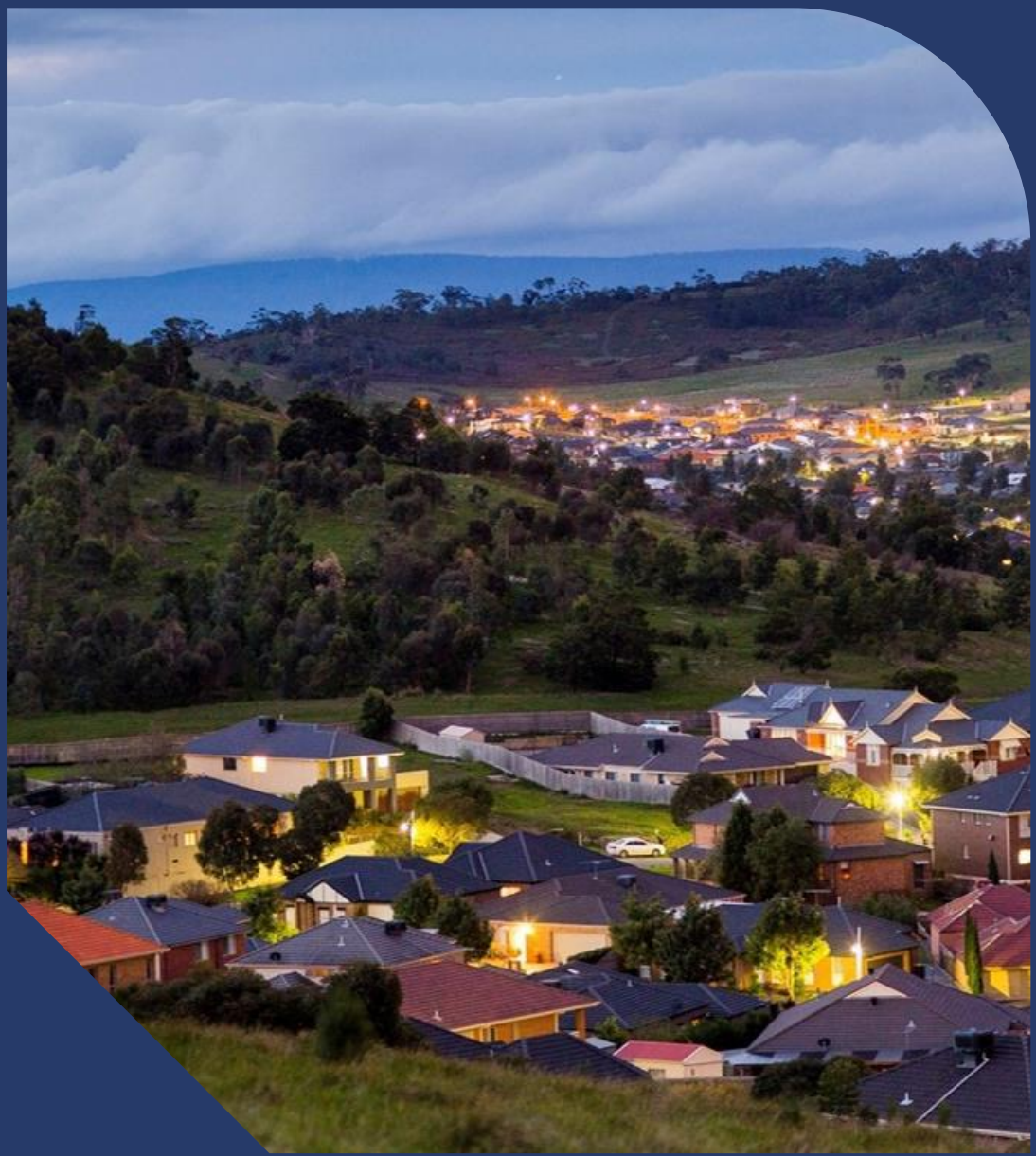
AusNet

Connection Enablement: Wodonga – Barnawartha in North-Eastern Victoria

Regulatory Investment Test for Transmission (RIT-T)

Project Specification Consultation Report

Wednesday, 31 January 2024



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1. Executive summary

AusNet owns and operates the electricity transmission network in Victoria, which transports electricity from large coal, gas and renewable generators across Victoria and interstate, to terminal stations that supply large customers and the distribution networks. AusNet also owns and operates the electricity distribution network in eastern Victoria and parts of northern and eastern Melbourne metropolitan area. As the Distribution Network Service Provider (DNSP) in Wodonga – Barnawartha area, AusNet is responsible for planning the transmission connection assets and distribution network in this area.

AusNet has received connection inquiries to connect a total of 420 MW of renewable generation to WOTS sub-transmission (66 kV) system. WOTS sub-transmission system was originally planned, built, and maintained to meet the rural load in that area and is not strong enough to connect this renewable generation.

The Regulatory Investment Test for transmission (RIT-T) is an economic cost-benefit test used to assess and rank credible options that are capable of meeting an identified need. The purpose of the RIT-T is to identify the credible option that addresses the identified need and maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the National Electricity Market (the preferred option).

AusNet is initiating this RIT-T to address the constraints in the WOTS sub-transmission system to enable more renewable connections to AusNet's sub-transmission and distribution network in North-eastern Victoria (Wodonga - Barnawartha area).

