

# Ausnet Services' Asset Renewal Plan - 2022

This section outlines AusNet Services' asset management strategy and approach and lists the asset retirements and asset renewal projects planned for the next 10-year period. The asset renewal plan addresses asset failure risk based on asset condition and network performance. It also considers other operational factors that affect the economic service life of the electricity transmission assets.

## 1 ASSET MANAGEMENT APPROACH

### 1.1 Asset Management Framework

AusNet Services' asset management system contains an asset management policy statement, strategic asset management plan, asset management objectives and a detailed suite of asset management strategies and an asset management plan.

The asset management policy acknowledges the company's purpose and directs the content and implementation of asset management strategies, objectives, and plans.

In the development of asset management strategies, asset management decisions are informed by an assessment of the external business environment, the corporate business and financial plans and responds to stakeholder engagement, which incorporates customer, generator, regulator, shareholder, and government views.

AusNet Services' asset management framework is illustrated in Figure 1.

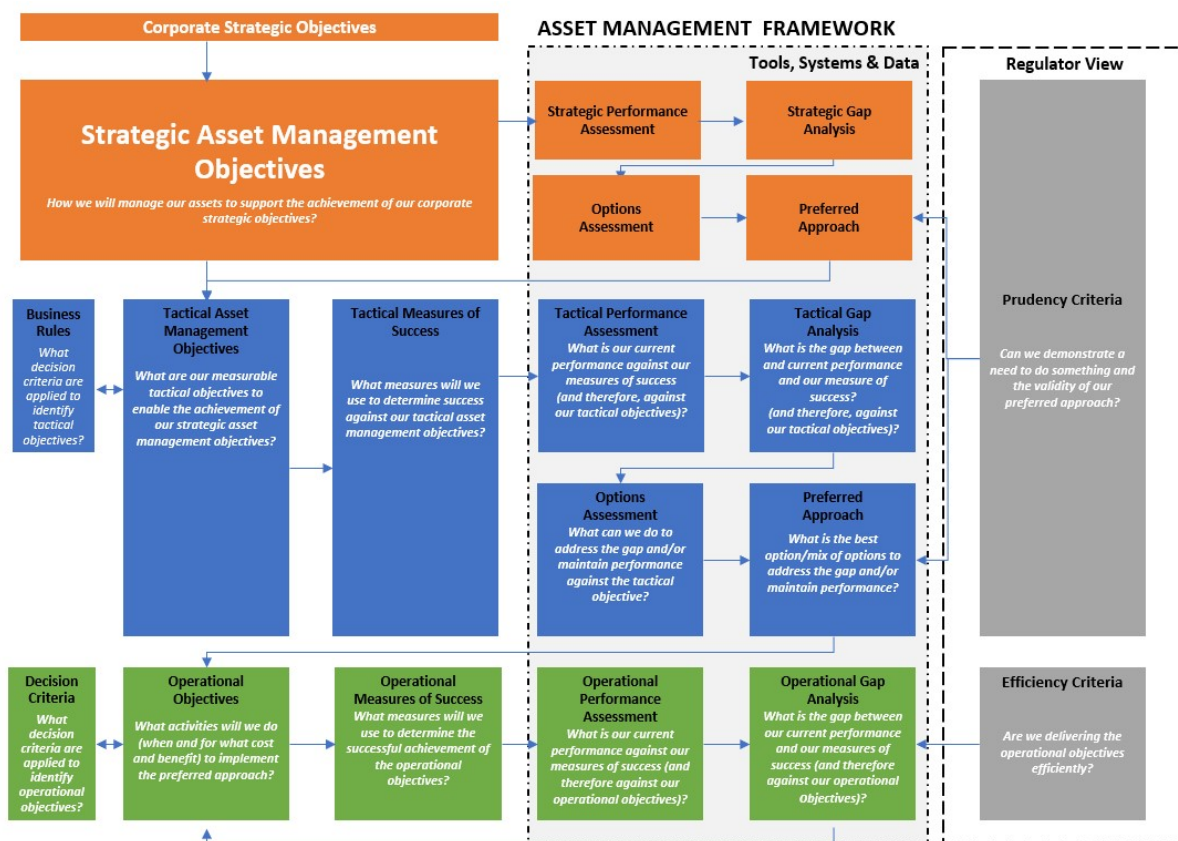
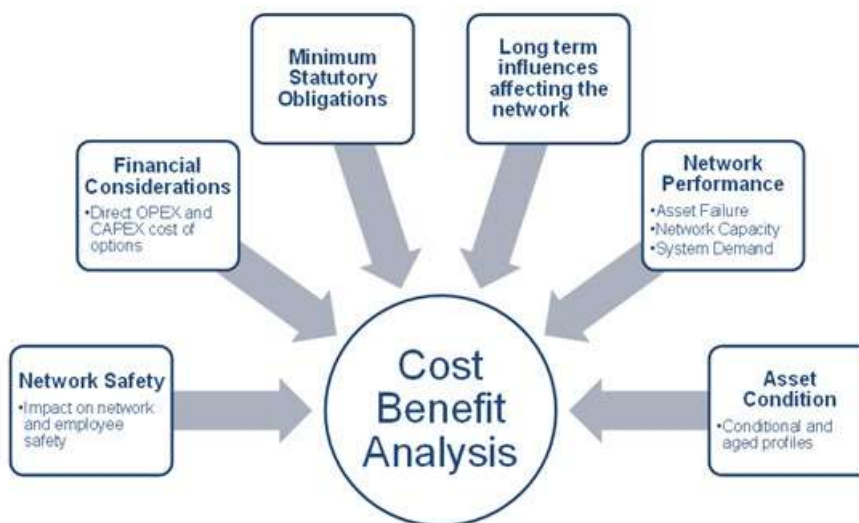


