

TD8033 Sydenham Terminal Station GIS Replacement

TD8033 Sydenham Terminal Station GIS Replacement Business Case (BC)



Portfolio Business Line:	Work Category:	Work Code / Name:
Transmission % Split: Elect Dist: 0% Gas: 0% Trans: 100%	Replacement	2002 TCAPEX Station Rebuilds
Project Start date:	Commissioning Readiness Date:	Project Completion Date:
26/06/2020	30/09/2025	31/12/2025
Business case purpose and overview		
This business case seeks approval to invest \$91.3M CAPEX (in nominal terms) at Sydenham Terminal Station (SYTS) by March 2026. The investment is to replace existing 500 kV gas insulated switchgear (GIS) that has been assessed to be in poor condition with a high failure risk. It is to be replaced with 500 kV air insulated switchgear (AIS). The investment timing is supported by an economic cost benefit analysis and the potential efficiency gain of integrating the asset replacement and the planned Western Victoria Transmission Network Project (WVTNP). The RIT-T has been completed and no submissions have been received. No non-network options have been identified as feasible alternatives to the proposed asset replacement. It is expected that the entire forecast capex for the SYTS project will be funded from the FY23 to FY27 TRR Capex Allowance. The project has been included in the AER draft decision and it is expected that the AER final decision will be made between December 2021 and March 2022 Network support payments estimated at \$2.4M may be required for planned 500 kV circuit outages. The cost for network support will be treated as a cost pass through with no financial impact on the business. Approval is also sought for \$290K relating to existing assets to be written off.		
Why is this project required? What's the value that this business will deliver?		
This project is required as the condition of the 500kV GIS has been assessed as poor with increased risk of asset failure. Asset failure at this site will have significant impact on the transmission network and National Energy Market as SYTS is part of the main Victorian 500 kV transmission backbone. The main benefit that this project will deliver is to avoid inefficient National Electricity Market (NEM) generation dispatch resulting from asset failures at SYTS. This project will deliver value to the business across the next 45 years as it will significantly mitigate the current business risk of asset failures by replacing all existing equipment. The asset management strategy for the 500 kV GIS at SYTS is to replace rather than refurbish as this technology is no longer supported by the supplier, we have limited spares and previous refurbishment did not deliver the desired results. The GIS at SYTS has reached the end of its technical life and there is no alternative that replacement to ensure continued reliable transmission services from this important 500 kV switching station. The business will also gain value by delivering this project with the consideration of the WVTNP requirements. It is important that we commence this project in 2022 (calendar year) to remove the asset failure risk and to optimise integration efficiencies between the asset replacement project and the WVTNP.		
Is this project part of the 5 year Reg Reset submission?	☒ Yes / ☐ No If Yes please select: ☐ EDPR / ☒ TRR / ☐ GAAR Reset Category: Tx - Switchgear Reset Amount: \$84.6M (nominal) excluding finance charges.	
Is this budgeted in the current Portfolio FY Plan?	☒ Yes / ☐ No <<If not, please provide details about the source of funding>>	
Incremental change in Opex	Avoided O&M cost is estimated at \$76K	

Project Expenditure Forecast

Project Expenditure for approval (nominal)	First 5 years					Lifecycle Total
	2022	2023	2024	2025	2026	
Direct Capital expenditure	0.8	28.4	29.3	16.2	1.2	75.8
Overheads	0.0	1.1	1.2	0.7	0.0	3.1
Capitalised Finance Charges	0.0	0.7	2.2	3.5	4.1	10.6
Project Delivery Budget (SAP Capex budget)	0.8	30.2	32.7	20.3	5.3	89.4
Management Reserve	-	-	-	-	1.9	1.9
Total CAPEX for Approval (incl risk, CFCs & OHs)	0.8	30.2	32.7	20.3	7.2	91.3
Operating Expenditure for approval (Project Opex)	-	-	-	-	-	-
Written down value of assets retired/sold	-	-	-	0.3	-	0.3
Total Estimated expenditure for approval (nominal)	0.8	30.2	32.7	20.6	7.2	91.6

