EVOENERGY FINAL PROJECT ASSESSMENT REPORT FOR CURTIN FEEDER RIT-D

FINAL PROJECT ASSESSMENT REPORT FOR THE CURTIN FEEDER UNDER THE REGULATORY INVESTMENT TEST-DISTRIBUTION (RIT-D)

Dispute period commences: 03/06/2026
Dispute period closes: 03/07/2026

VERSION CONTROL

VERSION	DETAILS	APPROVED
1.0	Draft	N/A
2.0	Final	03/06/2026

DOCUMENT CONTROL

DOCUMENT OWNER	PUBLISH DATE	REVIEW DATE
Asset Management	03 June 2026	N/A

Disclaimer

Whilst this document contains material relevant to the electricity industry legislation, codes of practice and standards, it is not intended to provide legal advice on how electrical contractors can meet their own statutory obligations or comply with legislation, codes of practice or industry. Whilst care has been taken in the preparation of this document, Evoenergy does not guarantee that the information contained in this document is accurate, complete, or up to date at time of publication. To the extent permitted by the relevant legislation Evoenergy will not be responsible for any loss, damage, cost, or expense incurred as a result of any error, omission or misrepresentation in relation to the information contained in this document.

Note

Printed versions of this document are “uncontrolled copies” - the latest version is available on the Evoenergy Website[1]

[1] https://www.evoenergy.com.au/Your-Energy/Demand-Management/Engagement-opportunities

CONTENTS

FIGURES

TABLES

EXECUTIVE SUMMARY

Background

This Final Project Assessment Report (FPAR) represents the final stage in the Regulatory Test for Distribution (RIT-D) to address network constraints in Curtin. This FPAR has been prepared following the conclusion of the consultation period for the Draft Project Assessment Report (DPAR) that was published on 15 April 2026, for the project originally identified through the Curtin Feeder Capacity Non-Network Options Report (NNOR) published on 19 December 2025.

The National Electricity Rules (NER) requires a Regulatory Investment Test for Distribution (RIT-D) be completed for capex projects with a value greater than $7 million. The RIT-D requires an FPAR where Evoenergy wishes to proceed with a RIT-D project following the publication of the DPAR and consultation, having regard to submissions received on the matters that were set out within the DPAR including the proposed preferred option.

Curtin is a predominately residential suburb located west of Parliament House, and north of the Woden Valley district of Canberra. Adjacent to Curtin are the suburbs of Deakin and Yarralumla, whilst similarly mostly residential suburbs, they do also contain a number of diplomatic embassies and missions. The Royal Australian Mint, and Government House are also located within these suburbs.

Electricity is distributed to Curtin and surrounding suburbs via the Woden Zone Substation (ZSS), located in the adjacent suburb of Lyons, just at the southern edge of Curtin. Two significant developments in the area are expected to increase the load demand with the development of a new diplomatic estate and the re-development of the Yarralumla brickworks site.

Identified Need

Curtin and nearby suburbs are forecast to experience an increase in electricity demand due to a number of new connections from developments currently approved for construction or progressing through the approvals process. The two projects expected to contribute significant load increases in the area include the Curtin diplomatic estate development that will host up to 32 embassies or diplomatic missions, and the redevelopment of the Yarralumla brickworks site into a mixed residential and commercial precinct. Additional demand growth is also anticipated as a result of a commercial development in Deakin and a larger mixed development located nearby in the suburb of Weston. These developments further increase load forecasts on the feeders that support electricity distribution to the Curtin area. The developments and their subsequent load requirements are forecast to rise by 7.4 MVA between now and 2029.

Evoenergy has identified capacity limitations on two (2) 11 kV distribution feeders that supply Curtin and Yarralumla with firm and thermal ratings forecasted to be exceeded in the coming years based on a 50% Probability of Exceedance (50POE) probabilistic assessment. The forecasted demand growth of the new mixed developments will result in the 11 kV distribution network supplying Curtin and surrounds exceeding its thermal capacity during System Normal conditions and requiring a solution to be in place by winter of financial year (FY) 2028, with some breaches to be managed on a case-by-case basis by Evoenergy in FY2027. The identified need was published in Evoenergy's Annual Planning Report.[2]

Preferred Network Option

The preferred network option to address these network limitations is the construction of a new 11 kV feeder from the Woden ZSS to a new switching station located between the Curtin diplomatic development and Yarralumla brickworks redevelopment sites. The new feeder will resolve the constraints and be capable of meeting the anticipated additional demand for Curtin and the surrounding area.

The scope of this project includes design, construction and commissioning of a new 11 kV underground feeder supplied from the Woden ZSS, and a new 11 kV Switching Station at the corner of Cotter Road and Dudley Street. This identified network option has an estimated capital cost of $7.24M exceeding the $7M threshold under the NER and the investment is therefore subject to a RIT-D.

Summary of DPAR 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.

---

[2] Evoenergy Annual Planning Report 2023: Annual-Planning-Report-2023.pdf

Evoenergy received no submissions relevant to the DPAR.

Hence, as originally outlined in the DPAR the FPAR confirms that no non-network option submissions are considered to be credible to meet the identified need.

Recommended Option

The FPAR recommends no change to the preferred option from the DPAR.

The recommended option is to proceed with the preferred network option, which is to install and commission the additional new 11kV feeder to supply Curtin, connected to the Woden ZSS.

The scope of works includes construction of a conduit bank, the bulk laying of feeder cable and commissioning switches and modifications required at the ZSS. These upgrades will be completed and commissioned prior to April 2028.

The total project cost of this recommend option for Evoenergy is estimated to be $7.24M in FY24/25 dollar terms.

Next Steps

Any queries in relation to this RIT-D should be lodged via email to: RIT@evoenergy.com.au

In accordance with the provisions of NER Clause 5.17.5, Registered Participants, Australian Energy Market Operator (AEMO), interested parties, non-network providers and persons registered on Evoenergy's demand side engagement register may, within 30 days after publication of this report, dispute the conclusions made by Evoenergy in this report with the Australian Energy Regulator (AER) based on a manifest error in calculations or application of the RIT-D. Dispute notification should be sent via email to: RIT@evoenergy.com.au by 3 July 2026 at 5pm. If no formal dispute is raised, Evoenergy will proceed with the preferred option (network option).

An overview of the timeline, from the publication of this FPAR to when the preferred option is required to be operational, is provided in **Table 1**.

TABLE 1: TIMELINE

ACTIVITIES	DATES	STATUS
Publish NNOR and request for submissions	19 Dec 2025	Completed
Consultation period for non-network providers to provide submissions	19 Dec 2025 to 13 Mar 2026	Completed
Public briefing session during consultation period	04 Feb 2026	Completed
Evoenergy review of submissions received (non-network proposals)	Mar 2026	Completed
Publish Draft Project Assessment Report (DPAR)	15 Apr 2026	Completed
Consultation period for DPAR	15 Apr 2026 to 27 May 2026	Completed
Publish Final Project Assessment Report (FPAR)	03 June 2026	Completed
Preferred option operational	April 2028	Planned

1. INTRODUCTION

1.1 Scope and Purpose

Under the Regulatory Investment Test for Distribution (RIT-D) process, Evoenergy is required to consider all credible network and non-network options to meet future electricity demand. The RIT-D process involves the following key stages:

Stage 1: Screen for non-network options and publish a NNOR

Stage 2: Undertake consultation on non-network options

Stage 3: Assess credible options

Stage 4: Publish draft project assessment and undertake consultation on the preferred option

Stage 5: Publish the final project assessment report (this report).

This report is the fifth and final stage of the RIT-D process to address the identified need for this study area. This report outlines the need for the proposed investment, the description of submissions received to the NNOR, the assessment of non-network options to resolve the identified need, and the recommendation on the preferred option to progress. This report identifies that no submissions were received on the DPAR (and therefore that no material changes from the DPAR are proposed).

The FPAR further ensures that stakeholders are informed of the preferred option to proceed with network augmentation. Evoenergy has developed this FPAR in accordance with the requirements of Clause 5.17.4 of the National Electricity Rules (NER).

As the consultation on the preferred option outlined in the DPAR concluded on 27 May 2026, this FPAR has been prepared to inform all stakeholders on the recommended option for the provision of services to address the identified need.