Figure 1: Asset Management Framework

AusNet Services uses a risk-based cost benefit analysis methodology to guide asset replacement decisions. The decision-making process considers the likelihood of failure (based on historic failure

data and asset age and condition information) and the consequences of failure to value the risk of asset failure in monetary terms. Figure 2 shows the factors considered in the cost benefit analysis.



**Figure 2: Cost Benefit Analysis Inputs**

A range of options are considered as part of the cost benefit analysis including network reconfiguration, asset retirement, asset refurbishment, asset replacement and non-network alternatives.

The methodology assesses whether the overall economic value of expenditure is positive and ensures that risks are reduced as far as practicable, as required by the Electricity Safety Act 1998.

## 1.2 Further Information

Further information on AusNet Services’ asset management strategy and methodology may be obtained by contacting [ritfconsultations@ausnetservices.com.au](mailto:ritfconsultations@ausnetservices.com.au). In the subject field, please reference ‘Asset Management Strategy’.

## 2 TEN-YEAR ASSET REPLACEMENT PLAN

The ten-year asset replacement plan (in calendar years) focuses on major transmission asset replacement projects. AusNet Services’ asset renewal plan does not propose any network changes that will have a material inter-network impact and AusNet Services has liaised with AEMO to integrate the asset renewal plan with AEMO’s transmission augmentation plan for Victoria as well as AEMO’s Integrated System Plan (ISP).

AEMO has also been consulted to review and assess the asset renewal plan in relation to the most recent power system frequency risk review.

### 2.1 Asset Renewal Options

The following asset renewal options are considered in the asset renewal evaluation and project specification:

- Renewal by Asset Class is employed when a class of assets has either a higher than acceptable failure rate or exhibits a higher deterioration rate than its peers. This approach avoids widespread deterioration in network performance due to multiple, asset class-related failures.
- Selective or Staged Replacement.
- Renewal on a Bay-by-Bay (or Scheme/Network) basis is employed when it is economic to replace all primary plant and equipment within a specific bay or scheme. This strategy is often adopted for terminal station renewals.
- Replacement of Whole Station in Existing Location (Brownfield) is employed when it is economic to replace most assets as part of a single, coordinated project within the existing station (normally when station assets are approaching the end of their life and there are advantages in reconfiguring primary electrical circuits).

- Replacement of Whole Station in New Location (Greenfield) is employed for the construction of a replacement station on a new site. It is a more expensive strategy than works within an existing station due to the need to procure new land, establish key infrastructure, and to relocate lines. It is usually only economic when the existing infrastructure is inadequate and replacement works cannot occur without a sustained supply disruption due to limitations at the existing site.

Non-network options are considered in AusNet Services' asset renewal approach once an identified need has been determined and include options such as demand side response and embedded generation. Non-network solutions are considered in the RIT-T process to find the most economical technically feasible solution.

## **2.2 2022 Asset Renewal Plan**

Some minor changes to scope, cost estimate and completion date have been made for some projects included in the 2022 Asset Renewal Plan compared with last year's plan. The completion dates of eleven projects that are not committed yet have been updated in this plan based on the latest asset failure risk analysis.

