Transgrid

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Non-network Other Overview Paper

2023-28 Revenue Proposal

Contents

List of Tables

List of Figures

1. Purpose, structure and scope of this document

1.1. Purpose and scope of this document

This document provides the background and justification at a high level for our Non-Network Other (Fleet, Plant and Equipment, and Property) capital expenditure (capex) for our prescribed transmission services for the next regulatory control period 1 July 2023 to 30 June 2028 (2023-28 regulatory period). This document supports our Revenue Proposal and references other supporting documents for further detail.

All capex is presented in real 2022-23 dollars and is expressed in total costs (i.e. direct costs plus escalations and excluding overheads).

This document explains and justifies our capex forecast for Non-Network Other (Fleet, Plant and Equipment, and Property) only.

We explain and justify our:

- operating expenditure (opex) step change forecast in a separate opex step change overview document, and
- other categories of capex, including replacement capex (Repex), augmentation capex (Augex), and Non-network ICT in separate capex overview documents.

1.2. Structure of this document

This Non-network Other Overview Paper is structured as follows:

- chapter 1 sets out the hierarchy of documents that support our Fleet, Plant and Equipment, and Property forecast
- chapter 2 discusses the nature and key drivers for our Fleet, Plant and Equipment, and Property forecast
- chapter 3 presents our historical and current period Fleet, Plant and Equipment, and Property expenditure with our forecast capex
- chapter 4 discusses the key outcomes that we have delivered from our current period Fleet, Plant and Equipment, and Property expenditure
- chapter 5 presents our forecast Fleet, Plant and Equipment, and Property for the 2023-2028 regulatory period, and discusses the key outcomes that we propose to deliver
- chapter 6 explains our forecast method, inputs and assumptions used to develop our forecast Fleet, Plant and Equipment expenditure
- chapter 7 explains our forecast method, inputs and assumptions used to develop our forecast Property expenditure
- chapter 8 explains cost escalation, overheads and our validation approaches for our forecast Fleet, Plant and Equipment, and Property expenditure
- chapter 9 presents our forecast total Fleet, Plant and Equipment, and Property expenditure, including expenditure by asset class, and
- attachment 1 lists the documentation, models and justifications that support this Fleet, Plant and Equipment, and Property Overview Paper and capex forecast.

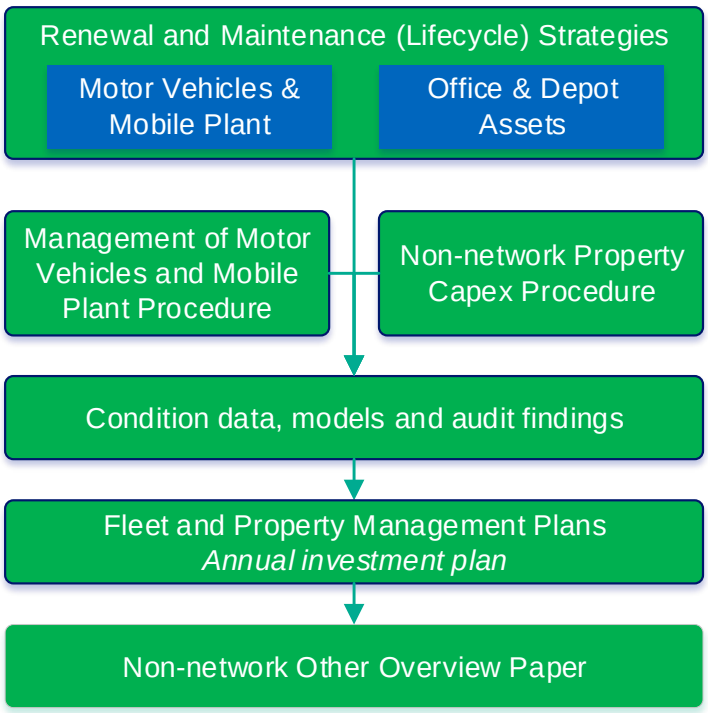
- attachment 2: Provides a summary table relating to our major proposed Fleet projects for the 2023-28 regulatory period
- attachment 3: Provides a summary table relating to our major proposed Plant and Equipment projects for the 2023-28 regulatory period
- attachment 4: Provides a summary table relating to our major proposed Property projects for the 2023-28 regulatory period.

1.3. Supporting documents and models

A number of other documents and models support, and form part of, our 2023-28 Revenue Proposal. This document references these documents and models for further detail and should be read in conjunction with them. A summary of these documents and models relevant to Non-network other is listed in Attachment 1.

Figure 1-1 illustrates our hierarchy of documents and models that support our Fleet, Plant and Equipment, and Property forecast, which we have submitted to the AER with our Revenue Proposal.