Publication of this Project Specification Consultation Report (PSCR) represents the first step in the RIT-T process in accordance with clause 5.16 of the National Electricity Rules (NER)[1] and section 4.2 of the RIT-T Application Guidelines[2].

AusNet will investigate and evaluate the following options to address the identified need:

1. Install and commission the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and augment the existing WO-BWA 66 kV line with 19/4.75 conductor to increase the line summer rating to 105 MVA
2. Install and commission the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and augment the existing WO-BWA 66 kV line with 37/3.75 conductor to increase the line summer rating to 118 MVA
3. Install and commission the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and add a second circuit to the existing WO-BWA 66 kV line with similar conductor to increase the line summer rating to 128 MVA (both circuits)
4. Install and commission the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and add a new WO-BWA 66 kV line in parallel with the existing line with a similar conductor to increase the line summer rating to 128 MVA (both lines)
5. Install and commission the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and add a new WOTS-BWA 66 kV line with 37/3.75 conductor to increase the overall 66 kV line summer rating to BWA to 182 MVA (both lines)

AusNet welcomes proposals from proponents of non-network options (stand-alone or in conjunction with a network solution) that meet the identified need. Any credible non-network options will be assessed alongside the network options at the next stage of the RIT-T.

AusNet welcomes written submissions on the credible options presented in this PSCR and invites proposals from proponents of potential non-network options. Submissions should be emailed to rittconsultations@ausnetservices.com.au by 1 May 2024.

In the subject field, please reference 'RIT-T PSCR CE WOTS-BWA'. AusNet's preference is that these submissions would be published on its website and AEMO's website. If you do not want your submission to be made public, please clearly stipulate this at the time of lodgement.

AusNet's assessments of the options and responses to this PSCR will be presented in the Project Assessment Draft Report (PADR) that is intended to be published before the end of May 2024.

[1] Australian Energy Market Commission, "*National Electricity Rules*"
[2] Australian Energy Regulator, "*Application guidelines Regulatory investment test for transmission*"

2. Introduction

AusNet owns and operates the electricity transmission network in Victoria, which transports electricity from coal, gas and renewable generators across Victoria and interstate, to terminal stations that supply large customers and the distribution networks.

The RIT-T is an economic cost-benefit test used to assess and rank potential investments capable of meeting an identified need. The purpose of the RIT-T is to identify the credible option that addresses the identified need and maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the National Electricity Market (the preferred option).

The publication of this PSCR represents the first step in the RIT-T process in accordance with clause 5.16 of the NER and section 4.1 of the AER's RIT-T Application Guidelines[3]. In accordance with those requirements, this document sets out:

- the identified need that AusNet is seeking to address, together with the assumptions used in identifying this need;
- a description of the credible network options that may address the identified need, including our reasons why there are no credible non-network options;
- the technical characteristics of each credible option;
- the classes of market benefits that AusNet considers are unlikely to be material, together with our reasoning;
- the estimated construction timetable and commissioning date; and
- the total indicative capital and maintenance costs for each option.

The appendix provides an overview of the RIT-T assessment and consultation process.

[3] Australian Energy Regulator, Application Guidelines, Regulatory Investment Test for transmission, August 2020.

3. Background

Wodonga Terminal Station (WOTS) is the main source of supply for a significant part of north-eastern Victoria. The supply is via two 330/66/22 kV three-winding transformers with a nominal rating of 75 MVA each. As these transformers are unique and due to the condition of the transformers, AusNet purchased a spare transformer with the same voltage ratio and capacity recently. This spare transformer is now stored at the WOTS as a cold spare (not energised or connected to the network).

AusNet is responsible for planning the transmission connection facilities and distribution network for this region.

WOTS consists of three switchyards operating at voltages of 330 kV, 66 kV and 22 kV as shown below. The 330 kV switchyard interconnects a transmission line from Dederang Terminal Station (DDTS) and a transmission line from Jindera Substation in New South Wales.

