Addressing increased customer demand in the Maitland and Rutherford area

Request for Proposal (RFP)

4 March 2026

Contents

1 Background

Ausgrid serves over four million customers across 22,275 square kilometres of electricity network infrastructure that covers large parts of Greater Sydney, the Central Coast, and the Hunter.

As described in Section 7 of this RFP (Appendices 1 to 4), Ausgrid has identified capacity constraints for limited periods at four 11kV feeders in the north-eastern section of Ausgrid's distribution network area (refer to the Map in Figure 1) that are listed below:

- Feeder 83013 - Maitland Zone Substation
- Feeder 83019 - Maitland Zone Substation
- Feeder 83020 - Maitland Zone Substation
- Feeder 29873 - Rutherford Zone Substation

Ausgrid has two options to address annual energy at risk - Infrastructure upgrades or Non-network solutions.

Non-network solutions may provide an opportunity to avoid or defer the need for network infrastructure investment for these feeders. This Request for Proposal (RFP) seeks submissions for the provision of non-network solutions to reduce peak demand on the identified feeders.

If no non-network proposals are received by Ausgrid or the proposals assessed are not considered technically feasible or cost-effective, Ausgrid will proceed with the preferred supply-side network investment option to alleviate the network constraints.

Figure 1 - Ausgrid's Network Area

1.1 Purpose of this document

This RFP is an invitation for proponents to submit non-network solutions for consideration by Ausgrid. This RFP provides:

- Summary of the non-network solution requirements;
- Location details of the required demand reduction;
- Appendices showing the characteristics of the loads and the preferred network investment options for each feeder;

Along with this RFP document, Ausgrid has provided the following information:

- Excel template to be completed by the proponents; and
- Zip file with Google Earth KML files to indicate the target areas.

For all enquiries regarding this RFP, please submit them to demandmanagement@ausgrid.com.au.

Submissions for this RFP are due by **20 March 2026.**

1.2 Ausgrid's objective

Ausgrid's objective is to obtain sufficient customer demand reductions in the affected network area on the occasions needed to address the capacity constraints. A viable non-network option is one that is technically feasible and offers a higher net benefit than the preferred supply-side network option.

2 Feeder 83013 at Maitland Zone Substation

2.1 Non-network Solution Requirements

The following table summarises the key requirements for a non-network solution. Further details, including the number and type of customers on the feeder, and the load duration curve at the feeder level, are provided in Appendix 1.

Table 1 – Non-network solution requirements for Feeder 83013 at Maitland Zone Substation

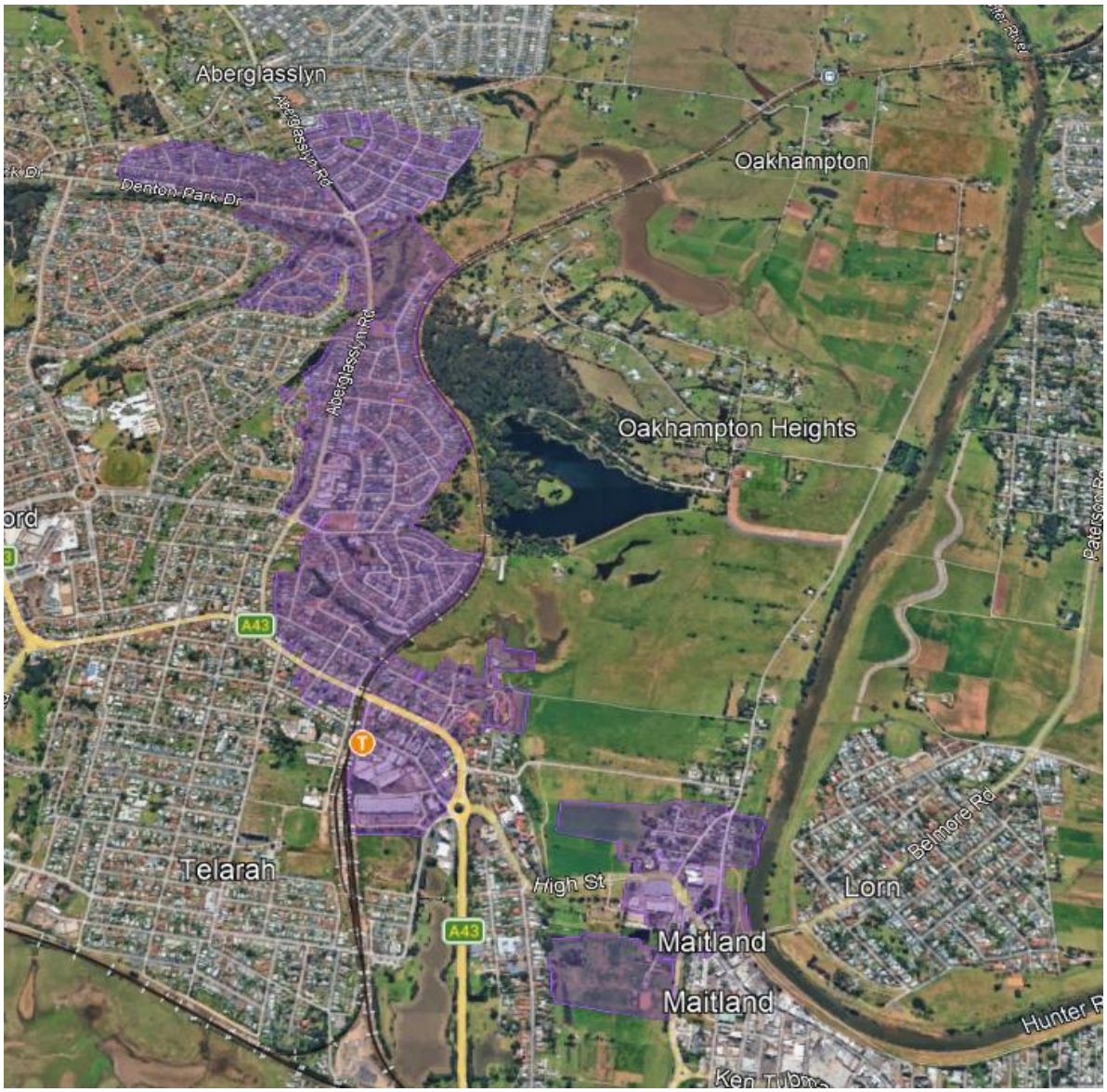
Parameters	Requirement
Network Constraint	Capacity constraint during peak summer periods
Demand reduction required	1.5 MW
Duration of demand reduction	Up to 3 hours
Time of year	1 November – 31 March (Network Summer)
Time of day	4 pm – 9 pm
Day type	Working and non-working days

