where relevant); (iii) the indicative capital and operating cost (where relevant); (iv) a statement and accompanying detailed analysis that the proposed preferred option satisfies the regulatory investment test for distribution; (v) if the proposed preferred option is for reliability corrective action and that option has a proponent, the name of the proponent 	4.1.1, 5.2, 6
5.17.4 (j)(12)	<ul style="list-style-type: none"> Contact details for a suitably qualified staff member of the RIT-D proponent to whom queries on the draft report may be directed. 	7.1

9. APPENDIX B – PROCESS FOR IMPLEMENTING A RIT-D

Figure 15 displays the general process for implementing a RIT-D.

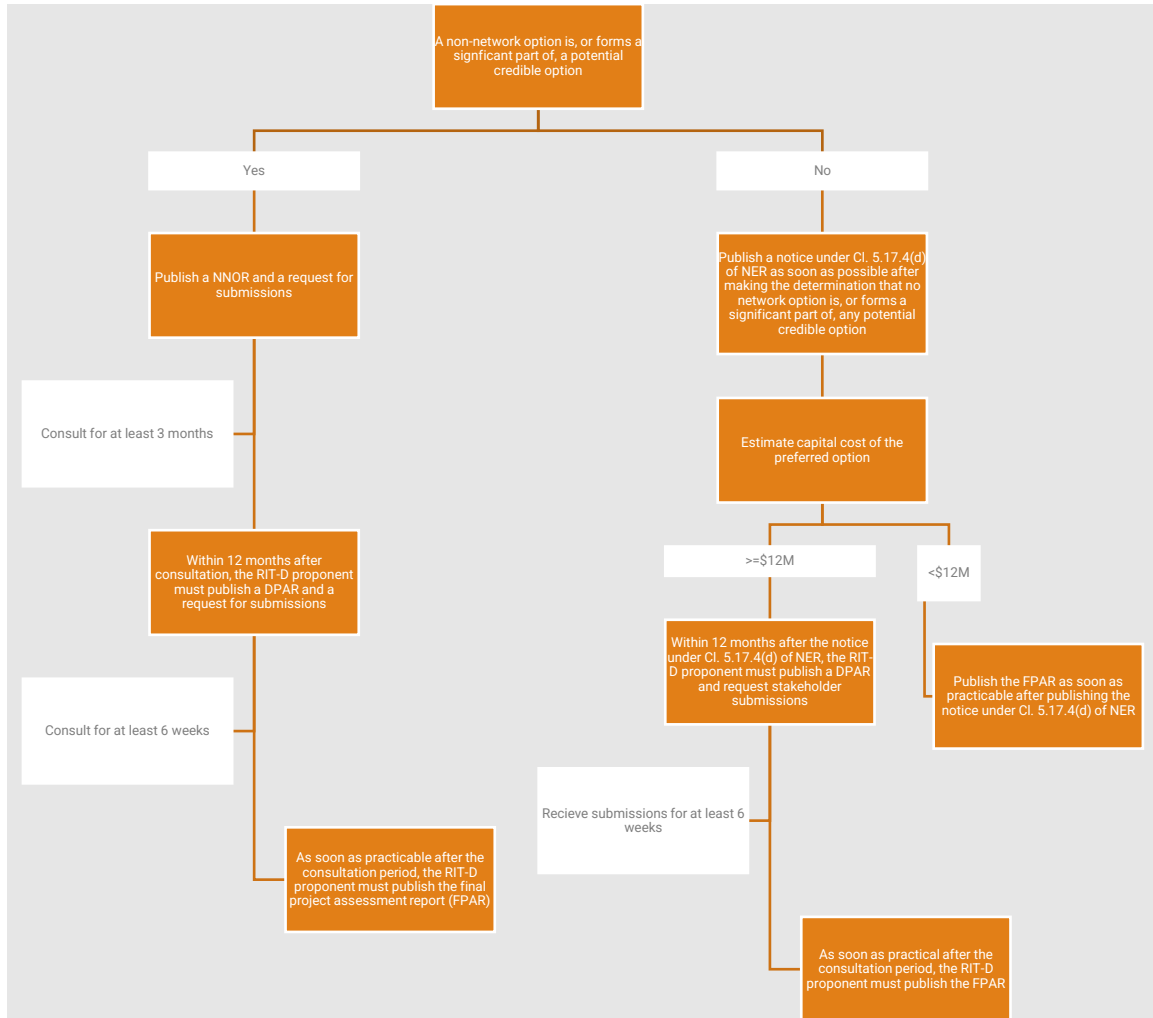


FIGURE 15 – PROCESS FOR IMPLEMENTING A RIT-D³⁷

³⁷ Cost thresholds as per AER - Final Determination - Cost thresholds review - 19 November 2021, available from <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/cost-thresholds-review-for-the-regulatory-investment-tests-2021>

VERSION CONTROL

VERSION	DETAILS	APPROVED
1.0	Initial Document	Leylann Hinch

DOCUMENT CONTROL

DOCUMENT OWNER	PUBLISH DATE	REVIEW DATE
Group Manager Strategy & Operations	28 November 2023	N/A