OPTIONS EVALUATION REPORT (OER)

Increase capacity of 132 kV busbars at Wagga and Yanco Substations

OER- N2208 revision 2.0

Ellipse project no(s):
TRIM file: [TRIM No]

Project reason: Economic Efficiency - Network developments to achieve market benefits
Project category: Prescribed - Replacement

Approvals

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Change history

Revision	Date	Amendment
0	10/8/2021	Initial Issue
1	15/10/2021	Updated as per Houston Kemp's comments
2	24/12/2021	Updated as per CutlerMerz comments; Revised for minor editorial changes

Executive summary

Several older Transgrid 132/66 kV substations in the Southern region have busbars made of galvanised steel pipe, which differs from Transgrid's current standard of aluminium tube. This older busbar design has a minimum summer day rating of 581 Amps compared to the Transgrid's current minimum standard summer day rating of 2,000 Amps[1].

Two substations in the area that have this older, lower rated busbar are:

1. Yanco 132 kV Bus (all sections); and
2. Wagga 132 132 kV Bus (all sections) and 66kV bus (all sections).

Some 132 kV feeders in the Wagga area have larger conductors and are rated higher than the galvanised steel busbars, and Wagga 132/66 kV Substation now has 120 MVA transformers. Consequently, the older galvanised steel pipe busbars are now the limiting elements in this part of the network.

There is an economic benefits need to upgrade the busbars at each location, which would increase the supply capacity at each location. Therefore, the evaluation of the economic benefits of upgrading the busbars has been undertaken. The evaluation of the options to address the Need has been carried out at each location and busbar level. The summary of the assessment appears in Table 1, with the economic evaluations shown against a "Do Nothing" Base Case as a reference.

Table 1 - Evaluated options

Location/Bus	Option	Description	Direct capital cost ($m)	Network and corporate overheads ($m)	Total capital cost[2] ($m)	Weighted NPV (PV, $m)	Positive NPV
Wagga 132 kV Bus	**Option A1**	Renew underrated 132 kV busbar sections	5.2	1.1	6.3	**185.5**	Yes
Wagga 66 kV Bus	**Option A2**	Renew underrated 66 kV busbar sections	3.6	0.8	4.4	**-3.9**	No
Yanco 132 kV Bus	**Option A3**	Renew 132 kV busbar sections	1.7	0.5	2.1	**-1.8**	No

As Table 1 indicates, Option A1 - Renew underrated 132 kV busbar sections at Wagga 132/66 substation should be undertaken. This option is the technically and commercially feasible option that meets the economic benefits need and delivers positive Net Present Value (NPV).

Options A2 and A3 should not be undertaken as they do not provide positive NPV.

[1] 100mm OD x 4mm thick bright aluminium tube

[2] Total capital cost is the sum of the direct capital cost and network and corporate overheads. Total capital cost is used in this OER for all analysis.