Parameters	Requirement
Weather conditions	High temperature days
Maximum number of demand reduction days per year	Up to 10 days
Number of years solution is required	3 years
Period required	Network Summer months of 2026/27, 2027/28, and 2028/29 The solution is required to be ready for testing by October 2026, with full operational readiness by 1 November 2026.
Funds available	Based on the deferral benefits, Ausgrid will consider non-network solution proposals around $46,000 per annum ($138,000 over three years).

2.2 Target Location

The location of the area requiring demand reduction is shown below. Ausgrid's preference is to procure a non-network solution within the purple highlighted area. However, due to network interconnectivity, non-network solutions located in adjacent areas may also be considered where they contribute to reducing demand on Feeder 83013 at Maitland Zone Substation. For more details on the location, please see the Google Earth KML files provided.

Figure 2 - Location of potential non-network solution for Feeder 83013 at Maitland Zone Substation



3 Feeder 83019 at Maitland Zone Substation

3.1 Non-Network Solution Requirements

The following table summarises the key requirements for a non-network solution. Further details, including the number and type of customers on the feeder, and the load duration curve at feeder level, are provided in Appendix 2.

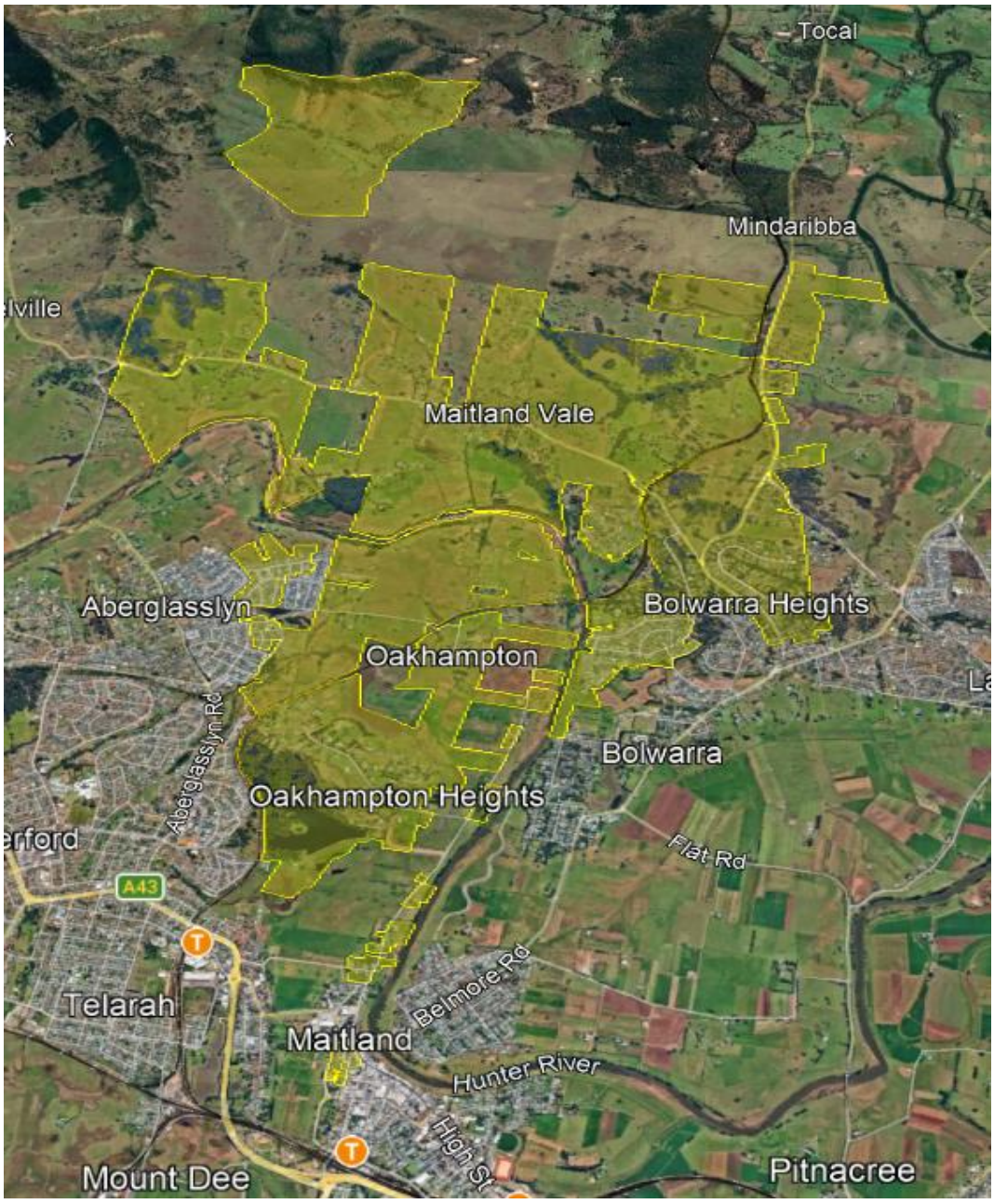
Table 2 - Non-network solution requirements for Feeder 83019 at Maitland Zone Substation

Parameters	Requirement
Network Constraint	Capacity constraint during peak summer periods
Demand reduction required	1.5 MW
Duration of demand reduction	Up to 3 hours
Time of year	1 November – 31 March (Network Summer)
Time of day	4 pm – 9 pm
Day type	Working and non-working days
Weather conditions	High temperature days
Maximum number of demand reduction days per year	Up to 10 days
Number of years solution is required	3 years
Period required	Network Summer of 2026/27, 2027/28, and 2028/29 Solution must be ready for testing by October 2026 and ready for operation by 1 November 2026
Funds available	Based on the deferral benefits, Ausgrid will consider non-network solution proposals around $50,000 per annum ($150,000 over three years).