1.2 Evoenergy's Obligations

Under Clause 5.17.4 of the NER, Evoenergy has obligations relating to this FPAR, including:

- Ensure that the FPAR gives regard to any submissions received on the DPAR[3],
- Ensure that the FPAR is published as soon as practicable after the end of the consultation period on the DPAR,
- Ensure the FPAR contains matters as detailed in the DPAR,
- Ensure the FPAR contains a summary of submissions received on the DPAR[4],
- Notify persons registered on its industry demand side engagement register of the report's publication[5].

1.3 Structure of Report

The rest of this FPAR is structured into the following sections:

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 applicable service standards.
Section 4: Provides the analysis of the credible options reviewed as part of this RIT-D.
Section 5: Summarises the planning methodology and assumptions used in Evoenergy's assessment.
Section 6: Details recommendations on the preferred option.
Section 7: Summarises submissions to the DPAR and provides guidance on next steps.

[3] As per NER clause 5.17.4(o)
[4] As per NER clause 5.17.4 (r)(1)(ii)
[5] As per NER clause 5.17.4(q)

2. BACKGROUND

2.1 Existing Network

2.1.1 Geographic Overview

Curtin is a predominately residential suburb located just to the west of Parliament House, and lies at the northern end of the Woden Valley district of Canberra. Adjacent to Curtin are the suburbs of Deakin and Yarralumla, whilst similarly predominately residential suburbs, also contain a number of diplomatic embassies and missions. The Royal Australian Mint, and Government House are also located within these suburbs.

Electricity is distributed to Curtin and surrounding suburbs via the Woden ZSS, located in the adjacent suburb of Lyons, just at the southern edge of Curtin. Two significant developments in the area are expected to increase the forecast load demand with the development of a new diplomatic estate and the re-development of the Yarralumla brickworks site

The Woden ZSS supplies the 11 kV network throughout the Woden Valley district, Weston Creek district and parts of Yarralumla and Deakin. The loads in the region are predominately residential with some commercial business loads. Two of the 11 kV feeders that supply parts of Yarralumla and Curtin are expected to become constrained due to the additional forecast growth in the area. There are a number of rooftop solar connections supported by these feeders, the LV connected solar generation supports daytime loads within the area.

A geographic diagram marking the location of the Woden ZSS and the commercial and diplomatic development sites driving demand growth is provided in **Figure 1**. The map of Evoenergy's ZSS locations is publicly accessible from Evoenergy's Rosetta Data Portal.[6]

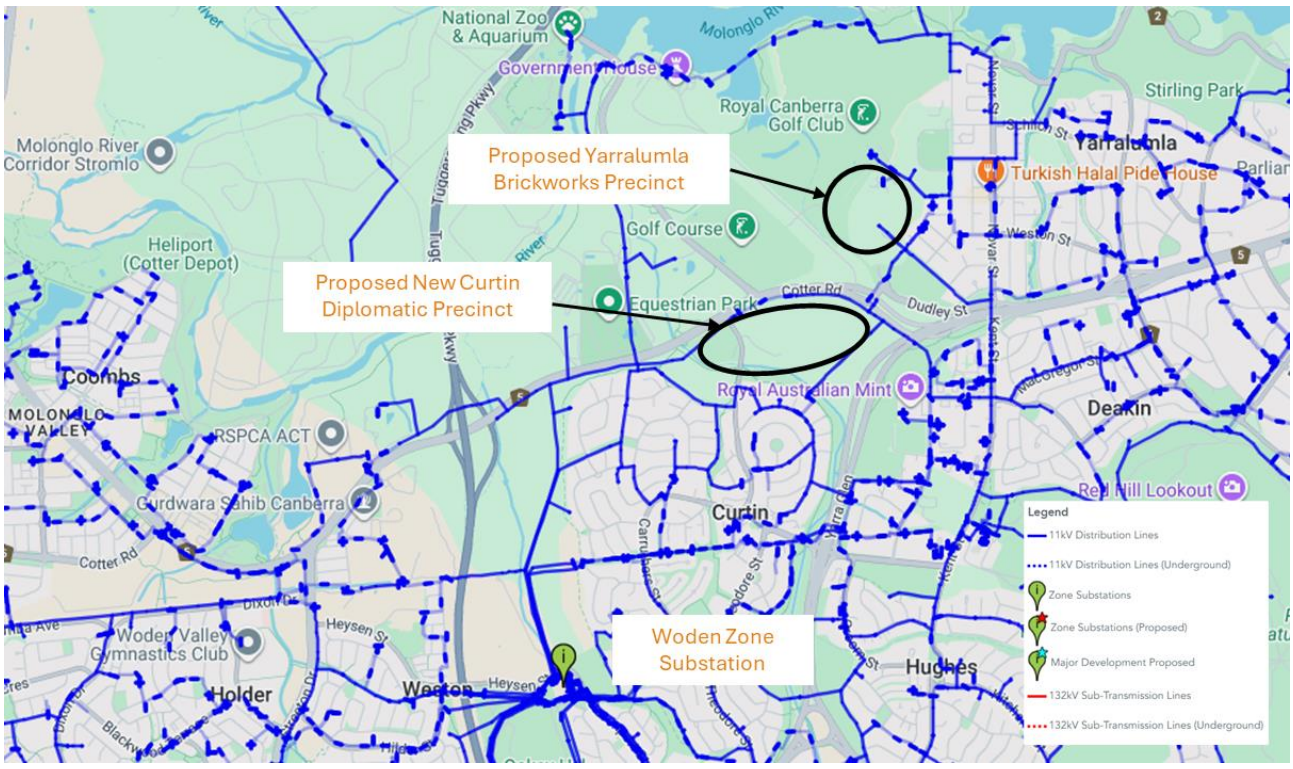

FIGURE 1: OVERVIEW OF THE AREA, SHOWING THE WODEN ZSS AND NEW DEVELOPMENTS

[6] Evoenergy's Rosetta Data Portal is available from the following weblink: https://apr.evoenergy.com.au/

2.1.2 11 kV Feeders

Evoenergy's 11 kV feeders are typically interconnected through multiple normally open ties. Under contingency conditions, selected open points are closed to enable load transfers and supply restoration.

Each 11 kV feeder in Evoenergy's network is assigned a thermal rating and a firm rating. The ratings are assigned for Summer and Winter operating conditions. The thermal rating accounts for the feeder installation method (e.g. directly buried, or overhead), cable configuration, conductor type and thermal capacity.

The firm capacity depends on feeder grouping and configuration including feeder ties. The typical firm rating assumes one feeder of a group of four feeders is out of service. The feeder firm capacity is based on the ability to restore supply through switching after a credible contingency event.

The 11 kV feeders included in the RIT-D study are presented in **Table 2** along with the Summer and Winter firm and thermal rating, and recent peak demand characteristics.

TABLE 2: 11 KV FEEDER CAPACITY RATINGS AND HISTORICAL MAX DEMAND CHARACTERISTICS

11 KV FEEDER	SUMMER RATING (MVA)		WINTER RATING (MVA)		PEAK DEMAND (MVA)	PEAK SEASON	PEAK DAY	TIME
	FIRM	THERMAL	FIRM	THERMAL				
Yarralumla	4.8	6.4	5.4	7.3	5.1	Winter	Weekday	18:00
Curtin north	4.5	6.0	5.5	7.3	5.6	Winter	Weekend	7:00

2.2 Load Profiles

2.2.1 Annual Load Profiles

The aggregated load profile for the two feeders is shown in **Figure 2**. The aggregated load profile is shown for illustration purposes only as solutions for network constraints need to be solved on an individual feeder basis[7]. The demand profile plotted for each individual feeder is plotted in **Figure 3** for the day when the maximum demand occurred (the chart legend shows the feeder's name and day of maximum demand).