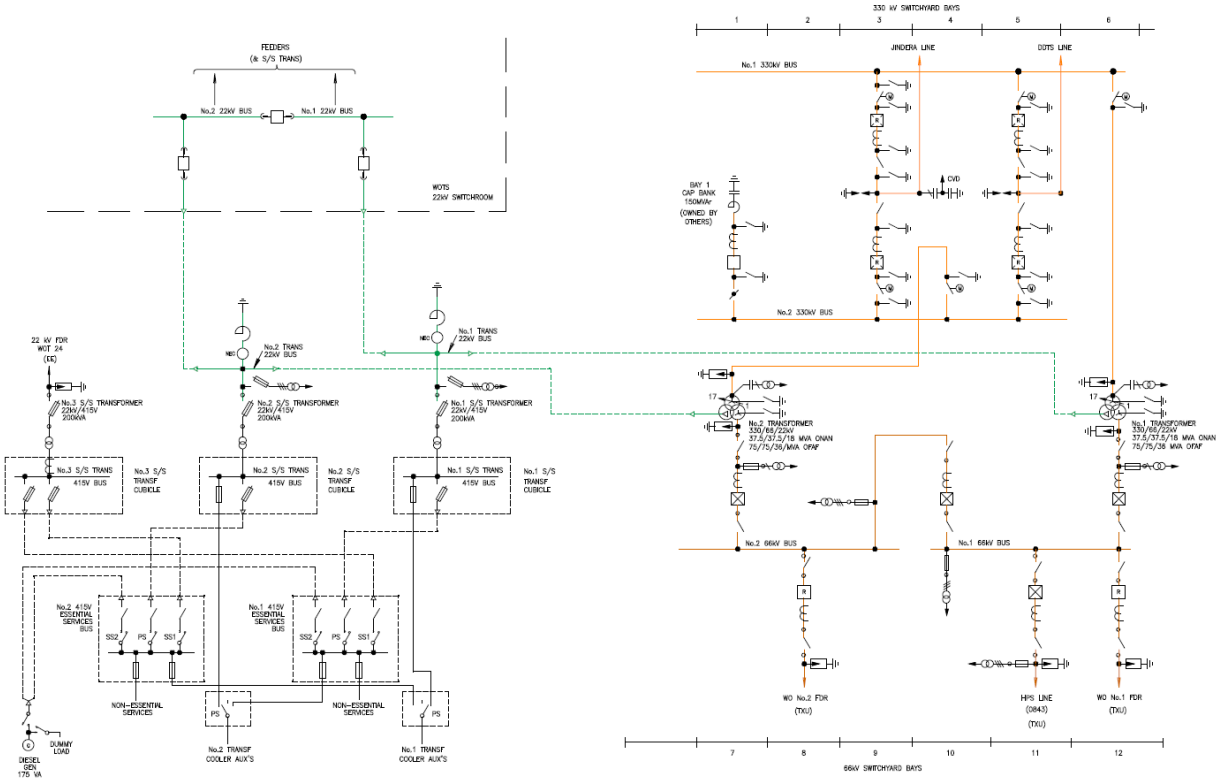

Figure 1: Network diagram showing Wodonga Terminal Station 330 kV, 66 kV and 22 kV Switchyards

Most of the time, total station demand (66 kV and 22 kV demand) at WOTS is below the N-1 station summer rating of 81 MVA. The maximum demand on the station reached 107.4 MVA in summer 2008/09 but had a period of decline before recently flattening. The recorded maximum demand in summer 2022/23 was 80.6 MW (81.9 MVA).

A total of 115.3 MW of embedded generation capacity is installed on the AusNet sub-transmission and distribution systems connected to WOTS. It consists of:

- 60 MW of large-scale embedded generation; and
- 55.3 MW of rooftop solar PV, including all the residential and small-scale commercial rooftop PV systems that are smaller than 1 MW.

Hume Power Station (HPS) is connected to the WOTS 66 kV bus 1 via a 66 kV line from HPS. HPS generation can also be connected to the TransGrid 132 kV network in New South Wales. The nameplate capacity of the HPS is 58 MW.

WOTS supplies Wodonga centrally as well as the area from Rutherglen in the west to Corryong in the east. Wodonga zone substation (WO ZSS) is connected to the WOTS via two 66 kV feeders connected to 66 kV bus 1 and 2 of WOTS for improved reliability.