3.2 Target Location

The location of the area requiring demand reduction is shown below. Ausgrid's preference is to procure a non-network solution within the yellow highlighted area. However, due to network interconnectivity, non-network solutions located in adjacent areas may also be considered where they contribute to reducing demand on Feeder 83019 at Maitland Zone Substation. For more details on the location, please see the Google Earth KML files provided.

Figure 3 - Location of potential non-network solution for Feeder 83019 at Maitland Zone Substation



4 Feeder 83020 at Maitland Zone Substation

4.1 Non-Network Solution Requirements

The following table summarises the key requirements for a non-network solution. Further details, including the number and type of customers on the feeder, and the load duration curve at feeder level, are provided in Appendix 3.

Table 3 - Non-network solution requirements for Feeder 83020 at Maitland Zone Substation

Parameters	Requirement
Network Constraint	Capacity constraint during peak summer periods
Demand reduction required	1.7 MW
Duration of demand reduction	Up to 3 hours
Time of year	1 November – 31 March (Network Summer)
Time of day	4 pm – 9 pm
Day type	Working and non-working days
Weather conditions	High temperature days
Maximum number of demand reduction days per year	Up to 10 days
Number of years solution is required	3 years
Period required	Network Summer of 2026/27, 2027/28, and 2028/29 The solution is required to be ready for testing by October 2026, with full operational readiness by 1 November 2026.
Funds available	Based on the deferral benefits, Ausgrid will consider non-network solution proposals around $63,000 per annum ($189,000 over three years).

4.2 Target Location

The location of the area requiring demand reduction is shown below. Ausgrid's preference is to procure a non-network solution within the red highlighted area to reduce demand. However, due to network interconnectivity, non-network solutions located in adjacent areas may also be considered where they contribute to reducing demand on Feeder 83020 at Maitland Zone Substation. For more details on the location, please see the Google Earth KML files provided.

Figure 4 - Location of potential non-network solution for Feeder 83020 at Maitland Zone Substation

5 Feeder 29873 at Rutherford Zone Substation

5.1 Non-Network Solution Requirements

The following table summarises the key requirements for a non-network solution. Further details, including the number and type of customers on the feeder, and the load duration curve at feeder level, are provided in Appendix 4.

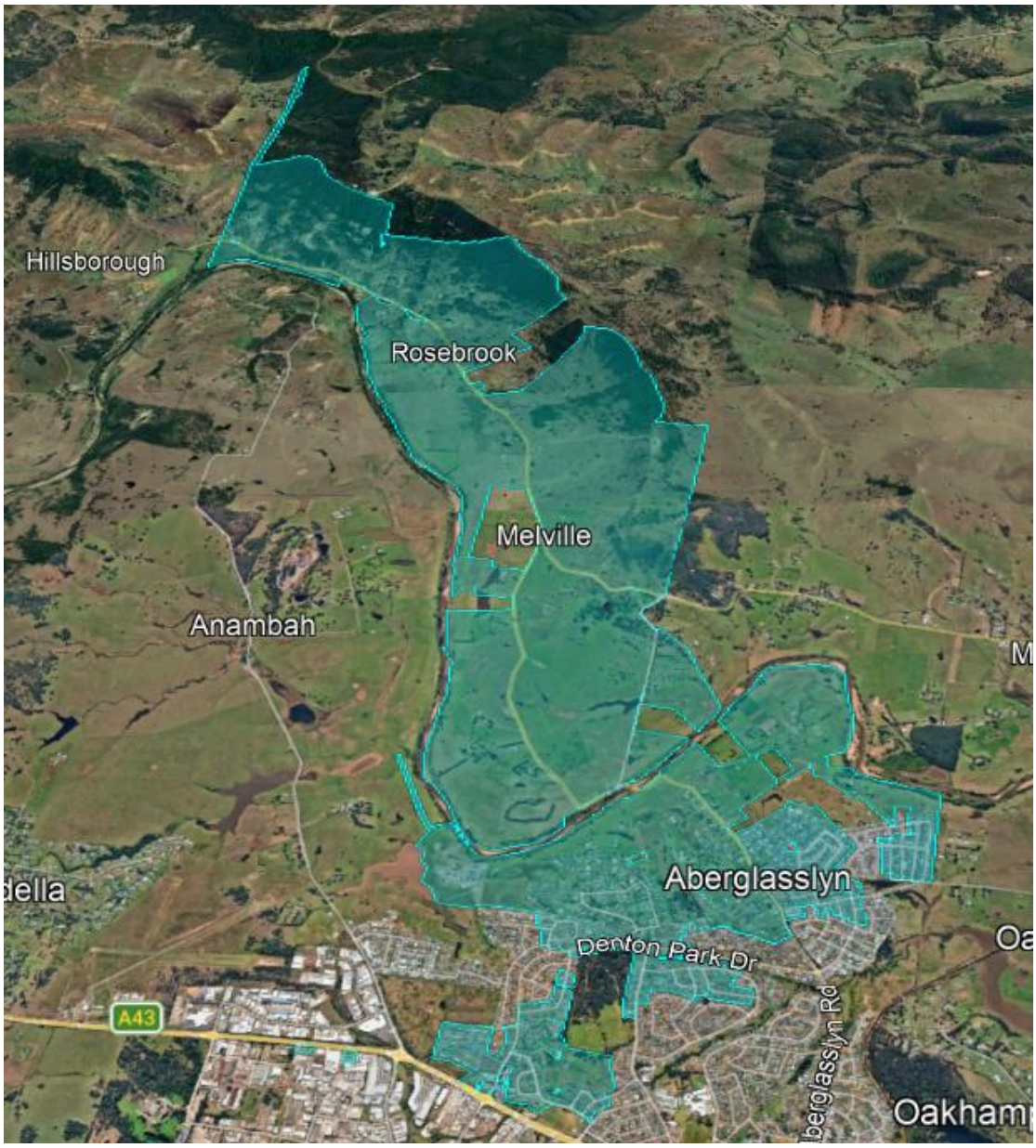
Table 4 - Non-network solution requirements for Feeder 29873 Rutherford Zone Substation