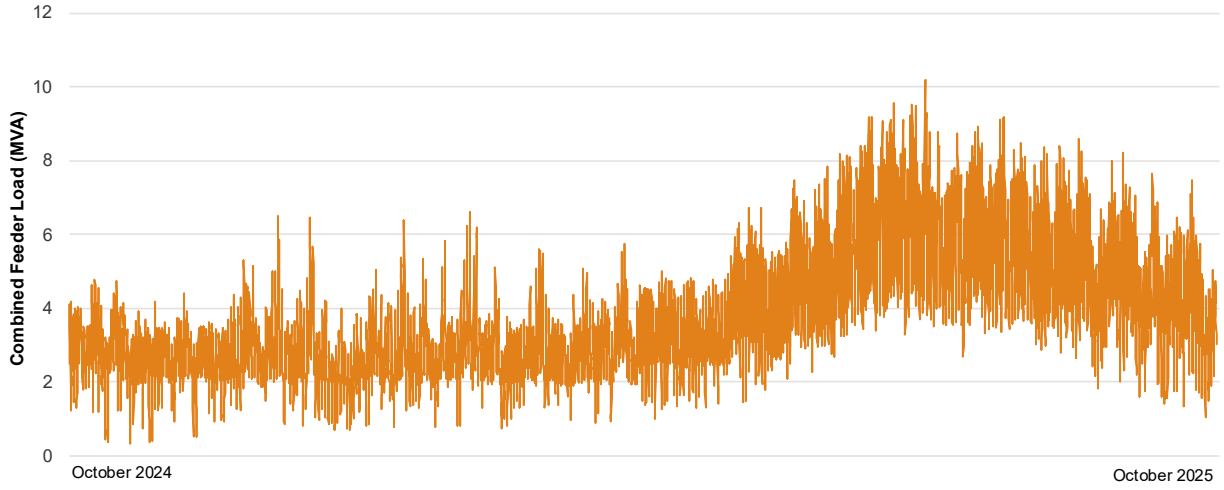

FIGURE 2: AGGREGATED OCT 2024 TO OCT 2025 LOAD PROFILE ACROSS 11 KV FEEDERS

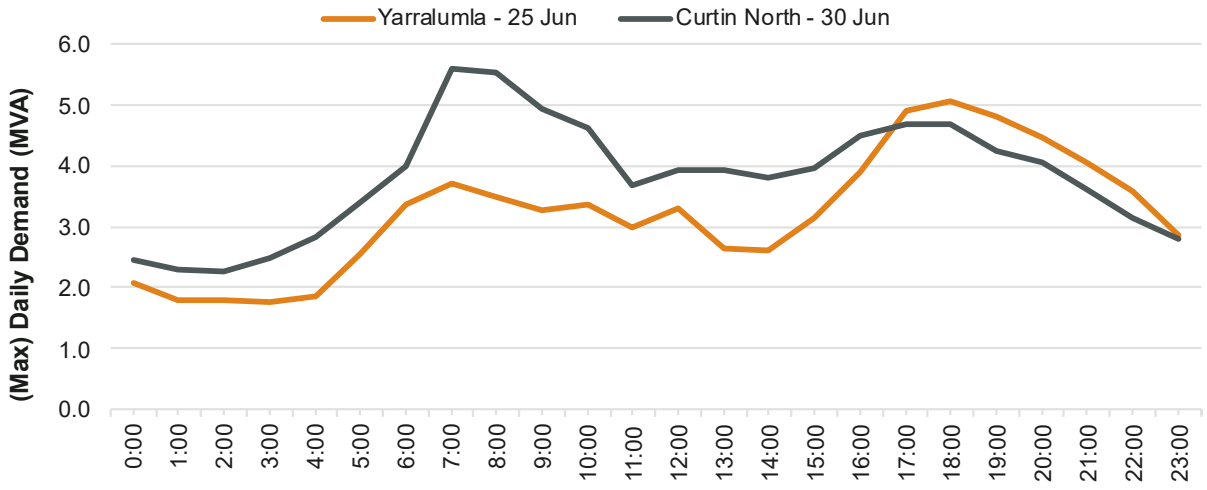

FIGURE 3: DEMAND PROFILE FOR EACH 11 KV FEEDER ON DAY-MONTH OF MAXIMUM DEMAND OCCURRENCE

2.2.2 Load Duration Curves

Figure 4 shows the load duration curves for the two feeders supplying the study area over a 12 month period.

[7] Load profile details available at: https://www.evoenergy.com.au/Your-Energy/Demand-Management/Engagement-opportunities

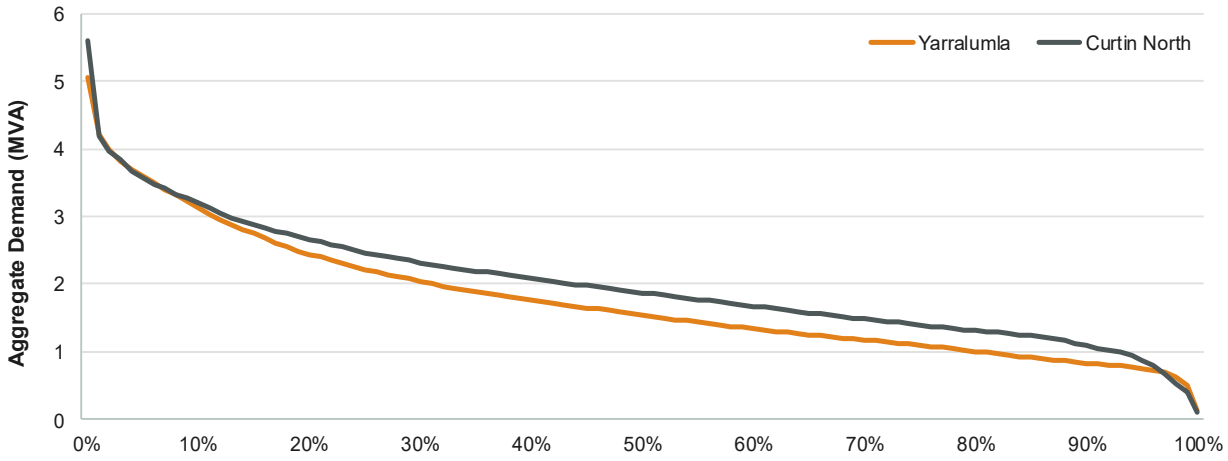

FIGURE 4: HISTORICAL 11 KV FEEDER LOAD DURATION CURVES

2.2.3 Yarralumla - Detailed

Figure 5 below shows the average daily summer and winter load profile for the Yarralumla Feeder, which is the feeder that is expected to breach its thermal limits the most of both feeders supporting Curtin area. Further below in Figure 6 is the annual load profile showing peak demand occurring in winter in calendar year 2025. Figure 7 details the load duration curve forecast, with increasing periods of firm and thermal limits being exceeded each year out to 2030.