Analysis of investment options

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Analysis of investment options (\$m - Present Value)	Capex	Opex	Total Financial Costs	Potential Costs	Other Economic Costs & (Benefits)	Total PV Cost
BAU	-	1.8	1.8	-	207.9	209.7
Option 1	73.6	1.8	75.5	-	16.8	92.2
Option 2	117.5	1.8	119.3	-	16.8	136.1

Options considered		- BAU: - Option 1: Replace with AIS (Recommended) - Option 2: Replace with GIS	
Preferred option		Replace with air insulated switchgear (AIS) is the preferred option as it has the highest net benefits and is also preferred from an asset management and operational perspective.	
Preferred option financial benefits		Total value	Overview
		\$0	The project will not deliver a material reduction in business operating and maintenance cost.
Non Financial benefits		Reduction in market impact cost and reactive asset replacement cost	
Key implementation/delivery risks		- Human error incident that impacts the transmission system - Availability of planned outages impacting project delivery - Interdependency with the WVTNP - Local government planning approvals	
Strategic Fit	Growth	☐ Pursue growth in infrastructure capitalising on the energy transition ☐ Selectively pursue opportunities in energy services	
	Customer Centricity	☒ Improve customer experience and enhance network reliability ☐ Invest in communities and enable sustainable choices	
	Operational Excellence	☒ Optimise asset management ☐ Modernise field operations	
	Culture and Capability	☐ Continue to improve asset mgmt and systems and process simplification ☐ Strengthen Risk & Governance frameworks ☐ Invest in data and digital capabilities, cybersecurity and tech. infrastructure	
Is this initiative part of a program of work?		☐ Yes / ☒ No <<If yes please complete program information section below>>	
Project Sponsor		Project Initiator & Dept.	Prepared by:
[C.I.C], Transmission Network Planning		[C.I.C], Transmission Network Planning	[C.I.C], Transmission Network Planning
			Date BC submitted:
			25/10/2021

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Business Case e-sign-off

Project # / Title / Version	TD8033 Sydenham Terminal Station GIS Replacement Business Case			
Name	Title	Signature	Date Approved	Comments
ENDORSEMENTS				
[C.I.C]	GM Network Strategy and Planning	Via Email	11/11/21	
[C.I.C]	Finance GM	Via Email	11/11/21	
DoA APPROVALS				
[C.I.C]	EGM Network Management	Via Investment Committee	12/11/21	
[C.I.C]	CFO/IC Chair	Via Docusign	14/11/21	
[C.I.C]	MD/Board	Via Docusign	15/11/21	

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1. PROJECT BACKGROUND

SYTS is owned and operated by AusNet Services and is located northwest of Melbourne's CBD. It is part of the main 500 kV transmission network, which provides major transmission network services in Victoria. The 500 kV transmission backbone runs from east to west across the state and connects generation in the Latrobe Valley and western parts of Victoria with the major load center in Melbourne. It also forms an interconnector with South Australia at Heywood Terminal Station (HYTS) as shown in Figure 1.



Figure 1 - 500 kV Transmission Backbone

SYTS serves as a 500 kV switching station located inside the Melbourne metropolitan area as shown in Figure 2.