Parameters	Requirement
Network Constraint	Capacity constraint during peak summer periods
Demand reduction required	2.0 MW
Duration of demand reduction	Up to 3 hours
Time of year	1 November – 31 March (Network Summer)
Time of day	4 pm – 9 pm
Day type	Working and non-working days
Weather conditions	High temperature days
Maximum number of demand reduction days per year	Up to 10 days
Number of years solution is required	3 years
Period required	Network Summer of 2026/27, 2027/28, and 2028/29 The solution is required to be ready for testing by October 2026, with full operational readiness by 1 November 2026.
Funds available	Based on the deferral benefits, Ausgrid will consider non-network solution proposals around $68,000 per annum ($204,000 over three years).

5.2 Target Location

The location of the area requiring demand reduction is shown below. Ausgrid's preference is to procure a non-network solution within the blue highlighted area. However, due to network interconnectivity, non-network solutions located in adjacent areas may also be considered where they contribute to reducing demand on Feeder 29873 at Rutherford Zone Substation. For more details on the location, please see the Google Earth KML files provided.

Figure 5 - Location of potential non-network solution for Feeder 29873 at Rutherford Zone Substation



6 Market Engagement Process

6.1 Schedule

The estimated timeline of key milestones for this project is as follows:

Table 5 - Schedule of key milestones

No.	Milestone	Date	Comments
1	**RFP release**	4 Mar 2026	This document.
2	**RFP response due**	20 Mar 2026	
3	**Contract issued**	April 2026	Contract offer to successful proponent(s)
4	**Contract execution**	April 2026	Ausgrid and the proponent(s) to execute agreement(s)
5	**Year 1 Testing**	October 2026	
6	**Year 1 period start**	1 Nov 2026	
7	**Year 1 period end**	31 Mar 2027	
8	**Year 2 Testing**	October 2027	
9	**Year 2 period start**	1 Nov 2027	
10	**Year 2 period end**	31 Mar 2028	
11	**Year 3 Testing**	October 2028	
12	**Year 3 period start**	1 Nov 2028	
13	**Year 3 period end**	31 March 2029	

6.2 Template and Datapack

Along with this RFP, Ausgrid has provided the following information:

- Excel template that **must** be completed by the proponents to enable more efficient evaluation of the proposals; and
- Zip file with Google Earth KML files to indicate the target areas.

6.3 Evaluation and selection criteria

Ausgrid will evaluate proposals submitted in response to this RFP against the criteria set out below. Proponents should note that these criteria are not listed in any particular order, are not necessarily exhaustive, and do not imply any relative weighting. Ausgrid may take into account additional factors it considers relevant to the assessment of proposals.

The evaluation criteria include, but are not limited to:

- Ability to meet the required demand reductions;
- Whether the proponent is offering a solution for just one of the locations or more;

- Cost-effectiveness of the proposal;
- Environmental friendliness of the solution;
- Timing of the delivery of the non-network solution; and
- Experience in delivering non-network solutions;

Proponents may be invited for further discussions with Ausgrid as part of the process.

6.4 Submissions

Please submit a completed version of the provided template, together with any relevant supporting materials, to demandmanagement@ausgrid.com.au.

Submissions for this RFP are due by **20 March 2026.**

Only proposals submitted using a fully completed template will be considered.

7 Appendix 1 – Further information on Feeder 83013 at Maitland Zone Substation

7.1 Load Characteristics

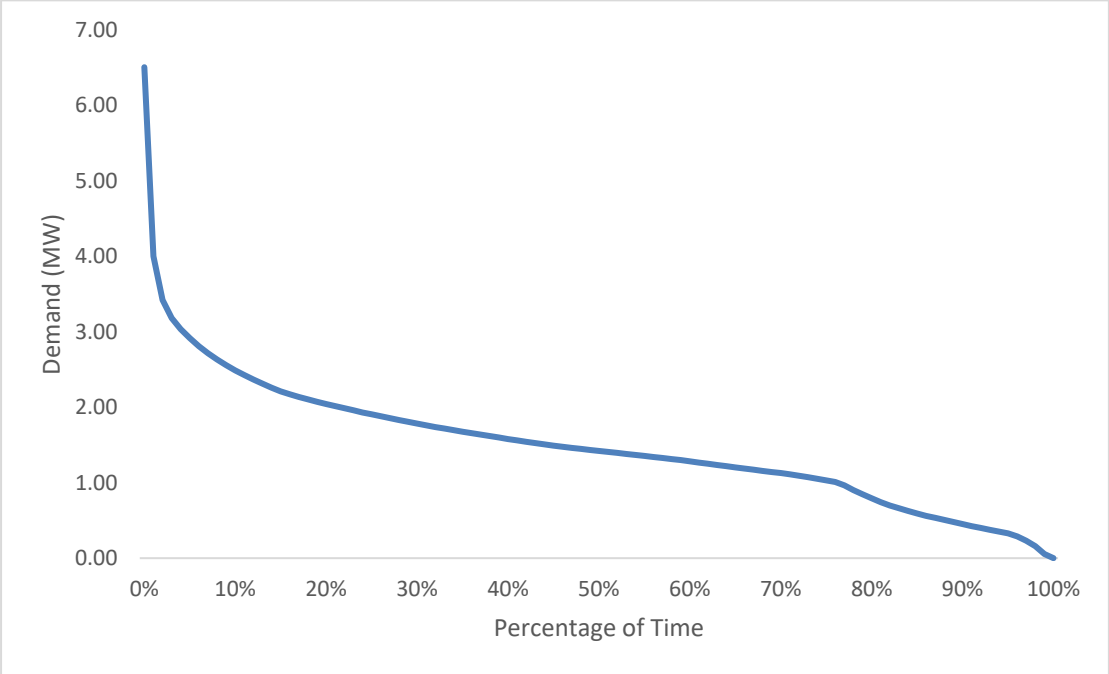
The following table summarises the key customer energy characteristics.