The cost estimates allow for the entire project cost including project management cost, overheads and finance cost.

AusNet Services commenced the HOTS SVC Replacement RIT-T during 2020 and published the PADR in April 2021. Stage 1 of the Renewable Energy Zone (REZ) Development Plan is expected to meet the identified need of this RIT-T should it proceed.

Wherever possible, asset renewal works are planned at times that minimise the impact of circuit outages.

The plan is subject to change based on the results of further asset condition analysis, asset failures necessitating a reprioritisation of projects and regulatory revenue decisions.

No urgent or unforeseen network issues have been identified to date.

A description of the proposed asset replacements is given in Table 1.

**Table 1: Ten-year asset replacement plan (cost estimate in 2022 dollars)**

Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
HYTS 500kV switchgear replacement	Heywood Terminal Station	18	2022	500 kV instrument transformers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2019 to 2022	Switching constraints	Two 500kV circuit breakers and associated equipment	Integrated replacement and staged replacement	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
HWPS 220kV Circuit Breaker Replacement - Stage 4	Hazelwood Power Station Switchyard	24	2022	Seven 220kV circuit breakers, nine current transformers, nine voltage transformers and thirty-nine disconnectors	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2018 to 2022	Load at risk	Seven 220kV circuit breakers, nine current transformers, nine voltage transformers and thirty-nine disconnectors	Integrated replacement and staged replacement	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
LYPS and HWTS 500kV Circuit Breaker Replacement Stage 1	Loy Yang Power Station Switchyard and Hazelwood Terminal Station	29	2022	Four 500kV circuit breakers, six 500kV current transformers and two 500kV voltage transformers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2018 to 2022	Switching/ generation constraints	Eight 500kV circuit breakers, six 500kV current transformers and two 500kV voltage transformers	Integrated replacement and staged replacement	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
ERTS Redevelopment - Stage 1	East Rowville Terminal Station	14	2022	One 150 MVA 220/66kV transformer, two 220kV circuit breakers and three 66kV Circuit Breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2019 to 2022	Load at risk	One 150 MVA 220/66kV transformer, two 220kV circuit breakers and three 66kV Circuit Breakers	Integrated replacement and staged replacement	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
WMTS Redevelopment	West Melbourne Terminal Station	128	2022	Four 150MVA 220/66kV transformers, 220kV switchyard, 66kV switchyard and 22kV switchyard	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2018 to 2022	Load at risk	Three 225MVA 220/66kV transformers, 220kV switchyard, 66kV switchyard and associated protection and control systems	Integrated replacement, staged replacement, replacement on a new site and replacement with larger transformers in consultation with Distribution Businesses	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
SVTS Redevelopment	Springvale Terminal Station	53	2022	Three 150 MVA 220/66kV transformers, four 220kV circuit breakers and nineteen 66kV Circuit Breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2019 to 2022	Load at risk	Three 150 MVA 220/66kV transformers, twelve 220kV circuit breakers and nineteen 66kV Circuit Breakers	Integrated replacement, staged replacement, replacement on a new site and replacement with larger transformers in consultation with Distribution Businesses	A request for proposal will not be issued for this project as it is a committed project and is already in its build phase	No change
RS Battery and Charger Replacements 1	Several locations	10	2022	Selected obsolete communication and control batteries	End of Life replacement	2019 to 2022	Load at risk	Replace to same standard	Business as usual or asset replacement	A request for proposal will not be issued for this project as it is a committed project	No change

Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
ERTS Redevelopment - Stage 2	East Rowville Terminal Station	24	2024	Two 150MVA 220/66kV transformers and eight 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2022 to 2024	Load at risk	Two 150MVA 220/66kV transformers and eight 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management and embedded generation	RIT-T completed	No change
BLTS 66kV Circuit Breaker Replacement	Brooklyn Terminal Station	16	2024	Fifteen 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2024	Load at risk	Fifteen 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management and embedded generation	RIT-T completed	No change
TSTS Transformer and 66kV Circuit Breaker Replacement	Templestowe Terminal Station	43	2024	Two 220/66kV transformers, two 66kV minimum oil Circuit Breakers and eleven 66kV bulk oil Circuit Breakers, and install new protection and control systems	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2024	Load at risk	Two 150 MVA 220/66kV transformer and thirteen 66kV Circuit Breakers	Integrated replacement, staged replacement, demand side management, embedded generation and retirement	RIT-T completed	No change
Communication and battery replacement in the South West Region Loop	South West Region	26	2024	Selected obsolete communication and control batteries	End of Life replacement	2023 to 2024	Market impact	Replace with current standard assets	Replace assets with new technology MPLS TP and install 5 more hops microwave to increase capacity required for new technology OR install underground fibre instead of microwave.	PSCR was published in May 2022	No change
HOTS SVC Replacement	Horsham Terminal Station	42	2025	SVC at HOTS	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Market impact	REZ Development Plan stage 1 project or replacement of HOTS SVC	REZ Development Plan stage 1 project, replace with a modern equivalent SVC, replace with a SynCon, non-network options and retirement	PADR was published in April 2021	Change to cost and completion date
HYTS-APD T624 to T628B tower replacement	HYTS-APD line	21	2025	Selected towers/ tower parts	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Market impact	New towers/ tower parts	Business as usual, Defer the work and asset replacement	2023	Change to cost and completion date
Transmission Line Insulator Replacement	Several locations	8	2025	Selected insulators	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Market impact	New insulators	Business as usual, Defer the work and asset replacement	PSCR was published in June 2022	Change to cost
MSS-DDTS Nos 1 and 2 tower upgrades	MSS-DDTS line	8	2025	Selected towers/ tower parts	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Load at risk	New towers/ tower parts	Business as usual, Defer the work and asset replacement	PSCR was published in April 2022	Change to cost



Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
RCTS Transformer Replacement	Red Cliffs Terminal Station	23	2025	Two 21.5MVA 220/22kV transformers and two 70MVA 220/66kV transformers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Load at risk	One 75MVA 220/22kV transformer and one 150MVA 220/66 kV transformer	Integrated replacement, staged replacement, demand side management, embedded generation and retirement	2022	Change to Scope
SYTS 500kV GIS Replacement	Sydenham Terminal Station	81	2025	500 kV GIS	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2025	Market impact	New 500kV outdoor station to replace the GIS	Business as usual, Integrated replacement, staged replacement and retirement	RIT-T completed	No change
HWTS A2, A3 and A4 Transformer Refurbishment	Hazelwood Terminal Station	8	2025	None	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	N/A	Market impact	None	Refurbishment	2023	New Project
Transmission Line Ground wire Replacement - Phase 1	Various	25	2025	Selected ground wire & conductor sections	Condition and risk based replacement	2024 to 2025	Market impact	Replace with new ground wire & conductor	Defer the work, selected asset replacement	PSCR was published in April 2022	Change to cost
SHTS Transformer and Circuit Breaker Replacement	Shepparton Terminal Station	39	2026	Two 150MVA 220/66kV transformers and twelve 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2026	Load at risk	Two 150MVA 220/66kV transformers and twelve 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management and embedded generation	RIT-T completed	No change
Communication and control batteries replacement - North East Region	North East Region	10	2026	Selected obsolete communication and control batteries	End of Life replacement	2025 to 2026	Market impact	Replace with current standard assets	Business as usual or asset replacement	2023	No change
Transmission Line Phase Conductor and GW Replacement - Phase 2	SYTS-MLTS	30	2027	Selected ground wire & conductor sections	Condition and risk based replacement	2025 to 2027	Market impact	Replace with new ground wire & conductor	Defer the work, selected asset replacement	2023	New Project
Communication and control battery replacement - Latrobe Valley Loop	Latrobe Valley	20	2027	Selected obsolete communication and control batteries	End of Life replacement	2026 to 2027	Market impact	Replace with current standard assets	Business as usual or asset replacement	2024	Change to cost and completion date
Moorabool Terminal Station Circuit Breaker Replacement	Moorabool Terminal Station	34	2027	Eight 500kV circuit breakers and ten 220kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2023 to 2027	Market impact	Eight 500kV circuit breakers and ten 220kV circuit breakers	Integrated replacement, staged replacement and retirement	PADR was published in August 2022	Change to cost and completion date
KTS A4 500/220kV Transformer Replacement	Keilor Terminal Station	71	2027	One 750MVA 500/220kV transformer and one 500kV, one 220kV and two 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2024 to 2027	Market impact	One 1000MVA 500/220kV transformer and one 500kV, one 220kV and two 66kV circuit breakers	Integrated replacement and staged replacement, replace with larger or smaller transformers, asset retirement, demand side management and embedded generation.	2024	Change to completion date

Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
Transmission 330kV and 500kV line conductor and ground-wire replacement program	LYPS-HWTS, HWTS-CBTS, SMTS-SYTS and HWTS-ROTS, SMTS-SYTS, SYTS-KTS, SYTS-MLTS, MSS-DDTS 330KV and 500kV line	8	2027	Selected ground wire & conductor sections	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2025 to 2027	Market impact	Replace with new ground wire & conductor sections	Business as usual, Defer the work and asset replacement	2024	No change
DC Supply Upgrade Stage 4	ATS, BETS, DDTS, EPS, FVTS, GNTS, HOTS	8	2027	Selected DC supply assets	Replacement of obsolete systems. Compliance	2024 to 2027	Market impact	Replace obsolete secondary assets with current standard equipment	Integrated replacement and staged replacement	2024	No change
Instrument Transformer replacements	Various	9	2027	Selected CVTs and VTs	Condition and risk based replacement	2026 to 2027	Market impact	New CVTs and VTs	Integrated replacement and staged replacement	2024	No change
Comms Batteries replacement program	Various	7	2027	Selected obsolete communication and control batteries	End of Life replacement	2026 to 2027	Market impact	Replace with current standard assets	Business as usual or asset replacement	2024	No change
Transmission line insulator replacement program	MLTS-TRTS1, MLTS-MOPS2, MOPS-HYTS2, TRTS-HYTS1, HYTS-APD 1 & 2 500kV lines; HYTS-SESS 275kV line	23	2027	Selected insulators	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2025 to 2027	Market impact	New insulators	Business as usual, Defer the work and asset replacement	2024	No change
SMTS 330/220kV Transformer Replacement - Stage 2	South Morang Terminal Station	44	2028	One 700 MVA 330/220 kV transformer	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2026 to 2028	Market impact	One 700 MVA 330/220 kV transformer and a spare phase	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2025	Change to completion date
SMTS 500kV GIS Replacement - Stage 1	South Morang Terminal Station	18	2028	Three 500kV GIS circuit breakers and associated equipment	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2026 to 2028	Market impact	Three 500kV AIS circuit breakers and associated equipment	Business as usual, Integrated replacement, staged replacement and retirement	2025	Change to completion date

Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
TTS Circuit Breaker Replacement	Thomastown Terminal Station	19	2028	One 220kV circuit breaker and fourteen 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2026 to 2028	Load at risk	One 220kV circuit breaker and fourteen 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management and embedded generation	2024	No change
LYPS and HWTS 500kV Circuit Breaker Replacement Stage 2	Loy Yang Power Station Switchyard and Hazelwood Terminal Station	60	2028	Fourteen 500kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2027 to 2028	Market impact	Fourteen 500kV circuit breakers	Integrated replacement, staged replacement and retirement	2025	No change
Radio Links replacement program	Various	16	2029	Selected radio links	End of Life replacement	2027 to 2029	Market impact	Replace with current standard assets	Business as usual, Defer the work and asset replacement	2025	Change to completion date
Communication and control batteries replacement - Metro Region phase 1 and 2	Metro Region	27	2029	Selected obsolete communication and control batteries	End of Life replacement	2028 to 2029	Load at risk	Replace with current standard assets	Business as usual or asset replacement	2026	No change
NPSD 220kV GIS	Newport Power Station Switchyard	43	2029	Six 220kV GIS switch bays	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2028 to 2029	Market impact	Six 220kV GIS switch bays	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	Change to completion date
LY 66kV Circuit Breaker Replacement	Loy Yang 66kV Switch Yard	14	2030	Sixteen 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2028 to 2030	Market impact	Sixteen 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	No change
MWTS 66kV Circuit Breaker Replacement	Morwell Terminal Station	6	2030	Thirteen 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2028 to 2030	Load at risk	Thirteen 66kV circuit breakers	Integrated replacement, staged replacement, demand side management, embedded generation and retirement	2027	No change
TBTS 220kV and 66kV Circuit Breaker Replacement	Tyabb Terminal Station	9	2030	Four 220kV circuit breakers and five 66kV circuit breakers	Selective replacement of assets based on condition. Project addresses supply, safety, environmental and collateral plant damage risk	2028 to 2030	Load at risk	Four 220kV circuit breakers and five 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	No change