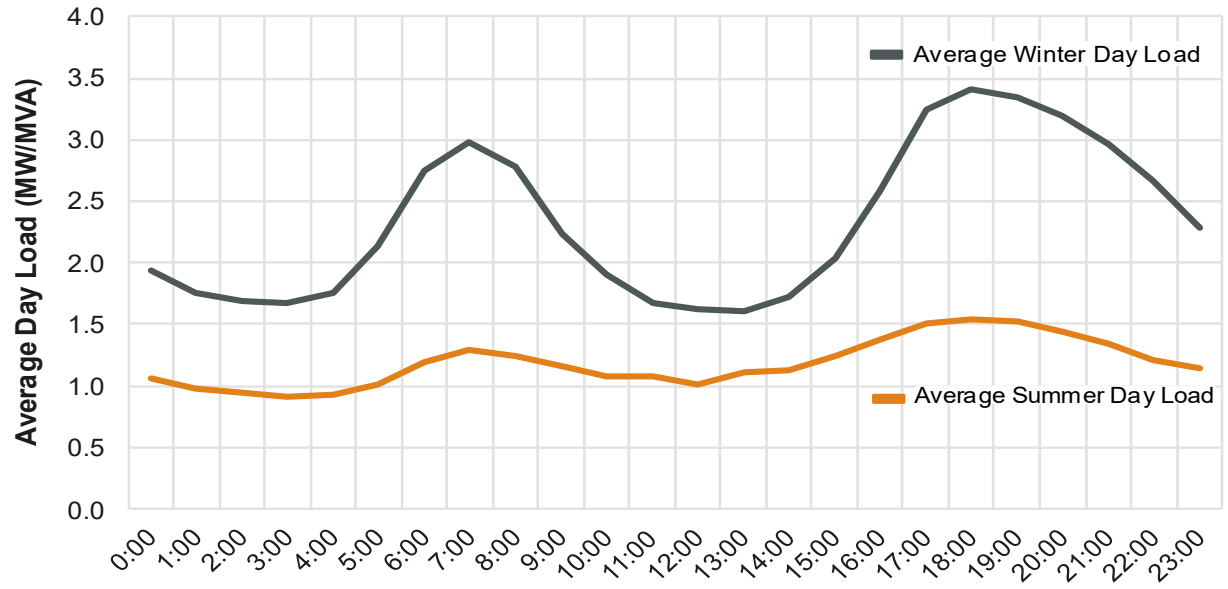

FIGURE 5: DAILY AVERAGE LOAD PROFILE OF WINTER AND SUMMER FOR YARRALUMLA FEEDER

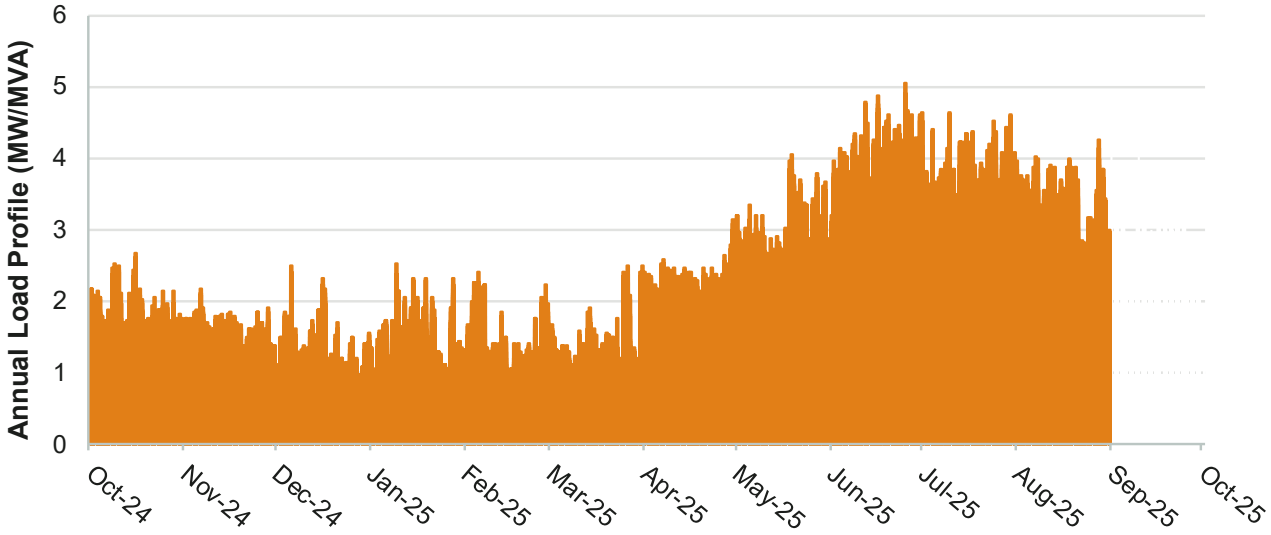

FIGURE 6: ANNUAL LOAD PROFILE OF THE YARRALUMLA FEEDER

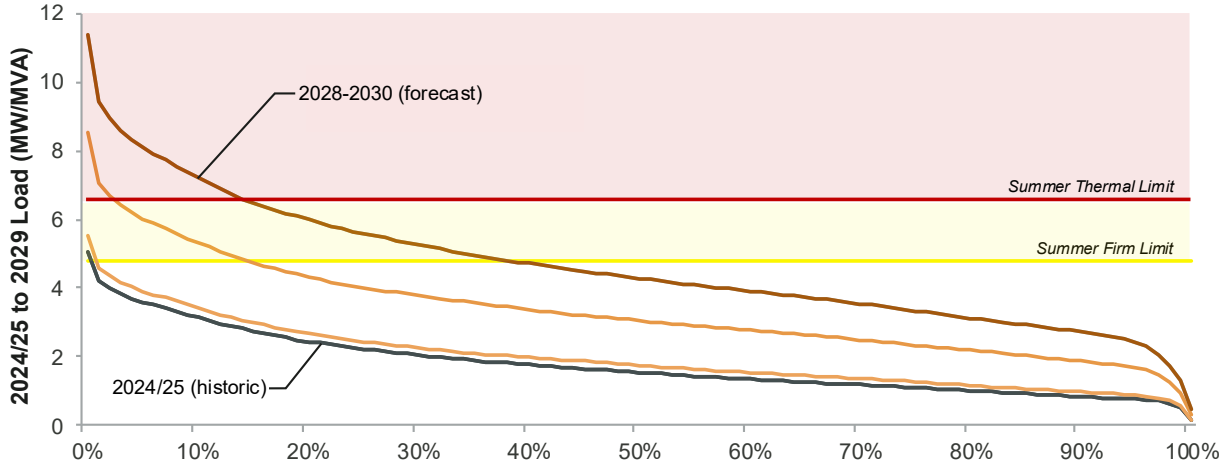

FIGURE 7: ANNUAL LOAD DURATION CURVE FORECASTS FOR YARRALUMLA FEEDER AT 50POE

Finally **Figure 8** below provides a snapshot of the 3 days before and after the peak demand occurs for the Yarralumla feeder in winter. This uses feeder data from October 2024 to October 2025 to identify peak winter demand that occurred in late June 2025, and the forecast demand growth changes out to 2029 for that week.

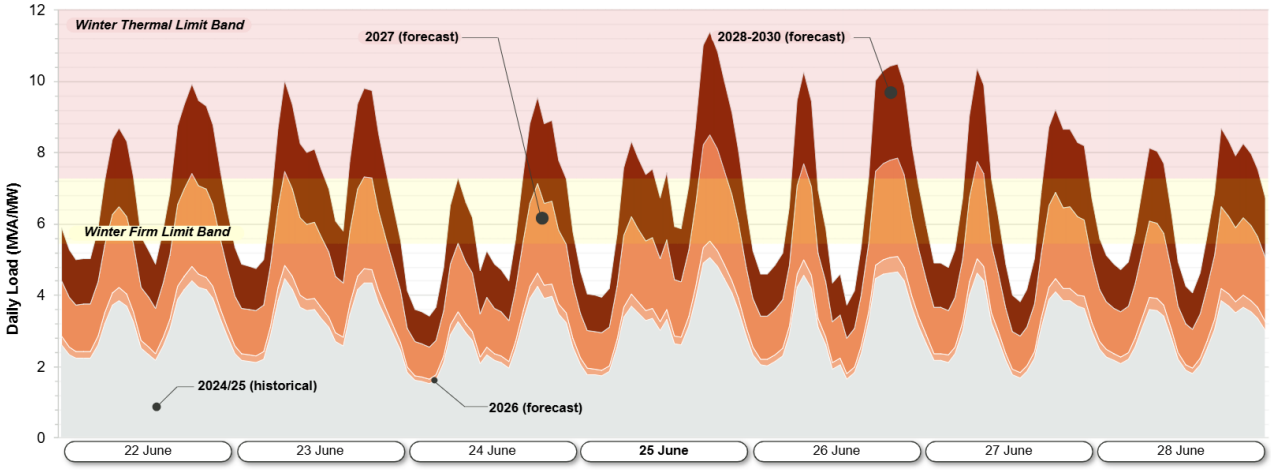

FIGURE 8: WEEK OF WINTER MAXIMUM DEMAND – YARRALUMLA FEEDER

2.2.4 Curtin North - Detailed

The figures below show the average load profiles for the Curtin North feeder. Figure 9 shows the average daily load profile for the feeder in peak seasons, Figure 10 shows the annual load profile, and Figure 11 shows the annual demand duration curve. The annual demand duration curve for this feeder includes the different winter and summer limits, the forecast breaches to these limits are detailed in Table 4 which show no thermal breaches expected for this feeder.