Table 6 - Customer characteristics for Feeder 83013 at Maitland Zone Substation

Item	Residential	Non-Residential	Total
Number of customers	1,468	147	1,615
Percentage of customers	91%	9%	
Annual consumption FY25 (MWh)	7,621	6,117	13,738
Percentage of annual consumption	55%	45%	
Number of solar customers	380	8	388
Percentage of solar customers	26%	5%	24%
Solar PV installed capacity (kW)	2,737	587	3,324
Avg annual usage per customer (MWh)	5	42	9

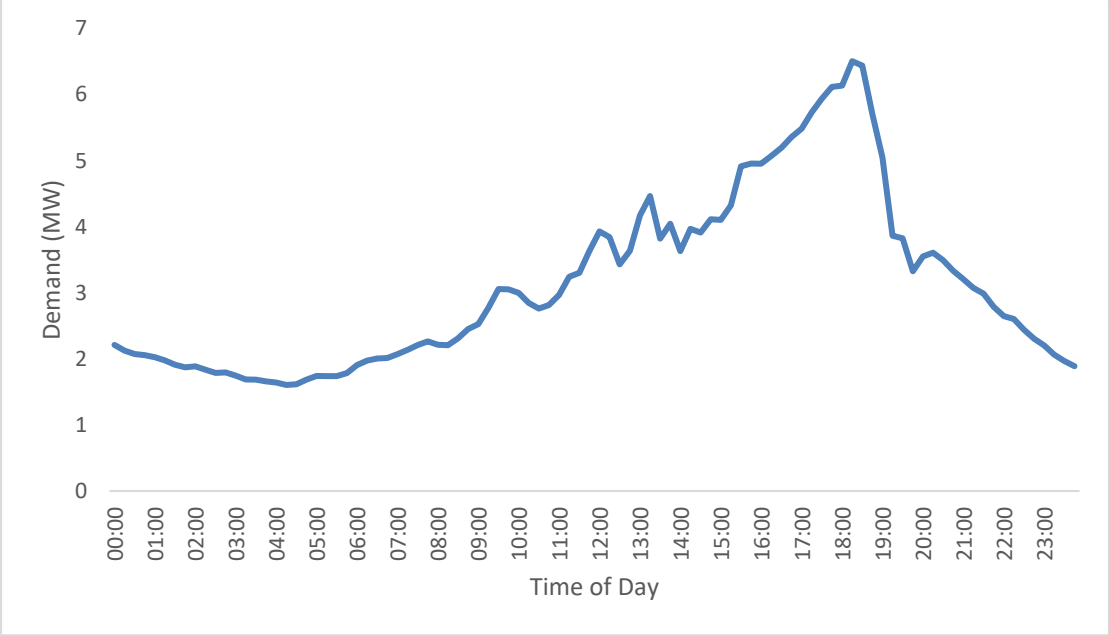
The following load duration curve is constructed by sorting the feeder's 15-minute electricity demand data from highest to lowest over a one-year period. It demonstrates that the high demand levels are experienced for only a small fraction of the time.

Figure 6 - Load duration curve for Feeder 83013 at Maitland Zone Substation



The following chart illustrates the load profile on a summer peak demand day, with demand typically peaking in the evening.

Figure 7 - 2024/2025 peak demand day for Feeder 83013 at Maitland Zone Substation



Load utilisation at Feeder 83013 on a peak summer day in 2024/25 is 114% relative to its thermal capacity under normal network operating state (N condition).

7.2 Network Solution

If no feasible non-network solution is identified for Feeder 83013 at Maitland Zone Substation, Ausgrid will proceed with the preferred network solution, which involves upgrading the feeder at an estimated cost of $1.39M to address annual energy at risk of around 3.7MWh[1] (associated value of energy at risk is $134,000 per annum).

[1] The annual energy at risk figure is calculated by assessing network constraints under normal (N) and firm (N-1) operating conditions.

8 Appendix 2 – Further information on Feeder 83019 at Maitland Zone Substation

8.1 Load Characteristics

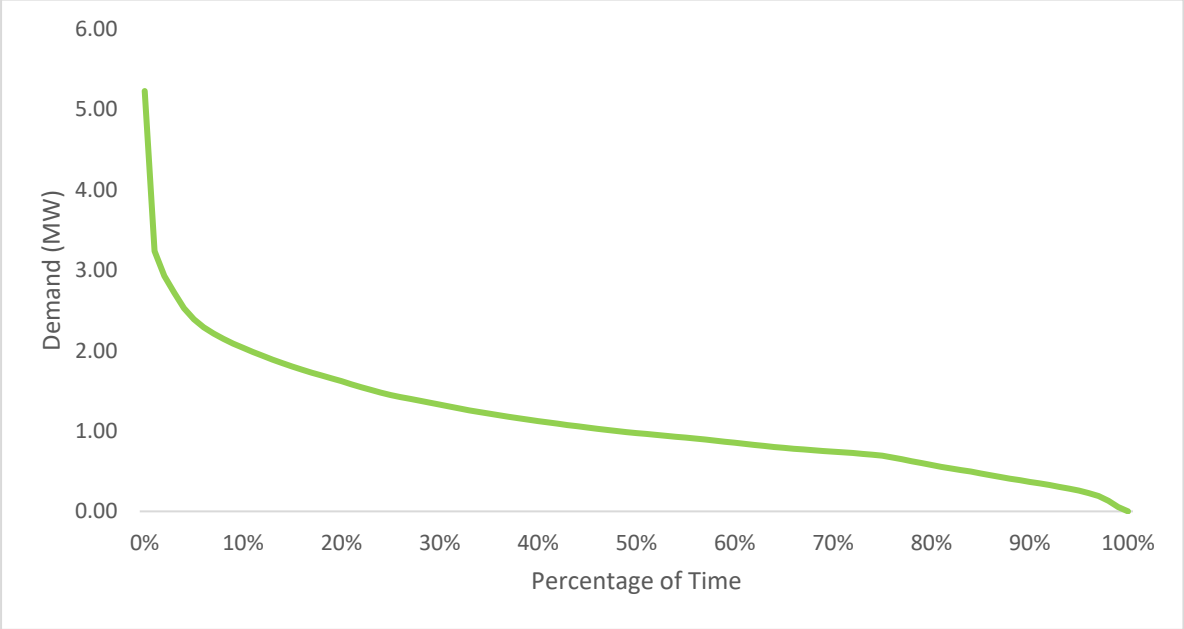
The following table summarises the key customer energy characteristics.