Project Name	Location	Total Cost (Real \$M)	Target Completion (December)	Network Assets to be Retired	Reasons for Retirement	Date of Retirement	Constraints	Proposed Replacement	Options Considered	Request for Proposal Date	Changes Compared with Last Plan
YPS 220kV Circuit Breaker Replacement Stage 2	Yallourn Power Station Switchyard	10	2030	Four 220kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2028 to 2030	Market impact	Four 220kV circuit breakers	Integrated replacement, staged replacement and retirement	2026	No change
WOTS 330kV and 66kV Circuit Breaker Replacement	Wodonga Terminal Station	13	2030	Four 330kV circuit breakers and six 66kV circuit breakers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2028 to 2030	Market impact and load at risk	Four 330kV circuit breakers and six 66kV circuit breakers	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	No change
Transmission line conductor and ground-wire replacement program	Various	23	2030	Selected ground wire & conductor sections	Condition and risk based replacement	2027 to 2030	Market impact	Replace with new ground wire & conductor	Defer the work, selected asset replacement	2026	No change
Transmission line insulator replacement	Various	15	2030	Selected insulators	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2027 to 2030	Market impact	New insulators	Business as usual, Defer the work and asset replacement	2026	No change
HWTS A2, A3 and A4 Transformer Replacement	Hazelwood Terminal Station	45	2030	A2, A3 and A4 Transformers	Condition and age of assets presenting a safety, supply, environmental and collateral damage risk in the event of an asset failure.	2027 to 2030	Market impact	Three 500/220 kV transformers	Integrated replacement, staged replacement and retirement	2026	No change
GNTS B2 220/66kV Transformer Replacement	Glenrowan Terminal Station	10	2031	B2 220/66kV Transformer	Selective replacement of assets based on condition. Project addresses supply, safety, environmental and collateral plant damage risk	2028 to 2031	Load at risk	One 220/66kV transformer	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	Change to completion date
MWTS B3 Transformer Replacement	Morwell Terminal Station	9	2031	B3 220/66kV transformer	Selective replacement of assets based on condition. Project addresses supply, safety, environmental and collateral plant damage risk	2028 to 2031	Load at risk	One 220/66kV transformer	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2026	Change to completion date
BATS B2 220/66kV Transformer Replacement	Ballarat Terminal Station	9	2031	B2 220/66kV Transformer	Selective replacement of assets based on condition. Project addresses supply, safety, environmental and collateral plant damage risk	2029 to 2031	Load at risk	One 220/66kV transformer	Integrated replacement, staged replacement, asset retirement, demand side management, embedded generation and retirement	2027	New Project

## 2.3 Regulatory Investment Test for Transmission (RIT-T) Schedule

AusNet Services completed two RIT-T assessments since October 2021. Table 4 shows the completed RIT-Ts. AusNet Services' RIT-T consultations can be found at: <https://www.ausnetservices.com.au/About/Projects-and-Innovation/Regulatory-Investment-Test>

**Table 2: Completed RIT-T Projects**

Project Name	RIT-T Completed (PACR published)	Type of Project
SHTS Transformer and Circuit Breaker Replacement	October 2021	Transformer and Circuit Breaker Replacement
SYTS 500kV GIS Replacement	October 2021	Circuit Breaker Replacement

Table 3 shows RIT-Ts that are in progress.

**Table 3: In Progress RIT-T Projects**

Project Name	RIT-T Status	Type of Project
HOTS SVC Replacement	PADR published in April 2021	SVC replacement
MLTS Circuit Breaker Replacement	PADR published in August 2022	Circuit breaker replacement
MSS-DDTS Nos 1 and 2 tower upgrades	PSCR published in April 2022	Tower upgrade
Transmission Line Ground wire Replacement - Phase 1	PSCR published in April 2022	Transmission line asset replacement
Communication and battery replacement in the South West Region Loop	PSCR published in May 2022	Communication asset replacement
Transmission Line Insulator Replacement	PSCR published in June 2022	Transmission line asset replacement

AusNet Services will commence RIT-T assessments for the projects shown in Table 4.

**Table 4: Planned RIT-T Projects**

Project Name	RIT-T Start Quarter	Type of Project
RCTS Transformer and Switchgear Replacement	Q4 2022	Transformer and circuit breaker Replacement
HYTS-APD T627 to T628B tower replacement	Q1 2023	Tower replacement
HWTS A2, A3 and A4 Transformer Refurbishment	Q1 2023	Transformer refurbishment
Communication and battery replacement in the South West Region Loop	Q2 2023	Secondary asset replacement
Transmission Line Phase Conductor and GW Replacement - Phase 2	Q3 2023	Transmission line asset replacement