1. Need/opportunity

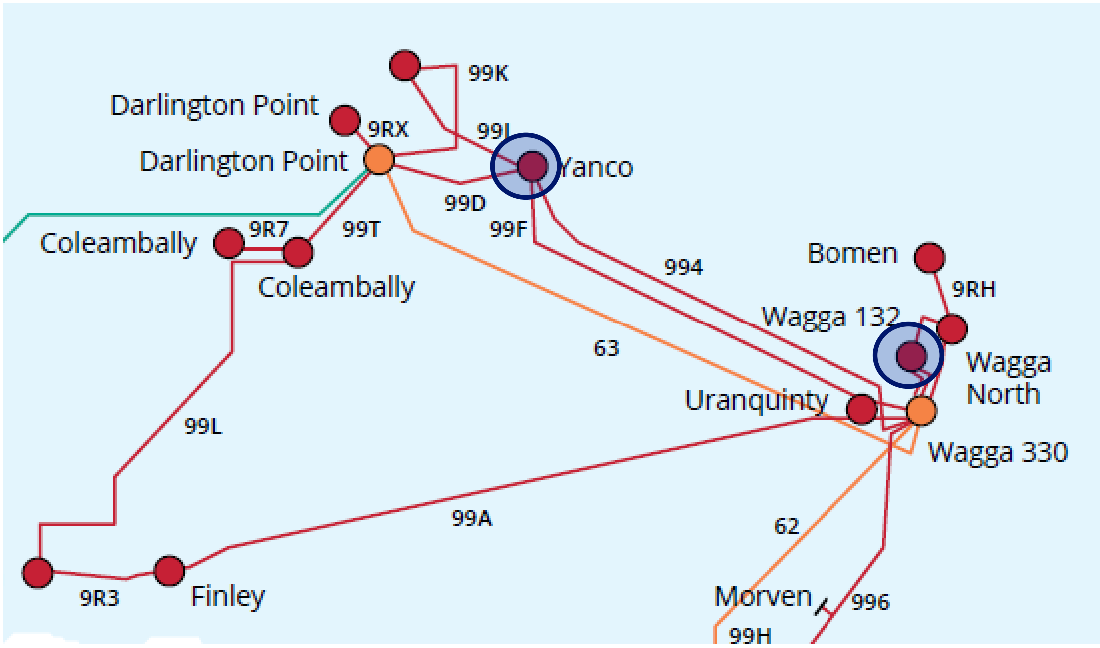
Several older Transgrid 132/66kV substations in the Southern region have busbars of galvanised steel pipe[3], which differs from Transgrid's current standard of aluminium tube[4]. This older busbar design has a minimum summer day rating of 581 Amps, which is similar to the current rating of smaller 132kV line conductors (i.e. 548 Amps for Lemon ACSR lines) and the 66 kV current rating of 60 MVA 132/66 kV transformers (520 Amps). Transgrid's current minimum standard for busbars has a nominal standard summer day rating of 2,000 Amps.

Some 132 kV feeders in the Wagga area have larger conductors and are rated higher than this, and Wagga 132/66 kV Substation has 120 MVA transformers. Consequently, the older galvanised steel pipe busbars are now the limiting elements in this part of the network.

Figure 1 shows the part of the transmission network in Wagga and Darlington Point area. The two substations in the area that have this older, lower rated busbar are:

> Yanco 132 kV Bus (all sections); and
> Wagga 132 132 kV Bus (all sections) and 66kV bus (all sections).

Figure 1: Transmission network in Wagga and Darlington Point area



There is an economic benefits need to upgrade these low-rated 132 kV and 66 kV busbars at Wagga 132/66 kV substation and similarly low-rated 132 kV busbars at Yanco 132/33kV substation. Upgrading the busbar may create market benefits through providing additional supply capacity to meet demand growth, as summarised in Table 2.

[3] 3"O.D. x 7G galvanised steel pipe
[4] 100mm OD x 4mm thick bright aluminium tube

Table 2: Potential constraints identified at Wagga 132 and Yanco

Location	Option	Description of the scenario	System Conditions - Normal (N) or Contingency (N-1)
Wagga 66 kV bus	**Option A2**	High load times with 132/66 kV transformer outage.	N-1
		High renewable generation times with transformer outage.	N-1
Wagga 132 kV bus	**Option A1**	High renewable generation in Temora region and high flows into Wagga via 132 kV lines 9R6, 99X and 99W.	N
Yanco 132 kV bus	**Option A3**	High flows into Yanco via 132 kV line 99D during a single contingency when far west renewable generation is high.	N-1
		Potential system normal overloads with emerging solar farms between Yanco and Wagga.	N

The forecast summer peak demand at Wagga is consistently 78 MVA (682 Amps at 66 kV), as shown in the 2021 TAPR[5]. An outage of a 132/66 kV transformer on a summer day at or near times of peak load may result in the current flow in the 66 kV busbar exceeding its rating (i.e. 581 Amps, or 66 MVA at 66 kV) at Wagga. This is also expected to occur at or near times of high renewable generation in the area. The likelihood of the occurrence of overloading and the subsequent risk of unserved energy depend on the demand forecast, the renewable generation available and the transformer failure rate.