Figure 1-1 Hierarchy of Fleet, Plant and Equipment, and Property documents and models



In particular, this Non-network Other Overview Paper is supported by our:

- **Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy** detailing our strategic plans for fleet management and investment, that supports the needs of the business in delivering prescribed transmission services
- **Non-network Property Renewal & Maintenance Strategy** detailing our strategic plans for property management and investment, that supports the needs of the business in delivering prescribed transmission services

- **Non-network Property Capex Procedure** sets out our governance process for investing capital into non-network assets (office and depots) in a way that achieves the objectives of safety and compliance, effective asset management, delivering value to our customers, and leading with sustainability
- **Management of Motor Vehicles and Mobile Plant Procedure** describes the way in which motor vehicles and mobile plant are controlled from acquisition through to disposal
- **Fleet and Property management plans** – justifying capital works that have been conducted under the established principles and guidelines of our Risk Management Framework based on evaluation of reports by independent experts:
    - for our Fleet, Plant and Equipment an annual investment list which is submitted as part of the annual budget approved by the Board. The approved budget is managed via the Project and Portfolio Management (PPM) system.
    - for Property, an annual capex plan comprising a list of projects and programs (including costs, risks, benefits, and timing) supported by:
        > independent 5-yearly audits of our property assets to identify priority issues relating to Building Code of Australia Compliance, safety, and building fabric and services based on a visual inspection of the property. This independent review and accompanying capex plan recommends the prioritisation of the issues and how they should be resolved, with estimated costs and timeframes for works to be completed, and
        > further independent advice that identifies items that can be delayed where asset failure should not normally pose immediate risk to the building or occupants, or for bringing forward expenditure on items to reduce the risk or provide benefits to us.

Our Fleet, Plant and Equipment, and Property expenditure considers ways to support the efficient management of our transmission network by our workforce, through mobility and accommodation solutions including the assessment of capex to opex trade-offs. Our approach ensures there is no double counting of expenditure and maximises the value of net benefits for our customers with a view to maintaining current performance, seeking to comply with regulations, and addressing any safety concerns.

2. Nature and external drivers

Our Fleet, Plant and Equipment, and Property capex is required to maintain, replace, or invest in new mobility and workplace/accommodation solutions that enable and facilitate the business to deliver prescribed transmission network services in the most prudent and efficient way for our customers.

There are several specific challenges driving our Fleet, Plant and Equipment, and Property capex into the 2023-28 regulatory period. The nature of our Fleet, Plant and Equipment, and Property and specific drivers that are contributing to our capex forecasts are detailed below.

2.1. Our Fleet, Plant and Equipment

The purpose of our fleet of motor vehicles, mobile plant and equipment is to support critical network maintenance services and construction work for our assets within NSW and the ACT.

2.1.1. Nature of our Fleet

Fleet comprises of motor vehicle, mobile plant which consists of cars, utilities, vans, trucks, trailers, cranes and elevating work platforms which are used to enable our staff to:

- inspect transmission lines and easements
- maintain transmission lines and associated structures
- maintain substations and associated equipment
- maintain communications infrastructure, and
- transport plant and equipment associated with capital projects and maintenance activities and undertake construction work associated with capital projects.

These assets are grouped into 2 categories with each performing a different function:

- mobile plant comprises trucks, trailers, mobile cranes, borers and elevated work platforms (EWP) that are used exclusively in support of network maintenance and construction.
- business Motor Vehicles are typically light commercial (utilities or vans) sedans, wagons or SUV's used to carry personnel and their tools/equipment to sites across the network.

Our fleet has been structured to maximise efficiency and to ensure assets achieve maximum utilisation over the course of their lifecycle. Our decisions to invest in Fleet assets align with our network delivery activities.

2.1.2. Nature of our Plant and Equipment

Our Plant and Equipment comprises:

- heavy commercial vehicles including trucks and trailers, typically used to carry bulky equipment or specialist plant items to site
- material handling equipment consisting of forklifts, elevated work platforms and self-loading cranes. The cranes and forklifts are used to load and unload equipment on site. The elevated work platforms are used to access towers and structures up to 60 meters high, and
- excavation equipment to move material around on sites and aid in the construction and maintenance of network infrastructure.

2.1.3. Drivers across our Fleet, Plant and Equipment forecast capex

Our Fleet, Plant and Equipment capex forecast supports the delivery of safe, secure and reliable electricity and comprises projects and programs driven by:

- **Asset condition and workforce demand** – to address identified vehicle, plant and equipment issues, an increased need for vehicles to meet our workforce delivery demands, or to support delivery of services in the case of plant and equipment.
- **Compliance obligations** – to meet the requirements of applicable legislation, regulations, codes and rules. These include meeting NSW Workplace Health and Safety (WHS), *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and accompanying Australian Standards (where applicable).