Table 7 - Customer characteristics for Feeder 83019 at Maitland Zone Substation

Item	Residential	Non-Residential	Total
Number of customers	988	60	1,048
Percentage of customers	94%	6%	
Annual consumption FY25 (MWh)	7,376	559	7,935
Percentage of annual consumption	93%	7%	
Number of solar customers	470	3	473
Percentage of solar customers	48%	5%	45%
Solar PV installed capacity (kW)	3,918	10	3,928
Avg annual usage per customer (MWh)	7	9	8

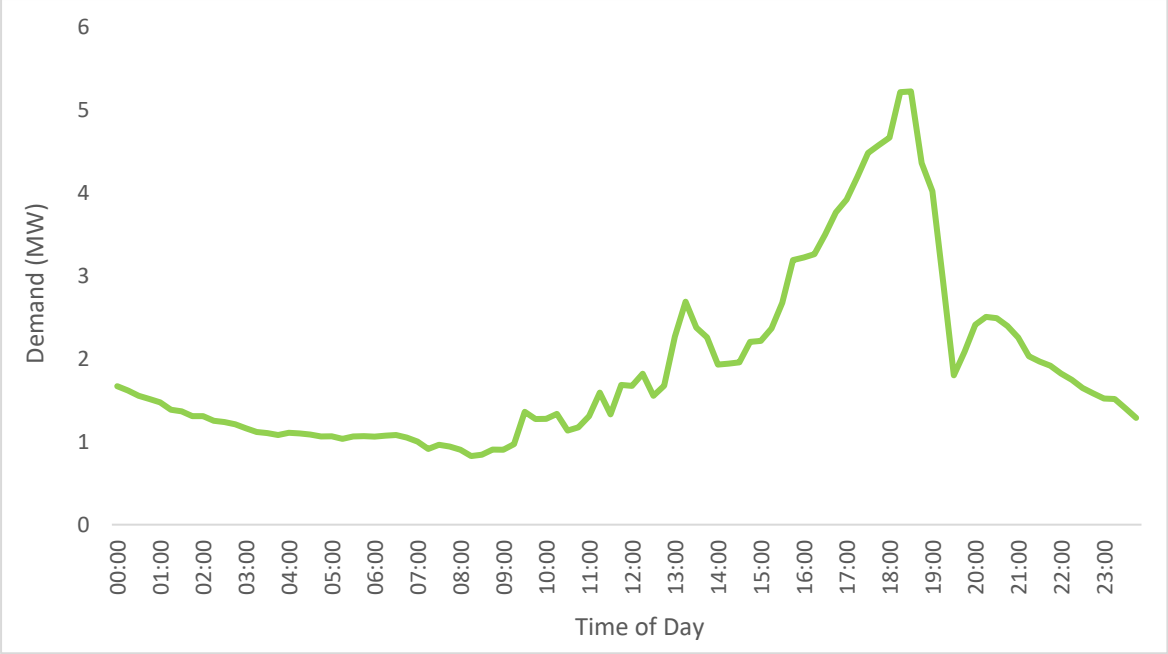
The following load duration curve is constructed by sorting the feeder's 15-minute electricity demand data from highest to lowest over a one-year period. It demonstrates that the high demand levels are experienced for only a small fraction of the time.

Figure 8 - Load duration curve for Feeder 83019 at Maitland Zone Substation



The following chart illustrates the load profile on a summer peak demand day, with demand typically peaking in the evening.

Figure 9 - 2024/2025 peak demand day for Feeder 83019 at Maitland Zone Substation



Load utilisation at Feeder 83019 on a peak summer day in 2024/25 is 101% relative to its thermal capacity under normal network operating state (N condition), with higher utilisation under firm (N-1) conditions.

8.2 Network Solution

If no feasible non-network solution is identified for Feeder 83019 at Maitland Zone Substation, Ausgrid will proceed with the preferred network solution, which involves upgrading the feeder at an estimated cost of $1.51M to address annual energy at risk of 5.6MWh (associated value of energy at risk is $202,000 per annum).