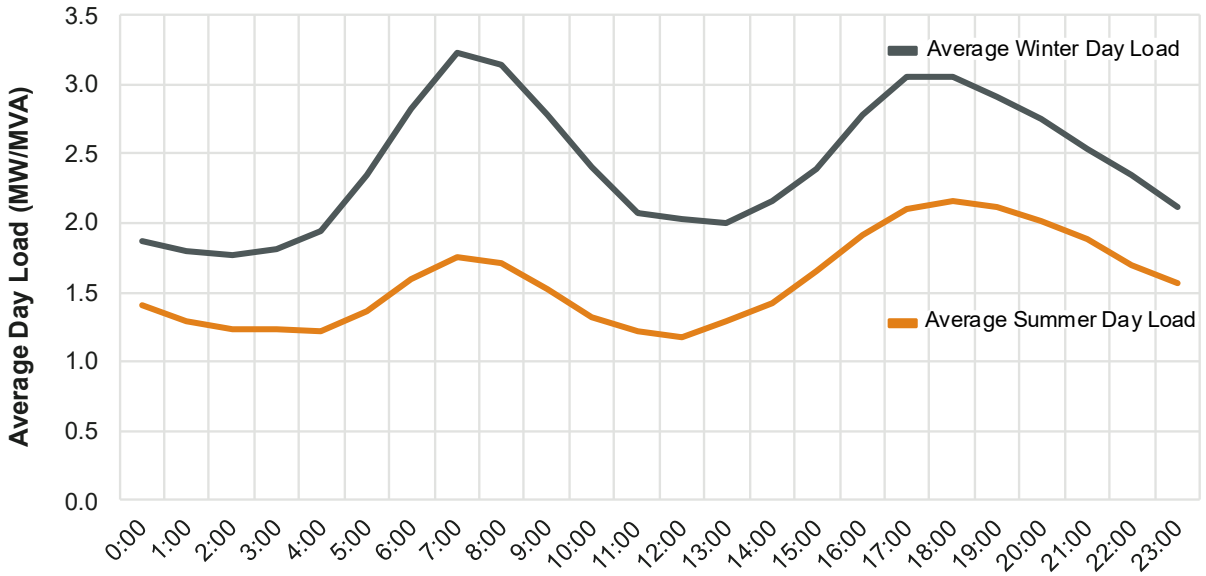

FIGURE 9: AVERAGE DAILY LOAD PROFILE FOR WINTER AND SUMMER FOR CURTIN NORTH FEEDER

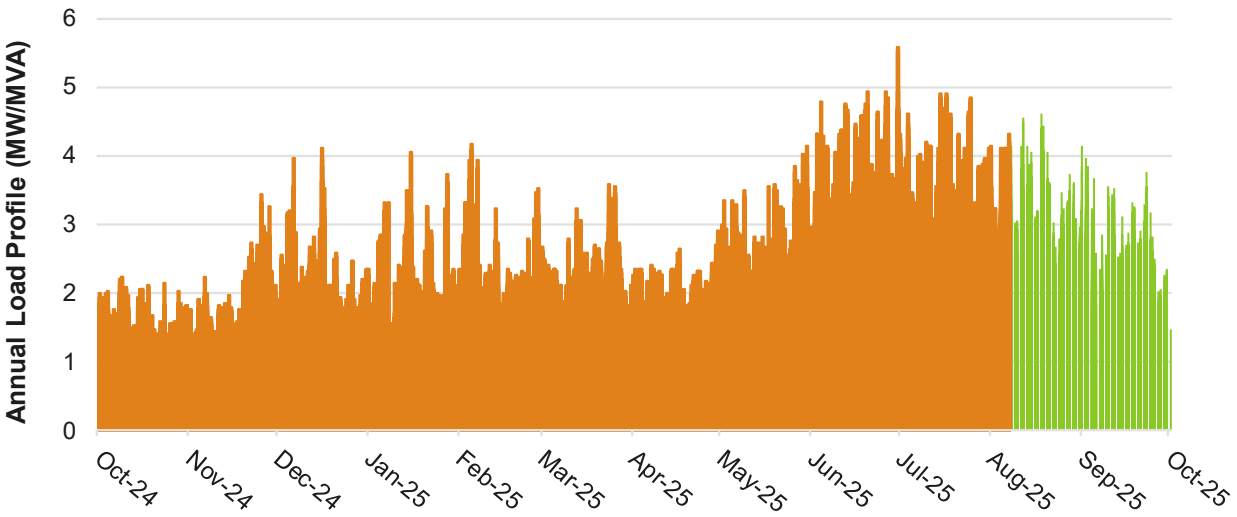

FIGURE 10: ANNUAL LOAD PROFILE OF THE CURTIN NORTH FEEDER

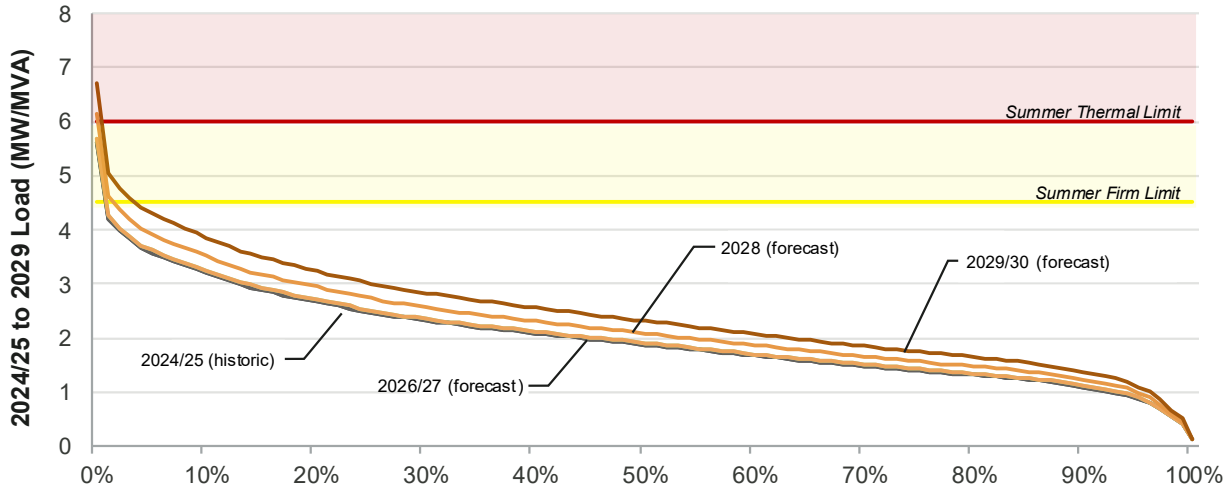

FIGURE 11: ANNUAL LOAD DURATION CURVE FORECASTS FOR CURTIN NORTH FEEDER AT 50POE

3. IDENTIFIED NEED

3.1 Overview

In the assessment of network needs for 11 kV feeders, Evoenergy employs probabilistic methods to analyse the risk cost to customers of capacity constraints and evaluate alternative solutions (options) to address the specific network needs.

Demand growth in the study area is forecast to exceed the firm capacity of two (2) of the existing 11 kV feeders that supply the Curtin area with increasing occurrence of exceedance in both Summer and Winter. The dominant thermal constraint identified by the 50POE assessment driving the identified need is primarily present in the Yarralumla feeder.

3.2 Geographic Overlay

The suburbs of Yarralumla and Curtin have two (2) new major developments that are anticipated to add significant demand once completed. There is also additional demand forecast that contributes to the identified need as a result of additional developments in the surrounding suburbs.

The geographic diagram in **Figure 12** shows the suburbs of Yarralumla and Curtin as well as the area where the two (2) new developments are to be built and the nearby existing 11 kV feeders.