The renewable generation on the 220 kV network to the west of Darlington Point (220 MW Limondale 1 Solar Farm and 200 MW Sunraysia Solar Farm) and on the 132 kV network around Darlington Point (275 MW Darlington Point Solar Farm, 150 MW Coleambally Solar Farm, 133 MW Finley Solar Farm, 85 MW Hillston Solar Farm) is expected to result in 132 kV Line 99D (Darlington Point to Yanco) being heavily loaded following a single contingency. Under these conditions, power flow on the 132 kV bus at Yanco could exceed its rating. Further, due the limited rating of this busbar, system normal thermal limitations are expected to emerge in the near future with development of renewable generation in the area between Griffith, Yanco and Wagga (particularly the establishment of the proposed Avonlie Solar Farm, Yanco Solar Farm and Riverina Solar Farm).

2. Related needs/opportunities

- 2166 – South Western Renewable Generation Network Development
- N2216 - Increase capacity between Yass and Wagga area
- N2205 – Increase Capacity for Generation in Wagga North Area

[5] Transgrid Transmission Annual Planning Report 2021

3. Options

3.1 Base case

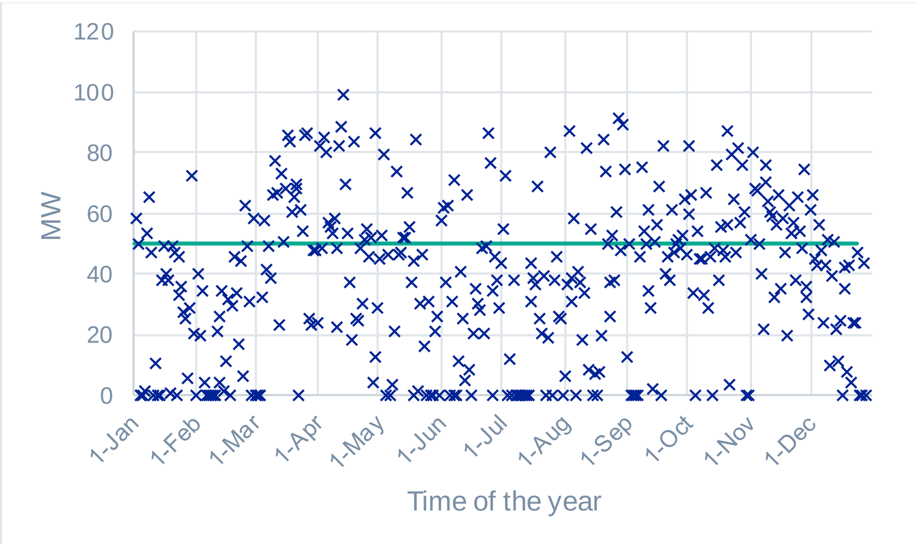
The base case is to not facilitate an increase in the capacity of the busbars at Wagga and Yanco Substations.

Construction details of the steel busbar sections at these locations and their respective ratings advice show that the busbars are limiting factors in the capacity of the network in which they are connected. Consequently, there will be times when load and/or generation will need to be constrained to ensure the loading of the listed busbars does not exceed their designated current ratings, which are below the ratings of the transmission assets connected to them at Wagga and Yanco.

For an example Figure 2 illustrates the days where renewable generation in Wagga area required to be constrained off throughout a year to prevent overloading in Wagga 132 kV busbar. The modelling suggests that for approximately 118 days of the year it will be necessary to constrain at least 50 MW of renewable generation and Figure 3 shows the total generation to be constrained off on yearly basis in order to ensure the Wagga 132 kV busbar is maintained below its normal rating.