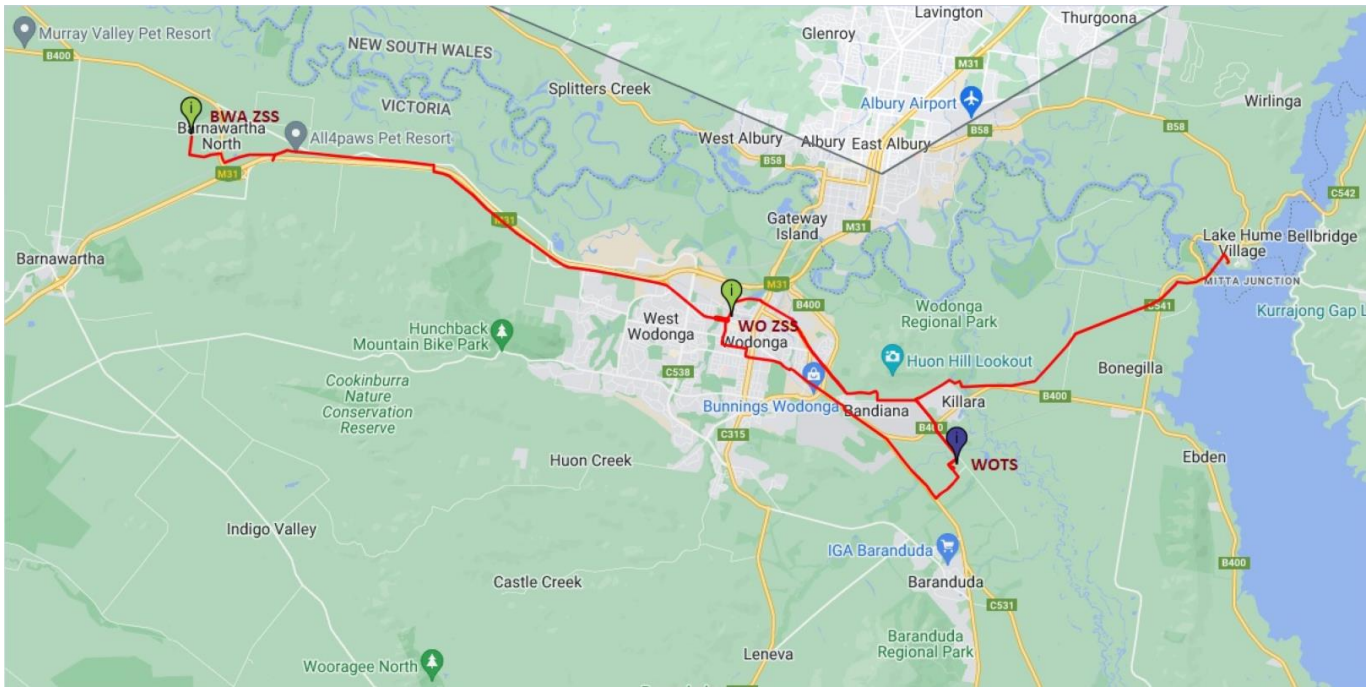

Figure 2: Map showing the Wodonga - Barnawartha sub-transmission network

As shown in the map above, the Barnawartha zone substation (BWA ZSS) is connected to WO ZSS 66 kV bus via a single 66 kV feeder (66 kV feeders are shown in red lines). The length of this feeder is 16.6 km.

The following diagram shows the 66 kV bus connection arrangement of WO ZSS with the 66 kV feeder connection to BWA ZSS (red boxes demonstrate 66 kV circuit breakers). The three WO ZSS transformers are 66/22 kV transformers.

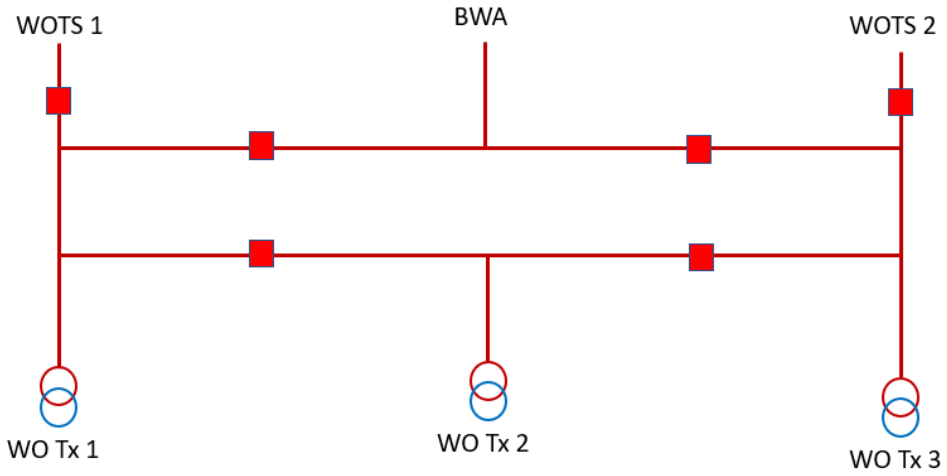

Figure 3: Wodonga Zone Substation 66kV bus arrangement

4. Identified need

4.1. Description

As mentioned above, there are already 60 MW of large-scale embedded generation connected to WOTS. AusNet has received a number of connection inquiries to connect a total of 420 MW of renewable generation to WOTS sub-transmission (66 kV) system. Of this, 370 MW is to connect into BWA ZSS and another 10 MW to WO – BWA 66 kV feeder.

The WO – BWA 66 kV feeder was originally planned to supply the small rural load connected to BWA ZSS. The summer rating of the existing line is limited to 64.02 MVA and the existing line cannot accommodate this additional generation. Further, WOTS would experience a significant reverse power flow with this proposed generation and the existing two transformers are not capable of handling this reverse power flow.

Through preliminary studies AusNet has found that only a portion of this proposed generation can be accommodated by the existing assets, and the output of the connected generation would have to be curtailed during peak generation due to the existing constraints of the network.

The identified need of this RIT-T is to address the existing constraints on the sub-transmission and distribution network in north-eastern Victoria (Wodonga - Barnawartha area) to enable more renewable generation to connect to this part of AusNet's network.

4.2. Assumptions

The identified need is underpinned by a number of assumptions, including the projected growth in renewable generation given the connection inquiries received; the risk of asset failure (determined by the condition of the assets); and the likelihood of the relevant consequences. In addition to these assumptions, further assumptions will be required to quantify the costs and benefits of options to address the identified need. These assumptions are outlined below, noting that our detailed assessment will be provided in the PADR.

4.2.1. Market impact costs

Using market modelling, AusNet will estimate the market impact for each option, which consists of reduced generation cost due to replacing higher cost fossil fuel generation by low-cost renewable generation and reduced carbon emissions. The cost of curtailing exports from renewable generation will be considered in the market impact analysis, which will reflect the estimated change in dispatch costs if these constraints are relieved. We note that the AER has published a methodology[4] that addresses the costs and benefits of increasing hosting capacity for rooftop solar, which has regard to the marginal costs of generation. While our approach to estimating the costs of curtailing grid scale renewable generation differs from this methodology, the principles underpinning both approaches are broadly aligned. Further assumptions made in estimating the market impact will be detailed in the PADR.

4.2.2. Emission reduction costs

Greenhouse gas emissions would be reduced by replacing fossil fuel powered generation with renewable generation. AusNet would quantify the benefits from reductions in carbon emissions using an appropriate cost of carbon when the guidance is published by the AER[5].

4.2.3. Supply risk costs

In calculating the supply risk costs, AusNet estimates the expected unserved energy based on the most recent demand forecasts, and values this expected unserved energy with the latest AER Value of Customer Reliability (VCR)[6]. The VCR value applied is based on the sector values published by the AER and the composition of load, by sector, supplied from WOTS. The resulting estimate of the weighted VCR for affected customers is $48,000/MWh for WOTS 66 kV.