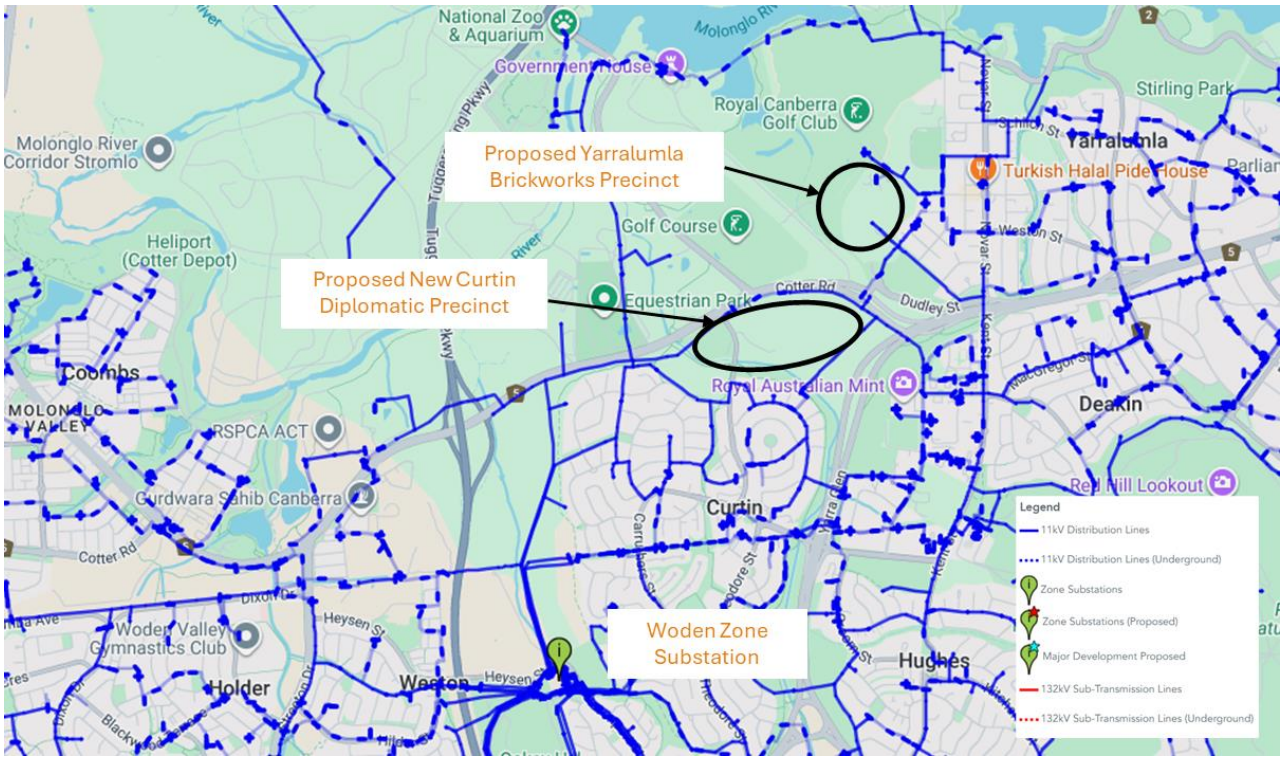

FIGURE 12: OVERVIEW OF THE 11KV NETWORK AND PROPOSED DEVELOPMENT AREA IN CURTIN AND YARRALUMLA

3.3 11 kV Feeder Groups

The Curtin area is currently supported by two (2) feeders that are supplied by the Woden ZSS, with no other inter-tied feeders with available capacity to support the additional loads forecast in the area.

The constraint is only being considered against the existing feeders that support the load demands of Curtin area, as shown in **Table 3.**

TABLE 3: CURTIN LOAD CENTRE 11 KV FEEDER LIMITS (MVA)

LOAD CENTRE	11 KV FEEDER	SUMMER LIMITS		WINTER LIMITS	
		Firm	Thermal	Firm	Thermal
Curtin	Yarralumla	4.8	6.4	5.4	7.3
	Curtin north	4.5	6.0	5.5	7.3

3.3.1 Demand Forecast and Capacity Limits

Evoenergy's existing network supplying the area will be unable to service the expected demand growth during the 2024-29 regulatory period, even with optimised load allocations among the existing 11 kV feeder network. If no action is taken, the demand forecast is projected to exceed the existing feeder capacity from financial year 2027/2028 (FY2027) onwards as shown in Table 4. The maximum firm and thermal capacities of each feeder is shown for Summer and Winter, where:

- Yellow cells denote load above the firm rating, and
- Red cells denote load above the thermal rating.

While thermal constraints are forecasted to be exceeded as early as 2026 and thermal constraints in 2027, Evoenergy will manage these constraints on a case-by-case basis.

The preferred economic timing of the augmentation option is 2028. Sensitivity of timing ranges occurs exclusively during 2028, which falls within the 2024-2029 regulatory control period. Within a given regulatory control period, investment drivers are continuously reviewed, and investments proceed on the basis of the latest information about project need. Delivery of feeders typically takes two years.

TABLE 4: FORECAST DEMAND FOR AFFECTED 11 KV FEEDERS DUE TO NEW MAJOR CUSTOMER LOADS (MW)

CURTIN FEEDERS	2026		2027		2028		2029		2030	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Yarralumla	3.1	5.5	6.1	8.5	9.0	11.4	9.0	11.4	9.0	11.4
Curtin north	4.3	5.7	4.3	5.7	4.7	6.1	5.3	6.7	5.3	6.7

ABOVE FIRM
ABOVE THERMAL

3.3.2 Unserved Energy

Unserved Energy (USE) provides an economic indicator of the reliability impact associated with network constraints, helping to optimise and prioritise investment in feeder augmentation. Augmentation decisions consider the economic cost of USE compared to the cost of augmentation. A cost-benefit analysis ensures investments are economically justified and proportional to the economic impact of unreliability.

Table 5 provides the expected amount and value of USE based on all energy above thermal ratings, and a proportion of energy above firm ratings utilising assumed feeder outage statistics (i.e. probability of unavailability). This represents all energy at risk after all possible load transfers under system intact conditions. All USE must be met by the network or non-network solution to be considered credible. As noted

previously, Evoenergy is managing forecast thermal constraints and resulting USE on a case-by-case basis in advance of the delivery of the preferred option.

TABLE 5: ANNUAL UNSERVED ENERGY (MWh)

CURTIN FEEDERS	USE EXCEEDING	2026	2027	2028	2029	2030
Yarralumla	Firm	0.0	0.0	0.2	0.1	0.1
	Thermal	0.0	21.4	1,016.9	1,016.9	1,016.9
Curtin North	Firm	0.0	0.0	0.0	0.0	0.0
	Thermal	0.0	0.0	0.0	0.0	0.0
Total USE		**0.0**	**21.4**	**1,017.1**	**1,017.0**	**1,017.0**

USE is anticipated to increase significantly in FY2028 with significantly increased thermal breaches as a result of the identified developments being completed.

3.3.3 Minimum Energy Capacity Requirements

Table 6 shows the minimum energy capacity (MWh) required to reduce the expected amount of unserved energy associated with capacity constraints on the forecast peak demand days, and have sufficient capacity for all other breaches in the forecast year.

TABLE 6: ENERGY CAPACITY REQUIRED TO DEFER NETWORK OPTION (MWh)

CURTIN FEEDERS	2026	2027	2028	2029	2030
Yarralumla	0.00	3.34	19.39	19.39	19.39
Curtin North	0.00	0.00	0.00	0.00	0.00
Feeder Capacity Required (MWh)	**0.00**	**3.34**	**19.39**	**19.39**	**19.39**

3.3.4 Operating Profile

To support the Curtin demand growth area with reliable and secure supply, a non-network option would be required to provide network support during peak demand days when thermal limitations are reached, or during a contingency event such as loss of a feeder. The identified network option will be in place by April 2028 prior to the Winter 2028 peak demand period if no credible non-network options are identified. The typical load profiles of each feeder can be found in Section 2.2.3 and 2.2.4.

3.4 Applicable Service Standards

3.4.1 Overview

Evoenergy is obligated to provide a high level of supply certainty to our customers, these obligations are stipulated through mandated codes and standards. To meet these standards, Evoenergy continually reviews future network requirements and anticipated customer needs to ensure that all expected electricity demand can be supplied within the stipulated requirements for safety, reliability, and quality. A failure to meet these standards would result in negative impacts for customers and fines payable by Evoenergy.