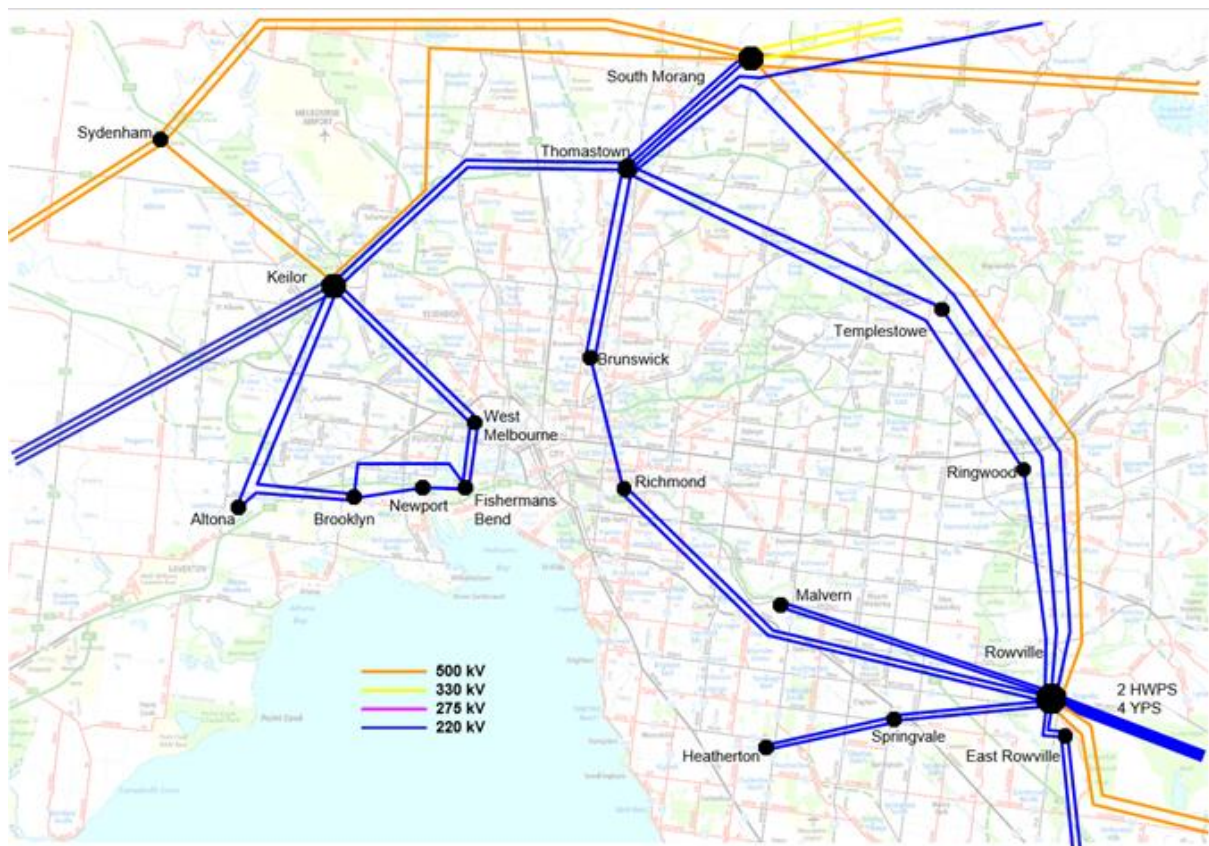


Figure 2 - Transmission network connected at SYTS

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1.1 Asset condition

The GIS, which is 41 years old is in a poor condition despite a major refurbishment that has been undertaken around six years ago. The GIS is no longer supported by the original equipment manufacturer (Merlin Gerin) and AusNet Services has only a limited number of spares to repair asset failures. The mean time to restore supply following an asset failure is expected to be significant, especially in the event of multiple failures.

Replacement of only parts of the SYTS GIS is not technically feasible as the existing GIS is no longer manufactured and present major interface issues with modern GIS. Whilst air insulated switchgear allows for component replacement (i.e. only one circuit breaker) from a different supplier; the same is not true for GIS. The only feasible options are to replace the entire GIS with either GIS (more costly) or air insulated switchgear.

The risk assessment for this business case considered the condition (poor to very poor) and expected failure rates for the installed GIS at SYTS.

1.2 Rationale

SYTS is part of the main Victorian 500 kV transmission network, which provides major transmission network services in Victoria. AusNet Services expects that the services that the terminal station provides will continue to be required given the transmission network developments that are foreshadowed in AEMO's Integrated System Plan¹, which also includes connecting two more 500 kV lines from North Ballarat Terminal Station at SYTS by September 2024.