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[4] Customer export curtailment value methodology | Australian Energy Regulator (aer.gov.au)
[5] https://www.aer.gov.au/communication/aer-releases-guidance-on-amended-national-energy-objectives
[6] In dollar terms, the Value of Customer Reliability (VCR) represents a customer's willingness to pay for the reliable supply of electricity. The values produced are used as a proxy, and can be applied for use in revenue regulation, planning, and operational purposes in the National Electricity Market (NEM).

The total supply risk cost is calculated by estimating the impacts of different combinations of relevant forced outages to reliability of supply and weighting them by their probabilities of occurrence.

4.2.4. Safety risk costs

The Electricity Safety Act 1998[7] requires AusNet to design, construct, operate, maintain, and decommission its network to minimise hazards and risks to the safety of any person as far as reasonably practicable or until the costs become disproportionate to the benefits from managing those risks. By implementing this principle for assessing safety risks from asset failures, AusNet uses:

- a value of statistical life[8] to estimate the benefits of reducing the risk of death;
- a value of lost time injury[9]; and
- a disproportionality factor[10].

AusNet's approach, including the use of a disproportionality factor, is consistent with the guidance provided by the AER.

4.2.5. Financial risk costs

In the event of an asset failure, costs will be incurred in replacing the failed assets (and any consequential damage to other assets). The risk of this financial impact may vary for different credible options and, therefore, should be factored into the cost-benefit assessment.

[7] Victorian State Government, Victorian Legislation and Parliamentary Documents, "*Electricity Safety Act 1998,*" available at Electricity Safety Act 1998 (legislation.vic.gov.au)
[8] Department of the Prime Minister and Cabinet, Australian Government, "*Best Practice Regulation Guidance Note: Value of statistical life,*" available at https://www.pmc.gov.au/resource-centre/regulation/best-practice-regulation-guidance-note-value-statistical-life
[9] Safe Work Australia, "The Cost of Work-related Injury and Illness for Australian Employers, Workers and the Community: 2012-13," available at https://www.safeworkaustralia.gov.au/system/files/documents/1702/cost-of-work-related-injury-and-disease-2012-13.docx.pdf
[10] Health and Safety Executive's submission to the1987 Sizewell B Inquiry suggesting that a factor of up to 3 (i.e. costs three times larger than benefits) would apply for risks to workers; for low risks to members of the public a factor of 2, for high risks a factor of 10. The Sizewell B Inquiry was public inquiry conducted between January 1983 and March 1985 into a proposal to construct a nuclear power station in the UK.

5. Potential Credible Options

This section describes the credible options that have been considered to address the identified need, including:

- the technical characteristics of each option;
- the estimated construction timetable and commissioning date; and
- the total indicative capital and operating and maintenance costs.

The purpose of the RIT-T is to identify the credible option for addressing the identified need that maximises the net market benefit. An important aspect of this task is to consider non-network and network options on an equal footing, so that the optimal solution can be identified.

None of the options considered are expected to have an inter-regional impact. Each credible option is discussed below, commencing with the Do Nothing/BAU option.

5.1. Option 0: Do Nothing/BAU

The Do Nothing/BAU option assumes that AusNet would not undertake any investment, outside of the normal operational and maintenance processes. The Do Nothing/BAU (Business as Usual) option establishes the base level of risk (base case) and provides a basis for comparing other credible options.

5.2. Option 1: Commission the WOTS spare transformer and augment the existing WO-BWA 66 kV line with 19/4.75 conductor

This option involves installation and commissioning of the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and augment the existing WO-BWA 66 kV line with 19/4.75 AAC (All Aluminium conductor) conductor to increase the summer rating to 105 MVA. The existing WO-BWA 66 kV line is constructed with 19/3.25 AAC conductor with 64 MVA summer rating. As there will be only one line between WO-BWA, even after the augmentation, this option does not provide a solution to the supply risk due to an unplanned outage of this line (e.g., due to a vehicle colliding with a pole, or tree branches falling onto the line in heavy winds etc).

The construction would commence in August 2024, with project completion expected by December 2026. The estimated capital cost of this option is $35.9 million.

In relation to operation and maintenance (O&M) expenditure, AusNet does not expect this option to have a material impact on future O&M costs i.e., routine maintenance expenditure would be substantially unchanged.

5.3. Option 2: Commission the WOTS spare transformer and augment the existing WO-BWA 66 kV line with 37/3.75 conductor

This option is very similar to option 1 above, the only difference being augmenting the existing WO-BWA 66 kV line with 37/3.75 AAC conductor to increase the summer rating to 118 MVA. Similar to Option 1, as there will be only one line between WO-BWA after the augmentation this option does not provide a solution to the supply risk due to an unplanned outage of the line.

The construction would commence in August 2024, with project completion expected by December 2026. The estimated capital cost of this option is $36.5 million.

In relation to O&M expenditure, AusNet does not expect this option to have a material impact on future O&M costs i.e., routine maintenance expenditure would be substantially unchanged.