As described in the identified need, without action to support the anticipated growth in electricity demand in the study area would likely result in Evoenergy breaching its requirements under the mandatory minimum service standards. The identified preferred option is required to ensure that Evoenergy does not breach any of the standards. Service standards applicable to the identified need as per this FPAR include the following:

Utilities Act 2000 (ACT):

- General obligation to provide safe, reliable, efficient services to all parts of the Evoenergy supply network.
- Compliance with other relevant industry and technical codes, e.g.: Consumer Protection Code

Evoenergy's Utility License (Under the Utilities Act 2000):

- Minimise network losses (Schedule 1, Clause 2)
- Adherence to planning and operating requirements for transmission services (66 kV and above)
- Incorporate reliability requirements for the transmission-distribution interface (e.g. 132 kV substations)

Electricity Distribution (Supply Standards) Code:

- Performance standards for nominal voltages, voltage variations and normal operating conditions, voltage fluctuations and flicker, harmonic voltage distortion, voltage unbalance and maximum allowable voltage dips per year.
- Reliability targets for Evoenergy's overall network are as per the Electricity Distribution Supply Standards Code and are targets over the entirety of Evoenergy's network (see below).

3.4.2 Contribution To Power System Reliability

Any proposed services must be capable of reliably meeting electricity demand under a range of conditions and must meet all the relevant NER requirements related to grid connection (if that is required as part of the solution).

Evoenergy has obligations under the NER, the Electricity Distributions (supply standards) Code and connection agreements to ensure supply reliability is maintained to customers as per **Table 7**. Failure to meet these obligations may give rise to liability. Proponents of non-network solutions must also be willing to accept any liability that may arise from its contribution to a reliability of supply failure.

TABLE 7: ELECTRICITY DISTRIBUTION STANDARDS CODE ANNUAL RELIABILITY TARGETS

PARAMETER	TARGET	UNITS
Average outage duration (SAIDI)	91.0	Minutes
Average outage frequency (SAIFI)	1.2	Number
Average outage time (CAIDI)	74.6	Minutes

Service Target Performance Incentive Scheme (STPIS) targets set by the AER incentivise performance relating to unplanned interruptions. Evoenergy's STPIS targets for the current regulatory control period are provided in **Table 8** for different network supply categories. Non-network options should have adequate availability levels to contribute to maintaining reliability performance within these target requirements.

TABLE 8: AER 2024-29 STPIS TARGETS FOR RELIABILITY

PARAMETER	SAIDI TARGET FOR UNPLANNED OUTAGES (MINUTES)	SAIFI TARGET FOR UNPLANNED OUTAGES (NUMBER)	EQUIVALENT SERVICE AVAILABILITY (% OF TIME)
Urban	34.398	0.57	99.9938%
Short Rural	52.141	0.59	99.9933%
Whole Network (weighted average)	37.691	0.57	99.9936%

4. OPTIONS ANALYSIS

In accordance with the RIT-D process outlined in section 5.17.4(j) of the NER, 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 FPAR as it was in the DPAR.

As there were no submissions received for non-network solutions, only the network solutions will be discussed in this section.

Network options explored in the NNOR included:

- Utilising existing network capacity (not credible)
- Constructing a new 11kV feeder (preferred option)

The first of these options was not considered a credible option due to demand still exceeding both firm and thermal limits in 2027. Hence, constructing a new 11kV feeder is the preferred network option.

4.1 Network Option

4.1.1 The Preferred Option

The preferred option for the purpose of the FPAR is the network option identified in the NNOR. The preferred option will install and commission one new underground 11 kV feeder, from the Woden ZSS and transfer loads to the new feeders to alleviate network constraints. The new feeder details are described in **Table 9**.

On completion of this work, the forecast constraints on the existing 11 kV network will have been resolved for the duration of the planning window, with sufficient capacity provided to enable planned development and future demand growth. The preferred option is expected to provide the greatest reliability and benefit for customers and ensure Evoenergy meets its reliability obligations and targets.

The new 11 kV feeder for construction is further detailed in **Table 10**. The new feeder is expected to be completed and commissioned by April 2028, in advance of the winter peak. Evoenergy is managing the identified thermal constraints before April 2028 on a case-by-case basis in advance of the delivery of the preferred option. The total initial capital cost of this project is $7.24M in FY24/25 dollar terms.

TABLE 9: NEW 11 KV FEEDER AS PART OF THE PREFERRED NETWORK OPTION

FEEDER	FROM	TO	FEEDER CABLE LENGTH	COMPLETED BY	INITIAL CAPITAL COST	OPERATING COST
New Feeder	Woden Zone Substation	Corner of Cotter Rd & Dudley St	5km	April 2028	$7.24M	$0.07M/yr

4.1.1.1 Technical Characteristics

The feeder upgrades comprise of works to construct and install new conduits along the proposed feeder route, and the bulk cable laying of feeder lines via the new conduit banks.

The feeder cable will be made up of several sections, comprising of different cable diameters and materials (aluminium and copper), depending on the requirements of each section. The feeder has been designed to support the existing network in the Curtin area, to fully alleviate the forecast constraints and meet future anticipated demand growth.

TABLE 10: TECHNICAL CHARACTERISTICS OF FEEDERS

FEEDER	FROM	TO	FEEDER CABLE LENGTH	CABLE TYPE	ADDITIONAL CONDUIT
New Feeder	Woden Zone Substation	Corner of Cotter Rd and Dudley St	5km	Aluminium and Copper Three-Core XLPE Cable	5km

4.1.1.2 Construction timeframe

The new feeder upgrades will begin preliminary works in late 2027, with all works completed and the feeder commissioned by April 2028, in advance of the Winter demand peak.

4.1.1.3 Costs

The total capex cost estimate for this option is $7.24m in FY24/25 dollars, exclusive of contingency and GST.

4.2 Non-Network Options:

4.2.1 Summary of Submissions Received on the NNOR

As part of the RIT-D process, Evoenergy issued a request for non-network solution submissions on the NNOR. Evoenergy engaged with the registered parties in the demand register and coordinated consultation including a public briefing session with potential non-network options providers that was held virtually in February 2026.

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 proposed BESS located within the study area. The proponent requested to withdraw this application during the non-network proposal 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.
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 or 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

This section outlines the methodology and assumptions used by Evoenergy to complete the economic assessment of all credible options that address the identified need. This will include where applicable; the approach to estimating project costs, market benefits, and modelling scenarios to address uncertainty.

5.1 Methodology

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

As outlined in the RIT-D documentation, Evoenergy has shown that the preferred network option to build an additional feeder to support load growth in the Curtin area has a higher NPV than the 'no investment' base case. 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 to meet the demand growth forecast expected in the Curtin area. 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.

5.2 Economic Assessment Timeframe

Evoenergy's planning considers scheduled new customer connections and forecast commercial demand growth for 2024–2029. Due to the uncertainty in long-term forecasts for new point loads, a 5-year horizon is used using the period out until 2030. Non-network options that defer network investments may also delay future stages, however Evoenergy cannot commit to upfront costs for uncertain future deferral benefits.

5.3 Electrical Demand

The following summarises Evoenergy's planning assumptions relating to electrical demand and details how the identified need is defined.

5.3.1 Scenarios

Evoenergy plans its distribution network with 50% Probability of Exceedance (POE) demand forecasts. Maximum demand forecasts include new block loads from annual developments, using approved and pending developer applications to estimate new connections in Curtin and the surrounding areas as well as continued demand growth from established developments nearby.

5.3.2 Load Profile

When evaluating the financial costs and USE implications of non-network submissions, Evoenergy will use historical feeder load profiles. These profiles reflect customer electricity usage in the area and are reasonable for forecasting, as new developments are expected to mirror existing load patterns. Details of the feeder load profiles for the proposed network options are provided as an additional attachment found on Evoenergy's website.[8]

5.4 Load Transfer Capability and Supply Restoration

A number of feeders were assessed to address the identified constraints, with varying capabilities for load transfer and restoration following network failures. The maximum demand forecast for the Curtin area incorporates all feasible load transfers to prevent exceeding power rating limits in the existing 11 kV network. Evoenergy will manage forecast thermal constraints on a case-by-case basis through operational

[8] Available at: https://www.evoenergy.com.au/Your-Energy/Demand-Management/Engagement-opportunities

management. However, from Winter 2028 onwards thermal constraints peak, and the supporting feeders are projected to exceed their thermal limits with large USE costs associated with those limits being exceeded.

Given the existing constraints and the lack of additional load transfer options beyond 2028, additional capacity or significant demand reduction will be required.