1.2.1 Asset Failure Risk

Without remedial action, other than ongoing maintenance practice (business-as-usual), the GIS is expected to deteriorate further and more rapidly. This will increase the probability of asset failure, resulting in a higher likelihood of an impact on users of the transmission network, environmental risks, collateral damage risks, and the risk of increased costs resulting from the need for emergency asset replacements and reactive repairs. Therefore, the 'identified need' this business case intends to address is to maintain reliable transmission network services at SYTS and to mitigate risks from asset failures. The main benefit that this project will deliver is to avoid inefficient National Electricity Market (NEM) generation dispatch resulting from asset failures at SYTS.

AusNet Services calculated the present value of the baseline risk cost to be more than \$155 million over the forty-five-year period from 2021/2022. The key risk costs are shown in Figure 3 with the largest component of the baseline risk being reactive asset replacement and the market impact from a potential asset failure.

¹ AEMO, Integrated System Plan for the National Electricity Market

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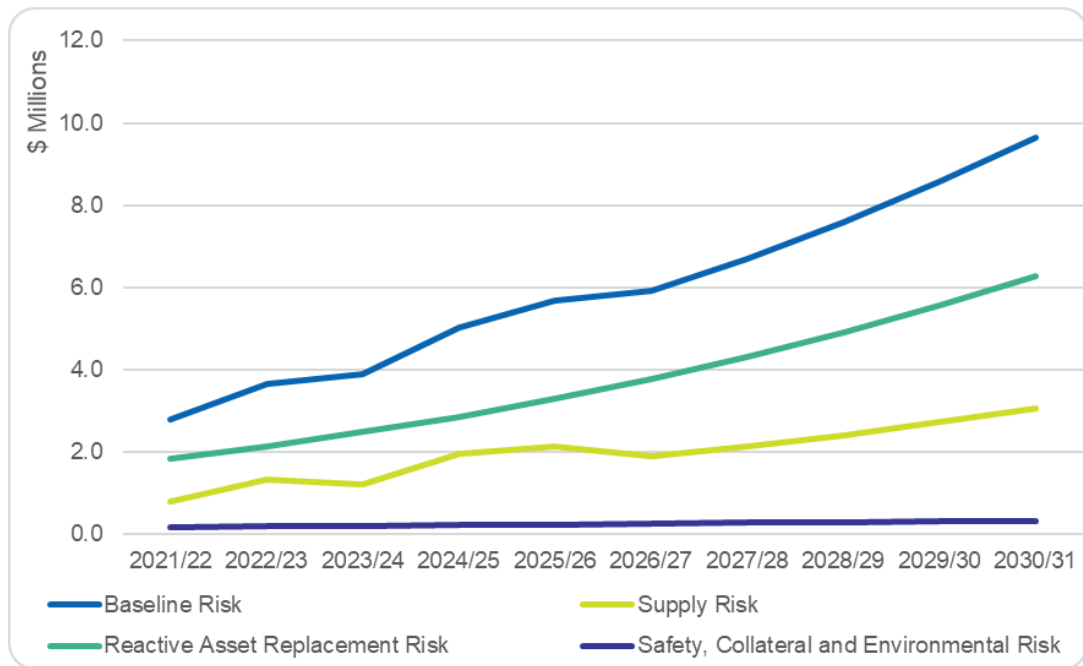


Figure 3 - Baseline risk costs

1.2.2 Technology Drivers

The asset management strategy (AMS 10-62) for the 500 kV GIS at SYTS is to replace rather than refurbish as this technology is no longer supported by the supplier, we have limited spares and previous refurbishments did not deliver the desired results in terms of life extension of the overall installation. The GIS at SYTS has reached the end of its technical life and there is no alternative than replacement to ensure continued reliable transmission services from this important 500 kV switching station.

1.2.3 Future Switchyard Configuration

Unlike AIS solutions, GIS does not lend itself to component or subsystem replacements and the only feasible options are to replace with either GIS (more costly) or with an AIS solution.