5.4. Option 3: Commission the WOTS spare transformer and add a second circuit to the existing WO-BWA 66 kV line with similar conductor

This option is also similar to Option 1 above, the only difference being adding a second circuit to the existing WO-BWA 66 kV line with similar conductor (19/3.25 AAC) to increase the summer rating to 128 MVA (two 64 MVA circuits in parallel). Similar to Option 1 and Option 2, as there will be only one line between WO-BWA after the augmentation, this option does not provide a solution to the supply risk due to an unplanned outage of the line.

The construction would commence in August 2024, with project completion expected by December 2026. The estimated capital cost of this option is $42.4 million.

In relation to O&M expenditure, AusNet does not expect this option to have a material impact on future O&M costs.

5.5. Option 4: Commission the WOTS spare transformer and add a new WO-BWA 66 kV line in parallel with the existing line with a similar conductor

This option includes installation and commissioning of the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS and adding a new line in parallel with the existing WO-BWA 66 kV line with a similar conductor (19/3.25 AAC) to increase the overall summer rating of WO-BWA to 128 MVA. A new easement would be required as this is a new line. Using a higher capacity conductor for the new line will not increase the overall summer rating above 128 MVA, as the rating of the new line would be constrained by the rating of the old line as the two lines would be operating in parallel. Unlike other three options above, Option 4 would provide a solution to the supply risk due to an unplanned outage of a single line, as the probability of losing both lines at the same time is negligibly small.

The construction would commence in August 2024, with project completion expected by December 2026. The estimated capital cost of this option is $41.4 million.

In relation to O&M expenditure, AusNet does not expect this option to have a material impact on future O&M costs.

5.6. Option 5: Commission the WOTS spare transformer and add a new WOTS-BWA 66 kV line with 37/3.75 conductor

Similar to the four options described above, this option includes installation and commissioning of the WOTS spare transformer (330/66/22 kV 75 MVA) as the third in-service transformer at WOTS, the only difference being adding a new 66 kV line between WOTS-BWA with 37/3.75 AAC conductor to increase the overall summer rating to BWA to 182 MVA. A new easement would be required as this is a new line. Similar to option 4, option 5 would provide a solution to the supply risk due to an unplanned outage of a single line to BWA, as the probability of losing both lines at the same time is negligibly small.

The construction would commence in August 2024, with project completion expected by December 2026. The estimated capital cost of this option is $73.2 million.

In relation to O&M expenditure, AusNet does not expect this option to have a material impact on future O&M costs.

5.7. Options considered and not progressed

Minor line rating improvement of the existing WO-BWA line can be obtained through Dynamic Line Raring (DLR) technology which has the capability to monitor ambient temperature, wind condition, line loading and conductor behaviour (sag/shape) and use that information to "calibrate" the line rating in real time. However, the existing line rating improvement through DLR technology is limited and not sufficient to meet the identified need. Therefore, this option has not been progressed.

5.8. Material inter-regional network impact

The proposed augmentations at WOTS and WO-BWA will not change the transmission network configuration and none of the network options considered are likely to have a material inter-regional network impact. A 'material inter-regional network impact' is defined in the NER as:

> "A material impact on another Transmission Network Service Provider's network, which may include (without limitation): (a) the imposition of power transfer constraints within another Transmission Network Service Provider's network; or (b) an adverse impact on the quality of supply in another Transmission Network Service Provider's network."

6. Non-network options

This section outlines:

- The technical characteristics that a non-network option would be required to deliver;
- The estimated maximum deferred augmentation charge that would be available to pay for the non-network service; and
- The information that a non-network proponent should provide to AusNet to explore the potential provision of a non-network service.

6.1. Required technical characteristics of a non-network option

The table below sets out the curtailment reductions that a non-network option placed preferably at Barnawartha connecting to Barnawartha Zone Substation would be required to deliver. The non-network option would mitigate the risks associated with the curtailed renewable generation from existing generators in the Wodonga – Barnawartha area and from new generation connecting into this area due to the constraints between WO – BWA sub-transmission section. The information presented provides an indication of the required operating profile, noting that prospective non-network service providers may not be able to exactly match these requirements.

Table 1: Service requirements for a non-network option

Year (FY)	Total Curtailment Relief (GWh)	Total Hours of Curtailment Relief	Maximum Duration of Curtailment Relief (hours)	Total Amount of Curtailment Relief During Maximum Duration Event (MWh)	Average Daily Hours of Curtailment Relief	Average Daily Curtailment Relief (MWh)
2027	177.22	3122	13	784.95	8.55	485.54
2028	180.56	3172	13	783.74	8.67	493.33
2029	175.42	3092	13	770.6	8.47	480.60
2030	181.69	3180	13	844.47	8.71	497.78
2031	179.56	3152	13	838.28	8.64	491.94
2032	181.95	3202	13	835.99	8.75	497.13
2033	182.99	3219	13	830.81	8.82	501.35
2034	179.95	3187	13	829.19	8.73	493.01

6.2. Power system security, reliability and fault levels

A non-network option must be capable of reliably reducing curtailed generation under a range of conditions and scenarios. The non-network solution will contribute to system security and reliability to the extent that it addresses the risks arising from the identified need. The non-network option is not required to address any existing issues in relation to fault levels.

If the non-network option is an inverter-based generator operating in parallel with AusNet network, the generator must comply with the requirements set out in document SOP 33-05 and other connection requirements which are set out in AusNet Services' embedded generator connections page.