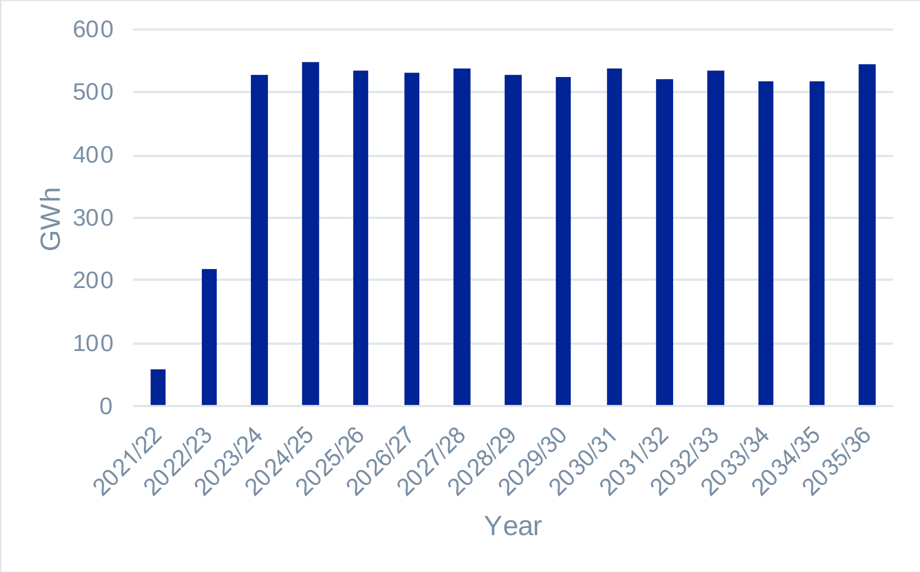
Based on a fuel cost of $32.04/MWh[6] for the conventional thermal based generation and at a discount rate of 4.8%, the Net Present Value of the total opportunity cost , that is the of economic benefits lost due to the constrained energy over a 25 years period is estimated to be $235 million.

Figure 2 - Renewable generation to be constrained throughout a year to prevent overloading in WG2 132kV busbars



[6] Fuel Cost used for the market benefit calculation is based on the average Short Run Marginal Cost (SRMC) of the NSW Coal -fired Generators excluding Liddell Reference: AEMO's Electricity Statement of Opportunities ESOO 2020.

Figure 3 – Renewable generation to be constrained to prevent WG2 132kV busbar overload



3.2 Options evaluated

Option A1 — Renew underrated 132 kV busbar sections at Wagga 132 Substation

This option entails renewing in-situ and on a piece-meal basis under-rated steel sections of 132 kV busbars or associated 132 kV busbar connection and circuit termination equipment as required at Wagga 132 substation in accordance with current Transgrid standards for these assets. Any busbar sections proposed to be replaced are to be upgraded to current modern standard aluminium tube design.

It is expected that works under this option can be accommodated within existing Transgrid owned property boundaries and that the acquisition of additional property will not be required. It is also considered that this option will not likely require any external agreements and can utilise Transgrid standard designs. Further, it is not anticipated that the project will have a significant impact on the environment in accordance with Section 111 of the EP&A Act[7]. This will be reviewed as the project develops but at this stage it is anticipated that an assessment in the form of a SER[8] will be required.

The expected commissioning date for this option is 2026/27.The total capital cost of upgrading the 132 kV busbar sections at Wagga 132 Substation is provided in Table 3. The costs include an uncertainty of ± 25% and exclude capitalised interest.

Table 3 - Option A1 capital cost (non-escalated) for each busbar [$million]

	Total Project Base Cost	2022/23	2023/24	2024/25	2025/26	2026/27
WG2[9] 132 kV Busbar	6.3	0.3	0.5	2.4	2.9	0.2

[7] Environmental Planning and Assessment Act 1979

[8] Supplementary Environmental Report

[9] Wagga 132/66kV Substation

It is estimated that a total amount up to $0.6 million is required to progress the project from DG1 to DG2 and this cost is included in the costs provided in Table 3 above. This is to cover activities such as site visits, development of concept design, and commencement of project approvals and early procurement of long lead-time items.

This project is expected to be completed in an estimated 53 months following the approval of DG1[10].

Option A2 – Renew 66 kV busbar sections at Wagga 132 Substation

This option entails renewing in-situ and on a piece-meal basis under-rated steel sections of 66 kV busbars or associated 66 kV busbar connections and circuit termination equipment as required at Wagga 132 Substation in accordance with current Transgrid standards for these assets. Any busbar sections proposed to be replaced are to be upgraded to current modern standard aluminium tube design.

This option would not require extensions of the substation and it is not anticipated that the project will have a significant impact on the environment in accordance with Section 111 of the EP&A Act[11]. This will be reviewed as the project develops but at this stage it is anticipated that an assessment in the form of a SER[12] will be required.

The expected commissioning date for this option is 2026/27. The total capital cost of upgrading the 66 kV busbar sections at Wagga 132 Substation is provided in Table 4. The costs include an uncertainty of ± 25% and exclude capitalised interest.