AEMO, in its role as the transmission system planner, has been consulted and agreed with the proposed station rebuild and layout. The new 500 kV switchyard will allow for the following:

- Integration of the WVTNP
- New transmission network connections such as the Melton Renewable Energy Hub; and
- The long-term plan for SYTS, which allows for more 500 kV lines to be connected when the need arises

1.2.4 Environment / Sustainability

Sulfur hexafluoride (SF₆) is used extensively within AusNet's transmission and distribution networks as an insulating medium and as a high performing arc extinguishing medium within circuit breakers. Large quantities of SF₆ insulating gas are used in outdoor applications of GIS, such as the installation at SYTS. SF₆ is a potent fluorinated greenhouse gas (F-gas) with a global warming potential of 23,900 times that of carbon dioxide. Many countries incorporated taxation on F-gasses based on the mechanisms used for carbon tax. Australia is not presently participating in these schemes. Establishment of a carbon tax (and F-Gas tax) at some point is considered a likely proposition and this therefore represents a risk to the business.

SF₆ losses at SYTS, Newport Power Station (recently refurbished) and the 500 kV gas insulated lines at Rowville Terminal Station (ROTS) represent the sites with the most reported SF₆ leakage within our transmission network. The SYTS GIS Replacement project will replace the existing GIS installation with modern AIS equipment with

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much lower quantities of SF₆ insulating gas and less potential for SF₆ gas leakage.

1.2.5 Summary

By delivering the options identified in this business case, AusNet Services will be able to maintain reliable transmission network services at SYTS and mitigate safety and environmental risks, as required by the NER and Electricity Safety Act 1998².

The regulatory investment test (RIT-T) has been completed and no alternatives to the network options proposed have been received during the consultation phase of the RIT-T.

2. PROJECT SCOPE

(RES ONLY) Has a Value Engineering Workshop been conducted? ☐ N/A If yes what are the savings? It is expected that savings could be achieved by integrating the WVTNP and SYTS asset replacement project. An integrated delivery model is being developed for the delivery of these two major projects to ensure efficient delivery and the best financial outcome for the business.	☒ Yes	☐ No
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2.1.1 In Scope

Item No.	In Scope
IS-1	Construct a new outdoor 500 kV switchyard to replace the existing outdoor gas insulated (GIS) switchyard at SYTS
IS-2	Turn the existing 500 kV transmission lines into the new outdoor switchyard and integrate with the new 500 kV Western Vic line connections
IS-3	Retire old 500 kV GIS

2.1.2 Out of Scope

Item No.	In Scope
OS-1	WVTNP requirements except for where integration work is required

2.1.3 Dependencies

Item No.	Project Dependency Details and Description
D-1	The SYTS GIS replacement can proceed on its own but requires consideration of the WVTNP as project synergies are possible by integrating these two major projects. Additional cost of \$4M is estimated should the WVTNP not proceed.

² Victorian State Government, Victorian Legislation and Parliamentary Documents, "Energy Safe Act 1998," available at http://www.legislation.vic.gov.au/domino/Web_Notes/LDMS/LTObject_Store/ltobjst9.nsf/DDE300B846EED9C7CA257616000A3571/1D9C11F63DEBA5E2CA257E70001687F4/%24FILE/98-25aa071%20authorised.pdf.

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3. SCHEDULE

3.1.1 Key Project Schedule and Milestones

For Waterfall projects please populate the table below – if Adaptive DELETE

Key Milestone and Deliverables (Waterfall)	Planned Completion Date
Approval of RIT (RES Only) ☐ N/A	21/10/2021
Approval of Stage Gate 2	26/02/2020
Approval of Business Case	19/11/2021
Design Complete	31/01/2023
Commissioning Readiness Complete	30/09/2025
Project Completion - Stage Gate 6 Approval	31/12/2025

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4. OPTIONS CONSIDERED

AusNet Services considered both network and non-network options to address the identified need but did not find any suitable non-network solution or received a proposal for a non-network solution. The two network options are presented below.