9 Appendix 3 – Further information on Feeder 83020 Maitland Zone Substation

9.1 Load Characteristics

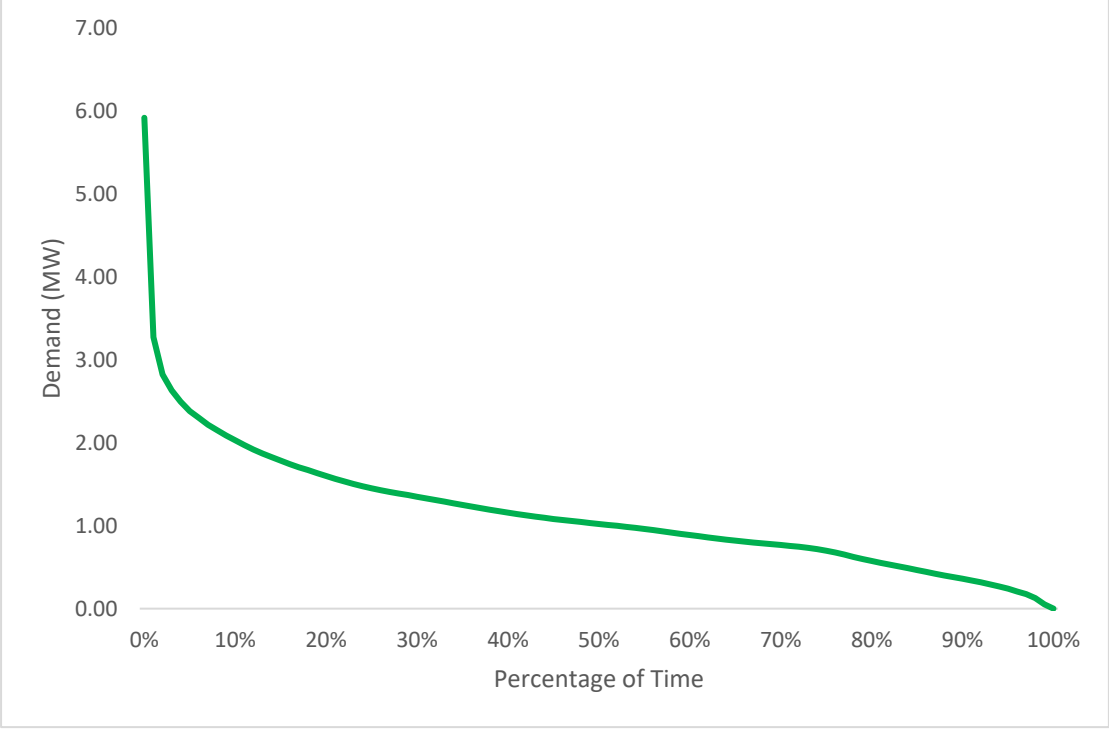
The following table summarises the key customer energy characteristics.

Table 8 - Customer characteristics for Feeder 83020 at Maitland Zone Substation

Item	Residential	Non-Residential	Total
Number of customers	1,315	97	1,412
Percentage of customers	93%	7%	
Annual consumption FY25 (MWh)	7,823	1,483	9,306
Percentage of annual consumption	84%	16%	
Number of solar customers	515	7	522
Percentage of solar customers	39%	7%	37%
Solar PV installed capacity (kW)	3,706	132	3,838
Avg annual usage per customer (MWh)	6	15	7

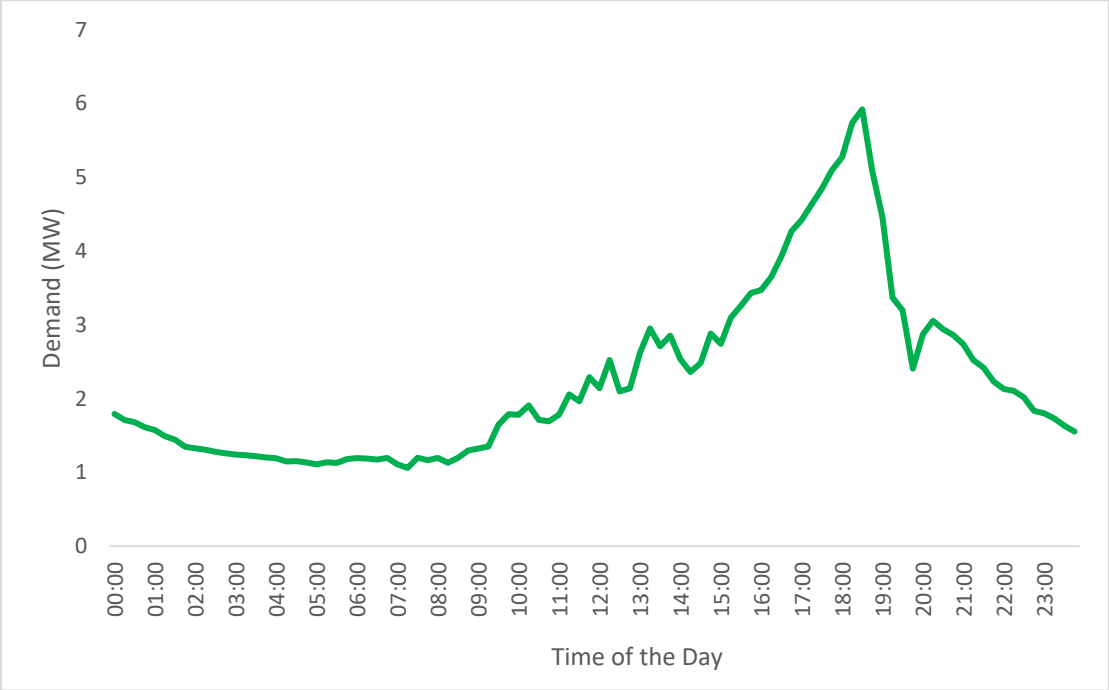
The following load duration curve is constructed by sorting the feeder's 15-minute electricity demand data from highest to lowest over a one-year period. It demonstrates that the high demand levels are experienced for only a small fraction of the time.

Figure 10 - Load duration curve for Feeder 83020 at Maitland Zone Substation



The following chart illustrates the load profile on a summer peak demand day, with demand typically peaking in the evening.

Figure 11 - 2024/2025 peak demand day for Feeder 83020 at Maitland Zone Substation



Load utilisation at Feeder 83020 on a peak summer day in 2024/25 is 114% relative to its thermal capacity under normal network operating state (N condition).

9.2 Network Solution

If no feasible non-network solution is identified for Feeder 83020 at Maitland Zone Substation, Ausgrid will proceed with the preferred network solution, which involves upgrading the feeder at an estimated cost of $1.89M to address annual energy at risk of 9.2MWh (associated value of energy at risk is approximately $270,000 per annum).