Table 4 – Option A2 expected expenditure (estimated cost $m 2020/21)

Location	Total Project Base Cost	2022/23	2023/24	2024/25	2025/26	2026/27
WG2[13] - 66 kV Busbar	4.4	0.2	0.3	1.7	2.0	0.2

It is estimated that a total amount up to $0.4 million is required to progress the project from DG1 to DG2 and this is included in the costs provided in Table 4 above. This is to cover activities such as site visits, development of concept design, and commencement of project approvals and early procurement of long lead-time items.

This project is expected to be completed in an estimated 53 months following the approval of DG1[14].

Option A3 – Renew 132 kV busbar sections at Yanco Substation

This option involves renewing in-situ and on a piece-meal basis under-rated steel sections of 132 kV busbars or associated 132 kV busbar connections and circuit termination equipment as required at Yanco Substation in accordance with current Transgrid standards for these assets. Any busbar sections proposed to be replaced are to be upgraded to current modern standard aluminium tube design.

This option would not require extensions of the substation and it is not anticipated that the project will have a significant impact on the environment in accordance with Section 111 of the EP&A Act[15]. This will be reviewed as the project develops but at this stage it is anticipated that an assessment in the form of a SER[16] will be required.

[10] As per the project program which covers all 3 components (i.e WG2 132kV, WG2 66kV and YA2 132kV busbars). The project duration may vary depending on the final scope of works under the preferred option.

[11] Environmental Planning and Assessment Act 1979

[12] Supplementary Environmental Report

[13] Wagga 132/66kV substation

[14] As per the project program which covers all 3 components (i.e WG2 132kV, WG2 66kV and YA2 132kV busbars). The project duration may vary depending on the final scope of works under the preferred option.

[15] Environmental Planning and Assessment Act 1979

[16] Supplementary Environmental Report

The expected commissioning date for this option is 2026/27. The total capital cost of upgrading the 66 kV busbar sections at Yanco Substation is provided in Table 4. The costs include an uncertainty of ± 25% and exclude capitalised interest.

Table 5 – Option A3 expected expenditure (estimated cost $m 2020/21)

Location	Total Project Base Cost	2022/23	2023/24	2024/25	2025/26	2026/27
YA2[17] 132 kV Busbar	2.2	0.1	0.2	0.8	1.0	0.1

It is estimated that a total amount up to $0.2 million is required to progress the project from DG1 to DG2 and this is included in the costs provided in Table 5 above. This is to cover activities such as site visits, development of concept design, and commencement of project approvals and early procurement of long lead-time items.

This project is expected to be completed in an estimated 53 months following the approval of DG1[18].

3.3 Options considered and not progressed

The options considered but not progressed are listed in Table 6, together with the explanation of reasons for them not progressing.

Table 6 - Options considered but not progressed

Option	Reason for not progressing
Option B – Replacement with adjacent busbars	This option entails replacing underrated steel sections with new busbars or bus-sections adjacent to the existing busbars but within the existing site. Sections proposed to be replaced are to be upgraded to current modern standard aluminium tube design. A desktop review has been undertaken by HV design and this has confirmed there is insufficient clearance on site to facilitate the construction of new busbar adjacent to the existing busbar within the existing substation. Therefore, this option is not technically feasible.
Option C – Alternative engineering solutions	This option entails investigating and providing alternative engineering solutions to address the present ratings limitations, including the construction of a complete new modern standard busbar on an adjacent site if practicable, with a new busbar based on the current modern standard aluminium tube design. A workshop was held between Project Development and HV Design to identify feasible engineering alternatives to uprating the busbars that have not already been considered under options A and B. No commercially or technically feasible alternative engineering solutions have been identified.

[17] Yanco 132/33 kV substation

[18] As per the project program which covers all 3 components (i.e WG2 132 kV, WG2 66 kV and YA2 132 kV busbars). The project duration may vary depending on the final scope of works under the preferred option.

4. Evaluation

4.1 Commercial evaluation methodology

The commercial evaluation undertaken for this project includes three scenarios that reflect a central set of assumptions based on current information that is most likely to eventuate (central scenario), a set of assumptions that give rise to a lower bound for net benefits (lower bound scenario), and a set of assumptions that give rise to an upper bound on benefits (higher bound scenario).

Assumptions for each scenario are set out in Table 7 below.