6.3. Guidance on potentially feasible options

The following non-network solutions are likely to be potentially feasible options to address the identified need:

- New embedded energy storage systems or load connections;
- Modifications to existing customer generation to include embedded energy storage systems; and
- Modifications to existing load connections to increase load capacity.

Without limiting the potential for non-network solutions, the following types of non-network options are unlikely to be feasible:

- Renewable generation not coupled with storage or dispatchable generation; and
- Unproven, experimental or undemonstrated technologies.

6.4. Information to be included in non-network solution proposals

Non-network service providers interested in alleviating the network constraints outlined above are advised to begin engagement with AusNet as soon as possible. A detailed proposal including the information listed below should be submitted by the requested date.

Details required include:

- Name, address and contact details of the person making the submission.
- Name, address and contact details of the person responsible for non-network support (if different to above).
- A detailed description of the services to be provided, including:
  - Size and capacity (MW/MVA/MWh).
  - Location(s).
  - Frequency and duration.
  - Type of action or technology proposed, including response / ramp rate information, where applicable.
  - Proposed dispatching arrangement (e.g. telephone, web-based trigger, automated means via RTU).
  - Availability and reliability performance details.
  - Period of notice required to enable dispatch of non-network support (e.g. to allow time for charging of energy storage solutions or market-based limitations).
  - Proposed contract period and staging (if applicable).
  - Proposed timing for delivery (including timeline to plan and implement the proposal).
- High-level electrical layout of the proposed site (if applicable).
- Evidence and track record proving capability and previous experience in implementing and completing projects of the same type as the proposal.

- Preliminary assessment of the proposal's impact on the network.
- Breakdown of the lifecycle costs for providing the service, including:
  - Capital costs (if applicable).
  - Annual operating (i.e. set up and dispatch fees) and maintenance costs.
  - Other costs (e.g. availability, project establishment, etc.).
  - Tariff assumptions.
  - Expected annual payment for providing the non-network solution
- A method outlining measurement and quantification of the agreed service, including integration of the proposed solution with the network.
- A statement outlining that the non-network service provider is prepared to enter into a Network Support Agreement (NSA) (subject to agreeing terms and conditions).
- Letters of support from partner organisations.
- Any special conditions to be included in an NSA.

All proposals must satisfy the requirements of any applicable laws, rules, and the requirements of any relevant regulatory authority, including following the normal network connection processes where applicable. Any network reinforcement costs required to accommodate the non-network solution will typically be borne by the proponent of the non-network solution.

For further details on AusNet's process for engaging and consulting with non-network service providers, and for investigating, developing, assessing and reporting on non-network options as alternatives to network augmentation, please refer to the Non-Network Solutions and Demand Management webpages, which contain the Demand Side Engagement Strategy and other relevant demand management documentation:

https://www.ausnetservices.com.au/Electricity

6.5. Potential payments to non-network proponents

The maximum amount that AusNet would be willing to pay for a non-network solution would depend on the value that it provides in terms of risk reduction.

At this stage, the preferred network option has not yet been determined. As a consequence, the total capital expenditure that could be deferred by engaging a non-network solution and, therefore, an estimate of the annual payment available to a non-network proponent cannot be provided.

The payment for a non-network solution may vary according to availability, capacity, dispatch duration and firmness of the non-network service, and the responses received from other non-network proponents. The actual payment to a non-network proponent will also be subject to negotiation.

AusNet welcomes the submission of non-network option proposals for review of the potential payment amount on a case-by-case basis. For more information or enquiries regarding non-network solutions to address the identified need, please contact rittconsultations@ausnetservices.com.au. In the subject field, please reference 'RIT-T PSCR CE WOTS-BWA'.

7. Economic assessment of the credible options

7.1. Material classes of market benefits

Clause 5.16.4 (b)(6)(iii) of the NER requires the RIT-T proponent to consider whether each credible option provides the classes of market benefits described in clause 5.15A.2(b)(4). To address this requirement, the table below discusses our approach to each of the market benefits listed in that clause for each credible option.

Table 2: Analysis of Market Benefits

Class of Market Benefit	Analysis
(i) changes in fuel consumption arising through different patterns of generation dispatch;	The credible options may affect the costs of dispatch by avoiding network constraints that result in curtailment of renewable generation. Our approach to estimating this market benefit is explained in section 4.2.1.
(ii) changes in voluntary load curtailment;	Any changes in voluntary load curtailment will be valued in accordance with any applicable network support agreements that may be in place.
(iii) changes in involuntary load shedding with the market benefit to be considered using a reasonable forecast of the value of electricity to consumers;	The credible options may reduce involuntary load shedding, by increasing network capacity. Our approach to estimating this market benefit is explained in section 4.2.3.
(iv) changes in costs for parties, other than the RIT-T proponent, due to differences in: *(A) the timing of new plant;* *(B) capital costs; and* *(C) the operating and maintenance costs;*	There is not expected to be any difference between the credible options.
(v) differences in the timing of expenditure;	There is not expected to be any difference between the credible options.
(vi) changes in network losses;	The credible options are not expected to result in material changes to electrical energy losses.
(vii) changes in ancillary services costs	The credible options will not have any impact on ancillary service costs.
(viii) competition benefits	The credible options will not provide any competition benefits.
(ix) any additional option value (where this value has not already been included in the other classes of market benefits) gained or foregone from implementing the credible option with respect to the likely future investment needs of the National Electricity Market;	There will be no impact on the option value in respect of the likely future investment needs of the NEM.
(x) any other class of market benefit determined to be relevant by the AER.	There are no other classes of market benefit that are relevant to the credible options.