Consistent with the RIT-T requirements and practice notes on risk-cost assessment methodology, AusNet Services undertook a cost-benefit analysis to evaluate and rank the net economic benefits of the credible options over a 45-year period.

All options considered have been assessed against a business-as-usual case where no proactive capital investment to reduce the increasing baseline risks is made.

Optimal timing of an investment option is the year when the annual benefits from implementing the option become greater than the annualised investment costs.

The asset replacement options will allow for line outages to be minimised, which is a favourable outcome given the criticality of this switching station and the major challenge to obtain planned circuit outages. Unfortunately, it will mean that finance charges are expected to be higher for this project compared with other major station projects as this project does not allow for progressive sarcooding. Assets will be sarcooded after commissioning.

Option	Option Title	Description of Option	Capex	Opex
BAU	Business as Usual	The Business as Usual (BAU) option quantifies the base line risk (primarily supply and reactive asset replacement risk). It is used for modelling purposes in the economic cost-benefit analysis to determine the economical time for the asset replacement option with the lowest PV cost to proceed.	\$0	\$84 K pa
Option 1 (Preferred)	Replace with AIS	Replace outdoor GIS with outdoor 500 kV switchyard	\$82.6 M	\$84 K pa
Option 2	Replace with GIS	Replace outdoor GIS with indoor GIS	\$132.3 M	\$84 K pa

4.1.1 Preferred option - Option 1 – Replace GIS with AIS

Option 1 involves replacement of the 500 kV GIS with air insulated switchgear (AIS) just to the north of the existing GIS.

Capex and Opex	This option requires \$91.3 M CAPEX including management reserve and no OPEX.
Community Costs & Benefits (Regulated projects)	The investment benefits include the following avoided cost: - Market impact cost, including avoided wholesale market fuel cost - Reactive asset replacement cost - Environmental, safety and collateral damage cost The project benefits are calculated by considering asset unavailability, i.e. likelihood that one or more 500 kV lines at SYTS could be impacted by an asset failure and the consequence of such an asset failure as detailed in AMS 10-24.
Incentive Benefits (Electricity only)	None

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5. BENEFIT ASSESSMENT

It is not necessary to identify benefits from each category.

Note: Productivity gains and Cost Avoidance are to be detailed as Non-financial benefits.

Financial Benefits are those that will have a direct bottom line (budget) impact on the profitability of AusNet Services (opex or propex or incentive, either on planned levels of expenditure and incentives, or growth (Revenue increase). Financial Benefits associated with an increased Regulatory Asset Base are not considered appropriate benefits for a Regulated Business Case.

Non Financial Benefits are those that will have a business benefit which will not directly impact the financials (cost centre / budget) of AusNet Services.

Every effort must be made to quantify these so they can be measured and tracked.

#	Benefit Category (Strategic Objective)	Sub-Category (Strategic Priority)	Benefit Name (& description)	Benefit Start to Full Realisation Date	Measure - Baseline, Metric and Target	Business Benefit Owner	Financial Benefit Details
	<i>Duplicate benefits must be avoided in the Benefit Assessment.</i>	<i>Use one of the existing categories below.</i>	<i>Provide a short benefit name and a description of what benefit is being provided by the program, project or initiative.</i>	<i>When can benefits (i) start to be tracked (date after key milestone) and (ii) when will they be fully realised?</i>	<i>What is the baseline, metric used and the result expected.</i>	<i>Who stands to gain the most from the benefit? (e.g. Business Owner) Must be role specific</i>	<i>Is there a direct bottom line budget impact. If Yes please provide Cost centre and amounts</i>
1	Culture and Capability	Choose an item.	N/A				☐ Yes / ☐ No
2	Customer Centricity <i>Improve customer experience and enhance network reliability or Invest in communities and enable sustainable choices</i>	Improve Customer Experience and Enhance Network Reliability Choose an item.	The project will reduce the risk of an asset failure and the consequent market impact.	Benefit will be realised at completion of the project by end 2025	The likelihood of an asset failure is small (0.3%) but has a significant market impact (\$148 M pa). The market impact cost includes increased generation fuel cost when network constraints result in non-optimal generation dispatch. Multiple asset failure at SYTS will have a more significant impact (\$260 M pa) on the NEM	Melanie Tan	☐ Yes / ☒ No Cost Centre: CPX: \$ OPX: \$