10 Appendix 4 - Further information on Feeder 29873 Rutherford Zone Substation

10.1 Load Characteristics

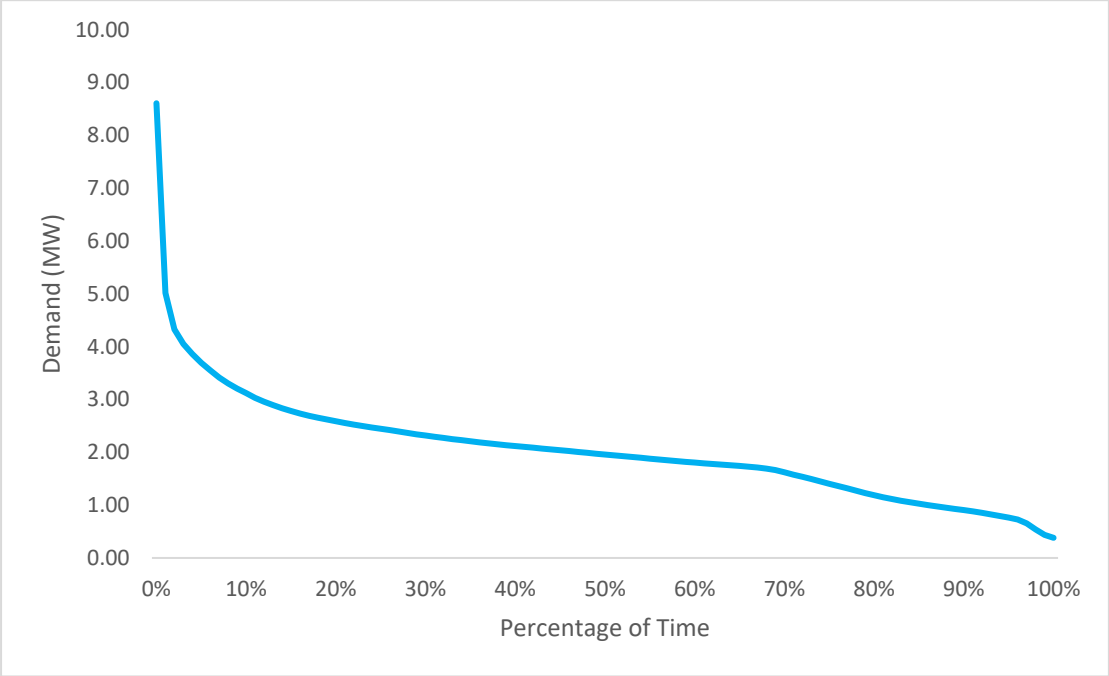
The following table summarises the key customer energy characteristics.

Table 9 - Customer characteristics for Feeder 29873 at Rutherford Zone Substation

Item	Residential	Non-Residential	Total
Number of customers	1,826	39	1,865
Percentage of customers	98%	2%	
Annual consumption FY25 (MWh)	10,888	3,656	14,544
Percentage of annual consumption	75%	25%	
Number of solar customers	659	6	665
Percentage of solar customers	36%	15%	36%
Solar PV installed capacity (kW)	5,045	256	5,301
Avg annual usage per customer (MWh)	6	94	8

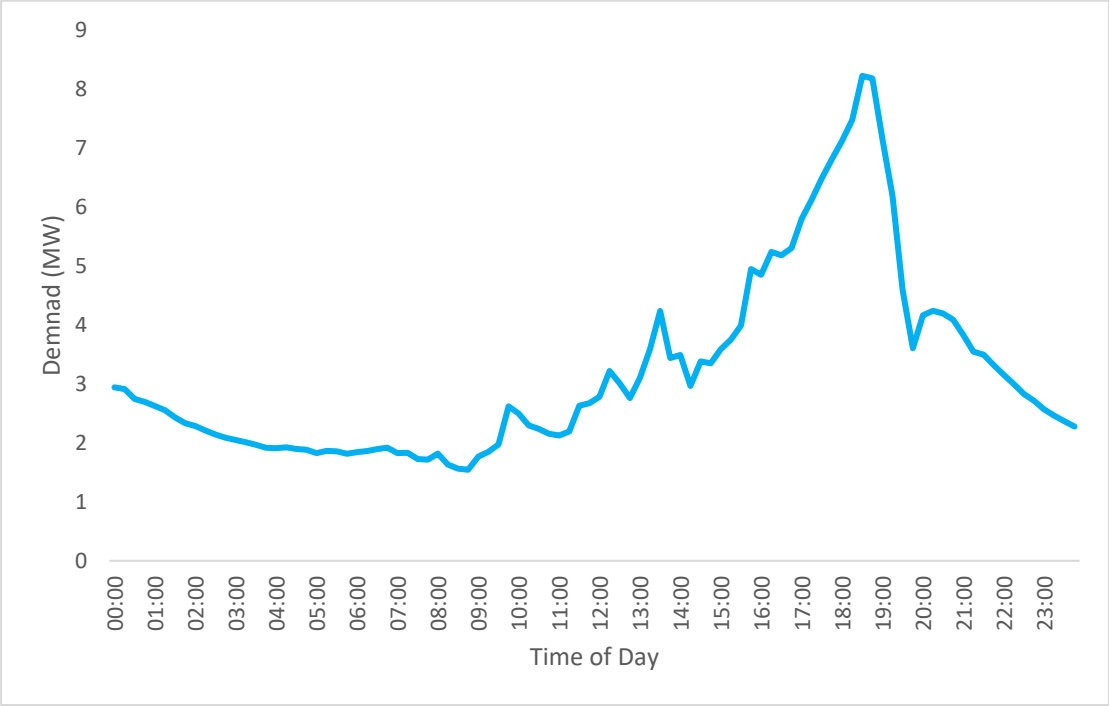
The following load duration curve is constructed by sorting the feeder's 15-minute electricity demand data from highest to lowest over a one-year period. It demonstrates that the high demand levels are experienced for only a small fraction of the time.

Figure 12 - Load duration curve for Feeder 29873 at Rutherford Zone Substation



The following chart illustrates the load profile on a summer peak demand day, with demand typically peaking in the evening.

Figure 13 - 2024/2025 peak demand day for Feeder 29873 at Rutherford Zone Substation



Load utilisation at Feeder 29873 on peak summer day in 2024/25 is 123% relative to its thermal capacity under normal network operating state (N condition).

10.2 Network Solution

If no feasible non-network solution is identified for Feeder 29873 at Rutherford Zone Substation, Ausgrid will proceed with the preferred network solution, which involves augmenting the network at an estimated cost of $2.06M to address annual energy at risk of 7.9MWh (associated value of energy at risk is approximately $244,000 per annum).