8. Next steps

8.1. Request for submissions

AusNet invites written submissions, on the matters set out in this report, from Registered Participants, AEMO, interested parties, non-network providers and those registered on our demand-side engagement register.

All submissions and enquiries should be directed to:

Email: rittconsultations@ausnetservices.com.au

Submissions are due on or before 1 May 2024.

Submissions will be published on AusNet's and AEMO's websites. If you do not wish to have your submission published, please clearly stipulate this at the time of lodging your submission.

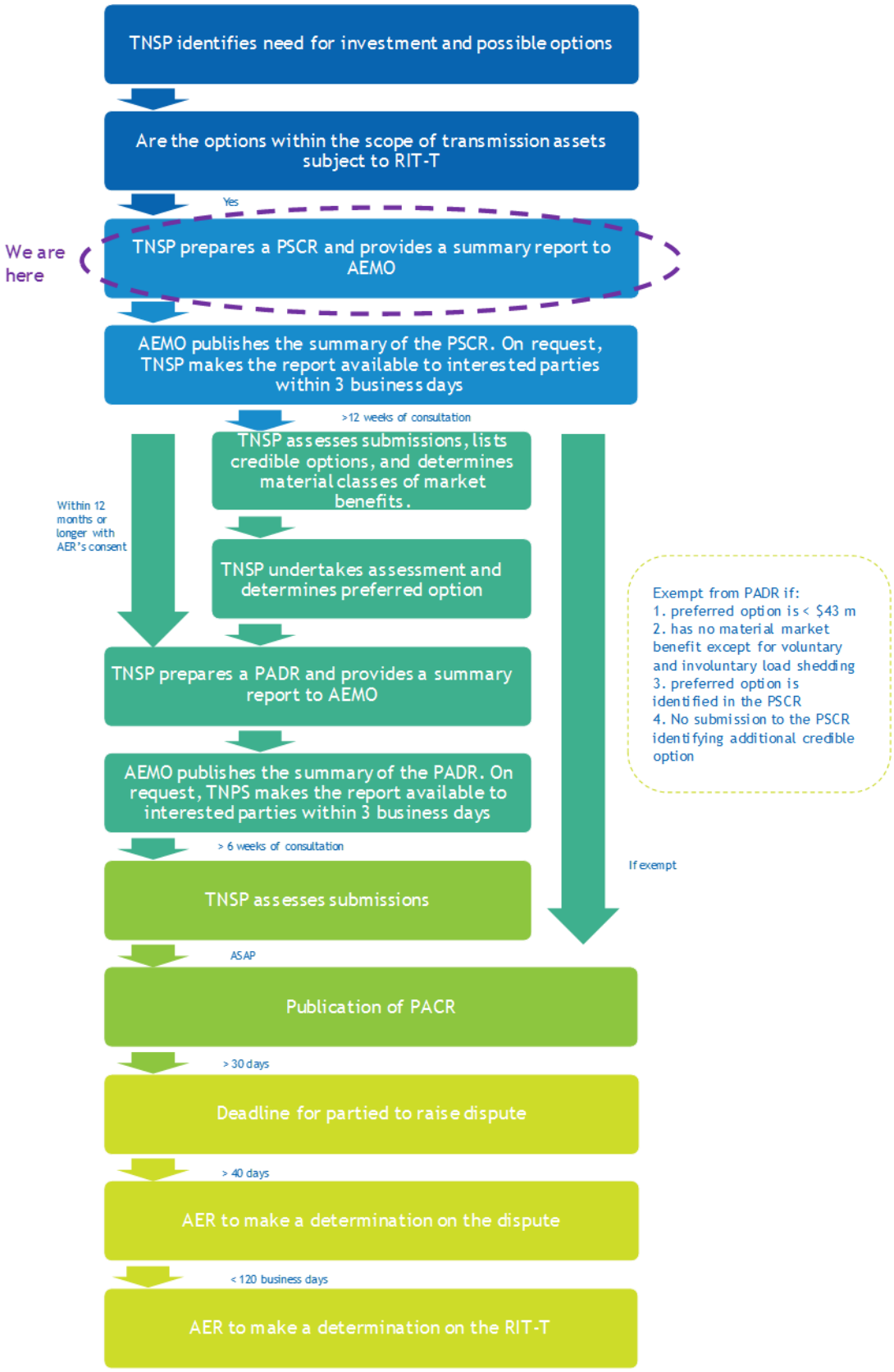
8.2. Next stage of RIT-T process

Following the conclusion of the PSCR report consultation period, AusNet will, having regard to any submissions received on this report, prepare and publish the PADR which will include:

- A summary of, and commentary on, any submissions received.
- A detailed market benefit assessment of the proposed credible options to address the identified need.
- Identification of the proposed preferred option to meet the identified need.

AusNet expects to publish the PADR before the end of May 2024.

Appendix – RIT-T assessment and consultation process



AusNet Services

Level 31
2 Southbank Boulevard
Southbank VIC 3006
T +613 9695 6000
F +613 9695 6666
Locked Bag 14051 Melbourne City Mail Centre Melbourne VIC 8001
www.AusNetservices.com.au

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