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#	Benefit Category (Strategic Objective)	Sub-Category (Strategic Priority)	Benefit Name (& description)	Benefit Start to Full Realisation Date	Measure - Baseline, Metric and Target	Business Benefit Owner	Financial Benefit Details
3	Operational Excellence	Improve Asset Mgmt & Systems and Process Simplification	It is expected that Opex will increase over time if the GIS is not replaced in the next five years. Proceeding with the project will ensure that Opex does not increase over time.	Benefit will be realised after completion of the project and over the 45-year expected asset life.	The project will avoid increased operation and maintenance cost but is unlikely to allow for reductions to be made to existing Opex budgets.		☒ Yes / ☐ No Cost Centre: CPX: \$ OPX: \$ No reduction in Opex budget is being proposed with this business case.
4	Growth <i>Pursue growth in infrastructure capitalising on the energy transition</i>		N/A				☐ Yes / ☐ No
5	Mission Zero <i>Benefits that provide a safer working environment for staff, our customers and the community</i>	Safety – General	N/A				☐ Yes / ☐ No

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6. RISK ASSESSMENT

6.1.1 6.1 Project delivery risk (known)

Project Risk	What could occur?	Consequence Rating 1-5*	Likelihood Rating (Almost Certain ~ Rare)*	Current Risk Rating A-E*	Actions and controls in place to manage/reduce risk	Target Risk Level A-E*	Cost Impact
Human Error Incident	Circuit or circuit outages impacting electricity market	2	Unlikely	D	Training; following procedures, etc.	E	
Plant failure during project	Circuit or circuit outages impacting electricity market	2	Unlikely	D	Proceed with project and continue maintenance program until replaced	E	
Availability of planned outages impacting project delivery	Delays to project delivery may occur if planned outages are not possible.	2	Possible	D	Planned outages have been minimised as far as possible by proceeding with a greenfield rebuild option. AusNet will apply for network support cost to be treated as a pass through from the AER and has AEMO support for the project	E	
Deferral or cancellation of the Western Victoria Transmission Network Project	Opportunity to achieve synergies from integrated delivery is lost or/and potential cost increase estimated at \$4M due to additional scope for SYTS asset replacement to be implemented as a standalone project	2	Unlikely	D	Project team to review the delivery strategies and project staging based on WVTNP timeline	E	

6.1.2 Refer to the Risk Rating Assessment Criteria document and the Risk Management Policy and Framework 2018) on ECM: [Link](#)

Has a Costed Risk Workshop been conducted to calculate Management Reserve for this project?	☒ Yes	☐ No
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6.1.3 6.2 Other risks

None

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7. HIGH LEVEL CHANGE IMPACTS

7.1.1 7.1 High Level Impacts

List the high-level impacts and implications of the change(s) this project will deliver in the table below.

This project is not expected to change the system, processes, people or culture. Accordingly, change impact is none or minimal.

Overall Change Impact Rating	☐ High ☐ Medium ☒ Low	What is the Type of Change?	☐ People ☐ Process ☐ Systems ☐ Mindset ☐ Skills
Divisions Impacted	☒ Network Ops ☐ Network Mgmt ☐ Growth & Future Networks ☐ Digital ☐ Strategy & Transformation ☐ People & Safety ☐ Regulation & External Affairs ☐ Governance & General Counsel ☐ Finance	Potential Impacts to External Parties	☒ None ☐ Customers ☐ Vendors ☐ Delivery partners ☐ Retailers ☐ Regulatory Bodies ☐ Distributors ☐ Other – specify below
High level description of the change impacts	This project is not expected to change the system, processes, people or culture. Accordingly, change impact is none or minimal.		