Table 7 – Assumptions used in the scenarios

Parameter	Central scenario	Lower bound scenario	Higher bound scenario
Discount rate	4.8%	7.37%	2.23%
Demand forecast	POE50	POE90	POE10
Fuel Cost[19]	100%	70%	130%
Capital cost	100%	125%	75%
Operating expenditure	100%	125%	75%
VCR	AER Latest VCR (escalated) 100%	70%	130%
Scenario weighting	**50%**	**25%**	**25%**

Since the central scenario represents the most likely scenario to occur, it has been weighted it at 50 per cent. The other two scenarios reflect extreme combinations of assumptions designed to stress test the results. Accordingly, these scenarios are weighted at 25 per cent each.

The parameters used in this commercial evaluation are listed in the Table 8.

Table 8 - Parameters used in the commercial evaluation

Parameter	Parameter Description	Value used for this evaluation
Discount year	Year that dollar values are discounted to	FY21
Base year	The year that dollar value outputs are expressed in real terms	FY21 dollars
Period of analysis	Number of years included in economic analysis with remaining capital value included as terminal value at the end of the analysis period.	25 years

The capex figures in this OER do not include any real cost escalation.

[19] Fuel Cost used for the market benefit calculation is based on the average Short Run Marginal Cost (SRMC) of the NSW Coal-fired Generators excluding Liddell Reference: AEMO's Electricity Statement of Opportunities ESOO 2020.

4.2 Commercial evaluation results

The commercial evaluation of the technically feasible options is set out in Table 9. Further details can be found in Appendix A.

Table 9 – Commercial evaluation (PV, $ million)

Option	Capital Cost PV	OPEX Cost PV	Central scenario NPV	Lower bound scenario NPV	Higher bound scenario NPV	Weighted NPV	Positive NPV
Option A1	4.3	1.3	171.1	84.7	315.2	185.5	Yes
Option A2	3.0	0.9	-3.9	-4.7	-2.9	-3.9	No
Option A3	1.5	0.5	-1.9	-2.3	-1.5	-1.9	No

4.3 Preferred option

Based on the commercial evaluation presented in this report, it is recommended that Option A1 be undertaken. As evident from Table 9, Option A1 is the only technically feasible option that meets the requirements of the need with a positive NPV. It is recommended that Options A2 and A3 are not to be undertaken, as they do not provide positive NPV. Further discussion of each individual option can be found below.

4.3.1 Option A1 - Wagga 132 (WG2) 132kV busbars

Option A1 has a positive NPV due to the significant market benefits projected following the completion of the project.

Figure 4 illustrates the reduction of opportunity cost[20] caused by implementing Option A hence upgrading the low rated 132 kV busbars at Wagga 132/66 kV substation. In Figure 4, the opportunity cost associated with Option A1 (shown as the green bars in Figure 4) refers to the PV of the cost of the generation to be constrained until the completion of the busbar replacement at Wagga 132.

The preferred option is Option A1. Under this option, the following investments will be undertaken:

> Renew underrated 132 kV sections at WG2 (Wagga 132/66 kV substation).

The scope of the works in the preferred option includes:

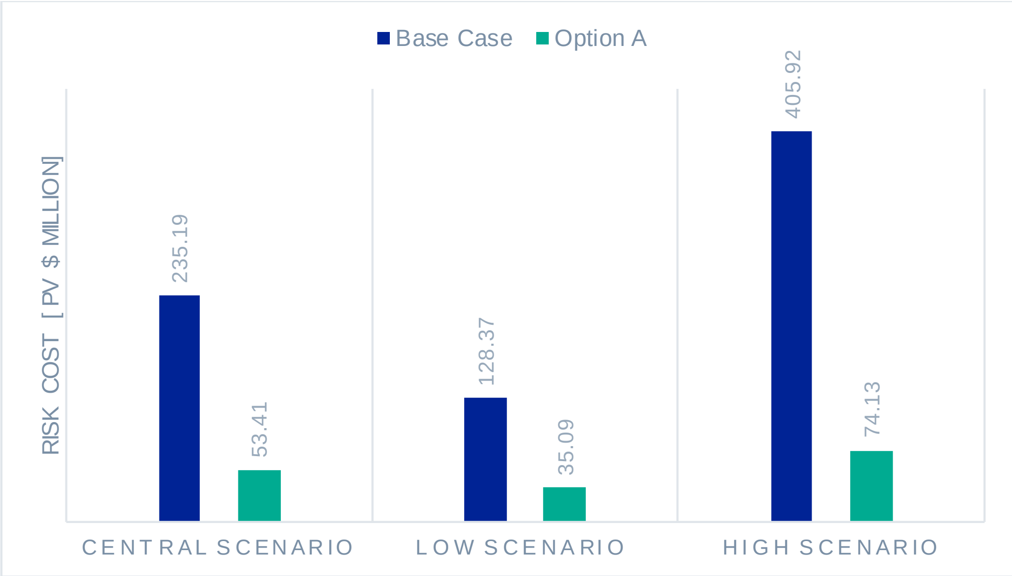
1. Install 20 off sets of 3 busbar post insulator supports with adaptor plates below the existing busbar.
2. Remove and dispose of the existing busbar in sections as per the staging.
3. Install 25 off single busbar post insulator supports for under slung flexible conductors.
4. Install 21 off sections of ~10m long 3-phase rigid aluminium busbar – high busbar.
5. Install 16 short sections of 3 phase flexible busbar (assumed to be triple olive) joining the rigid sections of high busbar.
6. Install 25 sections of ~5m long 3 phase flexible connections from the rigid high busbar to the bay disconnectors.

Therefore, it is recommended that Option A1 be undertaken.

The expected commissioning date for this option is 2026/27.

[20] The Risk Cost estimated based on the market impact - calculated by fuel cost saving from the dispatch of renewables generation.

Figure 4- PV of the Opportunity Cost of WG2 132kV busbars



4.3.2 Option A2 - Wagga 132 (WG2) 66kV busbars

Option A2 does not provide a positive NPV. With a flat load forecast and a very low probability of transformer failure at Wagga 132 BSP, there would not be significant unserved energy to yield net benefits from the investment proposed under Option A2.

Therefore, it is not recommended no capital investment is undertaken to upgrade the 66 kV busbar sections at Wagga 132.

4.3.3 Option A3 - Yanco (YA2) 132kV busbars

Option A3 does not provide positive NPV. The commercial assessment suggest that the projected market benefits at YA2 are inadequate to yield positive net benefits at Yanco in any of the scenarios considered.

The planned SA/NSW interconnector has a 330 kV double circuit to be built between Buronga and Dinawan (a new 330 kV switching station located in South of Darlington Point) and the estimated project completion time is Year 2024. Upon completion of the SA/NSW interconnector, there will be reduced power inflows from the far west NSW towards Darlington Point via Line X5, hence Yanco 132 kV busbars will not get overloaded during high renewable generation times. As such the existing thermal constraint at Yanco 132kV busbar will be removed and the existing busbars are deemed adequate to cope the forecast loading levels.

Figure 5 illustrates the opportunity cost associated with the market benefits will not be reduced by implementing the Option A3. Therefore, it is recommended that no capital investment is undertaken to upgrade the 132 kV busbars at Yanco.

Figure 5 - PV of the Opportunity Cost of Yanco 132kV busbars

Capital and Operating Expenditure

The preferred option (Option A1) requires capital expenditure of $6.3m. An operating expenditure of 2% of the capital expenditure is estimated for the assessment.

Regulatory Investment Test

As the total estimated cost of the project is above the Regulatory Investment Test (RIT-T) threshold of $6 million, a RIT-T will be required.

5. Optimal Timing

The test for optimal timing of the Option A1 has been undertaken for the Wagga 132 (WG2) 132kV busbar sections. The approach taken is to identify the optimal commissioning year for the preferred option where net cost is minimised while remaining compliant with all regulatory obligations. The commencement year is determined based on the required project disbursement to the meet the commissioning year based on the OFS. Table 10 below summarises the results from the optimal timing analysis.

Table 10 – Optimal timing analysis

Location/Busbar	Optimal Commission year	Commissioning year annual benefit ($m)	Annualised Cost ($m)
Wagga 132 (WG2) 132 kV	2026/27	16.6	0.36

Based on the optimal timing as provided in Table 1, the project is expected to commence in Year 2022/23.