5.5 Value of Customer Reliability

Evoenergy applied a blended Value of Customer Reliability (VCR) of USE. This value has been chosen to stay consistent with the figures provided in the NNOR which are based on the AER's 2024 VCR Annual Adjustment Summary, using the following:

- ACT residential VCR of $50.70/kWh ($2024) and commercial VCR of $34.39/kWh ($2024).
- Evoenergy has used a blended rate to assess the VCR

This aligns with Evoenergy's Risk Value Framework and the regional characteristics.

As Evoenergy's assessment is in real terms, VCR values remain constant over the assessment period.

5.6 Cost Estimates

Evoenergy estimated capital costs for the preferred network option has an accuracy of ±30%. Operating costs for new distribution assets were assumed as 1% of capital costs. Non-network providers are to include their own operating cost estimates in their submissions.

5.6.1 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. As the primary consideration for the identified need is unserved energy cost, additional market benefit considerations, such as avoided emissions is considered negligible when compared with the cost of unserved energy.

5.6.2 Discount Rate

A discount rate of 5.85%[9] has been applied in the initial assessment of options considered in this report. This corresponds to the rate in Evoenergy's 2024-2029 regulatory approval from the AER. This is the regulated (nominal vanilla) WACC and all values discounted using this rate are in nominal FY24/25 dollar terms.

[9] https://www.aer.gov.au/system/files/2024-04/AER%20-%20Final%20Decision%20-%20Overview%20-%20Evoenergy%20-%202024-29%20Distribution%20revenue%20proposal%20-%20April%202024.pdf

5.6.3 Results of Net Present Value Analysis

Table 11 below, shows the summary of results of the net present value analysis for the preferred option in real terms. The net present value of only the network option is summarised as it is the only option considered in this report.

TABLE 11: NET PRESENT VALUE RESULTS SUMMARY

Credible Option	PV - Capex	PV - Opex	NPC	PV – Benefits	NPV
Network option – Feeder upgrade ($m)	-$7.1	-$0.3	**-$7.4**	$114.1	**$106.7**

The network option to address the identified need has a net present cost (NPC) of $7.4m. The assessment considered the value of relevant network benefits, including the value of avoided unserved energy as a result of the investment including benefits that accrue after the solution has been implemented and post the potential deferral period, and has an NPV of $106.7m. This is the option with the greatest NPV and lowest NPC that was assessed and delivers the required reliability improvements.

6. RECOMMENDATION ON PREFERRED OPTION

Evoenergy has identified the network option to address the identified need in Curtin area as described below.

6.1 Option 1: Construct New 11 kV Feeders (Preferred Option)

The recommended option is to proceed with the preferred network option to install and commission an additional 11kV feeder to supply additional load in the Curtin area. The scope of work includes construction of conduit banks, bulk cable laying, and their connection to the Woden Zone Substation. The estimated construction timeline is provided in Table 12 below, with the works required to be completed and commissioned prior to the Winter peak in 2028.

TABLE 12: EXPECTED CONSTRUCTION TIMELINE

Feeder	Activity	Date
New Feeder	• Design and Development	Nov 2027
	• Build and Execute	Apr 2028

This is the preferred network solution identified in the NNOR and DPAR and meets the need to ensure stable and secure electricity supply to the Curtin area to accommodate expected demand growth. The total project cost of this recommended option for Evoenergy is estimated to be $7.24M in FY24/25 dollar terms.

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

7. SUBMISSIONS

7.1 Submissions

As part of the RIT-D process outlined in Section 1.1, Evoenergy issued a request for submission on the matters set out in the DPAR, including the proposed preferred option, and carried out a consultation period that concluded 27 May 2026.

There were no submissions received on the DPAR.

7.2 Next Steps

This FPAR represents the final stage of the RIT-D process. Evoenergy intends to commence work on delivering the preferred option (Network option).

Any queries in relation to this RIT-D should be lodged via email to: RIT@evoenergy.com.au

In accordance with the provisions of NER Clause 5.17.5, Registered Participants, AEMO, interested parties, non-network providers and persons registered on Evoenergy's demand side engagement register may, within 30 days after publication of this report, dispute the conclusions made by Evoenergy in this report with the AER based on a manifest error in calculations or application of the RIT-D. Dispute notifications should be sent via email to RIT@evoenergy.com.au by 3 July 2026 at 5pm. If no formal dispute is raised, Evoenergy will proceed with the preferred option (network option).

7.3 Timeline

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

TABLE 13: TIMELINE

ACTIVITIES	DATES	STATUS
Publish NNOR and request for submissions	19 Dec 2025	Completed
Consultation period for non-network providers to provide submissions	19 Dec 2025 to 13 Mar 2026	Completed
Public briefing session during consultation period	04 Feb 2026	Completed
Evoenergy review of submissions received (non-network proposals)	Mar 2026	Completed
Publish Draft Project Assessment Report (DPAR)	15 Apr 2026	Completed
Consultation period for DPAR	15 Apr 2026 to 27 May 2026	Completed
Publish Final Project Assessment Report (FPAR)	03 June 2026	Completed
Preferred option operational	Apr 2028	Planned

APPENDIX A – DEFINITIONS AND ABBREVIATIONS

TABLE 14: DEFINITIONS

Term	Definition
ACT government – Electrical Inspectorate	The ACT Government Electrical Inspectorate is the inspecting authority in the ACT and is responsible for inspecting and approving the consumer's electrical installation
Continuous rating	Substation rating capable of continuous reliable operation (24/7)
Demand response	A change from normal mode of load operation induced by a signal triggered by a network constraint or other constraint, to reduce demand for energy or market ancillary services within a region
Embedded generating system	A system comprising of multiple embedded generating units (e.g. solar PV system with a battery storage system)
Embedded generating unit	A generating unit connected within a distribution network and not having direct access to the transmission network
Emergency rating	Substation 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
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
Feeder	Typically, these are 11kV electricity distribution conductors / cables, for high voltage bulk electricity distribution within the network.
Firm delivery capacity	Maximum allowable output or load of a network or facility under single contingency conditions, including any short-term overload capacity having regard to external factors that may affect the capacity of the network or facility[10]
Frequency control and ancillary services	Services used by the energy market operator to maintain the frequency of the system within the normal operating band, which functions to provide a fast injection or reduction of energy to manage supply and demand, respectively
High Voltage (HV)	Any voltage greater than 1 kV AC
Load centre	Regions on the electricity distribution network close to load/centres of demand
Low Voltage (LV)	The mains voltages as most commonly used in any given network by domestic and light industrial and commercial consumers (typically 230 V)
Network	Evoenergy's distribution network
Non-network provider	A person who provides non-network solutions; proposing to become a generator (the relevant owner, operator or controller of the generating unit (or their agent))
RIT-D proponent	The Network Service Provider applying the regulatory investment test for distribution to a RIT-D project to address an identified need[11]
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
Utilities Technical Regulation Team	The ACT Government team responsible for the technical administration of utility requirements and administration of the Utilities (Technical Regulation) Act 2014
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, results involve analysing all hours of a particular year and calculations are presented as units of currency
Weighted average cost of capital	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

[10] As per definition from National Electricity Rules for *firm delivery capacity*
[11] As per definition from National Electricity Rules *for RIT-D proponent*

TABLE 15: 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
CAIDI	Customer Average Interruption Duration Index
CBD	Central Business District
CEC	Clean Energy Council
CPI	Consumer Price Index
DER	Distributed Energy Resource
DNSP	Distribution Network Service Provider
DSE-RIP	Demand Side Engagement Register of Interested Parties
EV	Electric Vehicle
FCAS	Frequency Control Ancillary Services
FAQ	Frequently Asked Question
FY	Financial Year
HV	High Voltage
LV	Low Voltage
MW	Megawatt
NEM	National Electricity Market
NER	National Electricity Rules
NNOR	Non-network options report
NPC	Net Present Cost
ODAF	Oil Directed, Air Forced
ODAN	Oil Directed, Air Natural
ONAN	Oil Natural, Air Natural
PoE	Probability of Exceedance
PV	Photovoltaics
RIT-D	Regulatory Investment Test for Distribution
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
STPIS	Service Target Performance Incentive Scheme
USE	Unserved Energy
UTR	Utilities Technical Regulator
V	Volt
VA	Volt-Ampere
VAr	Volt-ampere-reactive
VCR	Value of Customer Reliability
W	Watt
WACC	Weighted Average Cost of Capital
ZSS	Zone Substation