Have you consulted a change manager on this project to discuss your assumptions?	☐ Yes	☒ No	☐ Not Yet, but I will
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8. FINANCIAL ASSESSMENT

Note: OPEX owner assumes responsibility for any write off costs should the project be cancelled.

Capex profit centre	13260
Propex profit centre	N/A
Opex (BAU) owner & cost centre	[C.I.C] 12060
Transmission Regulatory Key	Prescribed Shared

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8.1.1 Capex Breakdown

Capex Breakdown (incl mngt reserve - nominal)	First 5 years					Lifecycle Total
	2022	2023	2024	2025	2026	
Design	-	4.6	0.9	-	-	5.6
Internal Labour	0.8	1.0	1.5	0.7	0.1	4.1
Materials	-	16.1	2.1	-	-	18.1
Plant & Equipment	-	0.5	2.4	2.1	0.2	5.2
Contracts	-	5.8	21.1	12.1	0.7	39.7
Meter Costs	-	-	-	-	-	-
Risk	-	-	-	-	-	-
Other	-	-	-	-	-	-
Management Reserve	-	-	-	-	1.9	1.9
Total Capex	0.8	28.0	28.1	14.9	2.8	74.6

The Capex breakdown excludes overheads and finance charges (CFC).

8.1.2 Opex Breakdown

Opex excl Project implementation (nominal)	First 5 years					Lifecycle Total
	2022	2023	2024	2025	2026	
BAU Total Opex	0.1	0.1	0.1	0.1	0.1	2.9
Incremental Opex Costs - Option 1	-	-	-	-	-	-
Opex Savings - Option 1	-	-	-	-	-	-
Net Budget impact (split by division below)	-	-	-	-	-	-
New Cost profile	0.1	0.1	0.1	0.1	0.1	2.9

8.1.3 Analysis of investment options³

Analysis of investment options (\$m - Present Value)	Capex	Opex	Total Financial Costs	Potential Costs	Other Economic Costs & (Benefits)	Total PV Cost	PV Cost Ratio (compared to BAU)	Network Performance Benefits	Financial outcome (in present value terms) - compared to BAU - excl non cash costs and benefits
BAU	-	1.8	1.8	-	207.9	209.7	1.00	-	
Option 1	73.6	1.8	75.5	-	16.8	92.2	0.44	-	Excluding Economic costs and benefits, this Option spends \$m more Capex compared to BAU ✓
Option 2	117.5	1.8	119.3	-	16.8	136.1	0.65	-	Excluding Economic costs and benefits, this Option spends \$m more Capex compared to BAU ✗

9. CORPORATE ACCOUNTING CONSIDERATIONS

9.1.1 Asset Retirements

The total asset write down amount is \$0.290M. It includes protection and control assets, fire protection systems and surge diverters.

9.1.2 Contributed (Gifted) Assets

N/A

9.1.3 Assets to be created

This project will replace the existing assets with details provided in the attached scope of work document.

Description of Asset	Quantity	Estimated Cost (total)	Expected Asset Life
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³ The NPV model includes cashflows over 12 years with the remaining 33 years of the 45 year assessment period shown as a present value in Year 13.

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500 kV Switchgear	Three breaker-and-half switch bays	\$91.3 M	45 Years
Totals		\$91.3 M	

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Appendix A ATTACHMENTS

Document Title	Attachment (Embedded document)
Scope of Works / Initiative Brief *	 TD-8033 - SYTS 500kV GIS Replacem  TD-8033 - SYTS 500kV GIS Replacem
Financial Model with NPV* Note - the market impact cost is probability weighted. Cash flows in the NPV model are annual costs and benefits until Year 12 with the PV of the remaining annual cash flows (Year 13 to Year 45) included in Year 13.	 SYTS NPV ModelV1.xlsm
Detailed Cost Estimate and Benefit Assumptions*	 SYTS Economic Model RIT_PACR.xlsm
Cost Breakdown File	
Asset Management Strategy Extract	
Write Down Value (WDV) details	 WDV SYTS Revised V1.xlsm