6. Recommendation

The final preferred option will be determined through the RIT-T process based on detailed network analysis, market modelling, technical and economic feasibility. However, based on the option evaluations in this report, the preferred network option is:

Option A1 – Renew underrated 132kV busbar sections at Wagga 132/66 kV substation.

Option A1 is the technically and commercially feasible option that meets the economic benefits need by providing positive NPV. Implementation of Option A1 would deliver economic benefits to the NEM by dispatching low cost renewable generation in the Wagga area and replacing equivalent amount of conventional thermal based generation.

It is therefore recommended that the project be approved to proceed to a RIT-T assessment, with a view to the preferred option being implemented by 2026/27.

It is expected that this project would incur a total capital cost of approximately $6.28 million in P50 non-escalated 2020/21 dollars.

This option requires up to $0.6 million of capex to progress the project from DG to DG2 and this cost is included in the total capital cost of $6.3 million.

Appendix A – Option Summaries

Table 11 – Option A1 - Wagga 132 (WG2) 132 kV Busbars

Project Description	**Increase capacity of 132 kV busbars at Wagga and Yanco Substations**		
Option Description	Option A1 – Renew underrated 132 kV busbar sections at Wagga 132 kV Substation		
Project Summary			
Option Rank	1	Investment Assessment Period	25
Asset Life	40 years	NPV Year	2021
Economic Evaluation			
NPV @ Central Benefit Scenario (PV, $m)	171.1	Annualised CAPEX ($m)	0.4
NPV @ Lower Bound Scenario (PV, $m)	84.7	Network Safety Risk Reduction ($m)	N/A
NPV @ Higher Bound Scenario (PV, $m)	315.2	ALARP	N/A
NPV Weighted (PV, $m)	185.5	Optimal Timing	2026/27
Cost			
Direct Capex ($m)	5.2	Network and Corporate Overheads ($m)	1.1
Total Capex ($m)	6.3	Cost Capex (PV,$m)	4.3
Terminal Value ($m)	3.1	Terminal Value (PV,$m)	1.1

Table 12 - Option A2 - Wagga 132 (WG2) 66kV Busbars

Project Description	**Increase capacity of 132 kV busbars at Wagga and Yanco Substations**		
Option Description	Option A2 – Renew underrated 66kV busbar sections at Wagga 132 Substation		
Project Summary			
Option Rank	Not ranked	Investment Assessment Period	25
Asset Life	40 years	NPV Year	2021
Economic Evaluation			
NPV @ Central Benefit Scenario (PV, $m)	-3.9	Annualised CAPEX ($m)	0.2
NPV @ Lower Bound Scenario (PV, $m)	-4.7	Network Safety Risk Reduction ($m)	N/A
NPV @ Higher Bound Scenario (PV, $m)	-2.9	ALARP	N/A
NPV Weighted (PV, $m)	-3.9	Optimal Timing	2026/27
Cost			
Direct Capex ($m)	3.6	Network and Corporate Overheads ($m)	0.8
Total Capex ($m)	4.4	Cost Capex (PV,$m)	3.0
Terminal Value ($m)	2.2	Terminal Value (PV,$m)	0.7

Table 13 - Option A3 – Yanco (YA2) 132 kV Busbars

Project Description	**Increase capacity of 132 kV busbars at Wagga and Yanco Substations**		
Option Description	Option A3 – Renew underrated 132 kV busbar sections at Yanco Substation		
Project Summary			
Option Rank	1	Investment Assessment Period	25
Asset Life	40 years	NPV Year	2021
Economic Evaluation			
NPV @ Central Benefit Scenario (PV, $m)	-1.9	Annualised CAPEX ($m)	0.1
NPV @ Lower Bound Scenario (PV, $m)	-2.3	Network Safety Risk Reduction ($m)	N/A
NPV @ Higher Bound Scenario (PV, $m)	-1.5	ALARP	N/A
NPV Weighted (PV, $m)	-1.9	Optimal Timing	2026/27
Cost			
Direct Capex ($m)	1.7	Network and Corporate Overheads ($m)	0.5
Total Capex ($m)	2.2	Cost Capex (PV,$m)	1.5
Terminal Value ($m)	1.1	Terminal Value (PV,$m)	0.3