We apply an established risk management framework to forecasting our Fleet, Plant and Equipment needs with a view to optimising cost, risk and performance for our customers while meeting our regulatory compliance obligations.

2.1.4. Key drivers for our Fleet forecast

Our fleet assets are used in support of our wider transmission network and must be maintained to a standard that can be safely used by personnel.

The primary objective for our Fleet is to invest capital in a way that ensures safe, reliable access to the network. Providing access to network sites with fit for purpose equipment helps ensure the community and our technicians remain safe when work is being conducted on the network.

Prior to 2020, our motor vehicle and mobile plant fleet was well used. During 2020 and into 2021, COVID-19 impacts forced much of our workforce to work from home. This reduced the use of pool vehicles for inter-office travel in line with government recommendations. Notwithstanding, normal usage levels of operational vehicles and mobile plant were maintained which comprise the bulk of our fleet. Post 2021, we expect the need for remote working due to COVID-19 to decline over time as the vaccination rollout progresses and the COVID-19 response transitions.

Further, we expect our fleet requirements to grow due to the need to deliver major ISP projects in the National Electricity Market (NEM), putting pressure on our existing fleet resources. Vehicles that have been dedicated to a project will be recycled into new projects until they meet the end of their useful/economic life.

We need to remain responsive to long-term fleet requirements, and our capex forecast is based on a 10-Year view under our Motor Vehicles and Mobile Plant Renewal & Maintenance Strategy, supported by vehicle and mobile plant condition reports. We will contain the cost of the projected fleet increase through our rigorous procurement processes.

Our expenditure forecast seeks to maintain the suitability and safety of our current fleet. The current strategy is to align light vehicles service life with manufacturer warranty periods. Partnering with our suppliers to ensure the vehicles are maintained and costs are optimised over the vehicle's life cycle.

2.1.5. Key drivers for our Plant and Equipment forecast

The objective of our Plant and Equipment items is to ensure safety of the crews and value for money over the use of short term external hire. This minimises the cost of construction and maintenance teams can deploy equipment with priority to minimise the duration of outages and faults.

2.2. Our Property

The purpose of our Non-network Property portfolio is to provide the necessary workplaces, and related support functions and services to support the business to prudently and efficiently deliver transmission network services.

2.2.1. Nature of our Property

Our Property assets comprise offices and depots and are predominantly used as:

- workplaces for our activity-based operational, field, engineering and technical teams
- workplaces for our administrative, facilities, corporate, regulatory, and training functions
- network control room facilities
- workshops and loading bays
- warehousing and storage facilities for equipment and spare parts
- compounds for large vehicle and operational vehicle fleet and covered parking facilities, and
- specialist functional facilities such as oil processing, battery charging, vehicle wash bays etc.

As at July 2021, we own 7 regional depots and offices of varying sizes and ages across NSW:

- 180 Thomas Street Haymarket, Sydney - 9-storey office building above the existing Haymarket substation which was completed in early 2014 (3 stories are used by us) and accommodating about 360 Full Time Equivalent personnel (FTE)
- Wallgrove Depot - Eastern Creek – site comprising circa 10 buildings constructed from between 1965 – 2014 and accommodating about 300 FTE
- Orange Depot - site comprising 3 buildings ranging in construction type and age and constructed from circa 2000 onwards and accommodating about 40 FTE
- Wagga Wagga Depot - site comprising 3 buildings constructed in the 1960's and 1970's and accommodating about 56 FTE
- Waratah West, Newcastle Depot - site comprising 12 buildings ranging in construction type and age constructed in circa 1992 with a few modern additions and extensions and accommodating about 124 FTE
- Tamworth Depot - site comprising 2 buildings constructed in 2013 and accommodating about 40 FTE
- Yass Depot - site comprising 8 buildings constructed between 1960s to 2006 and accommodating about 56 FTE.

We also temporary lease premises for Powering Sydney's Future (PSF) site office in Summer Hill to accommodate the project team of about 15 FTE. The costs associated with this office are covered by PSF.

Overall, the office and depot assets comprise approximately 50 separate spaces or areas, including roads, hardstands, workshops, warehouses, office floors, bathrooms, and common areas.

2.2.2. Drivers for our Property forecast

Our overarching objectives for Property are to support the safe, secure and reliable delivery of electricity and invest capital in a way that ensures:

- **Safety and compliance** – deliver and maintain safe, compliant and reliable workplaces for employees

- **Effective asset management** – provide effective asset management over the life of the property assets
- **Delivering value to our customers** – manage cost versus risk and performance of the assets on a like for like basis, while providing workplaces which meet our accommodation requirements and enable efficient delivery of projects and services, and
- **Leading with sustainability** – identify and achieves sustainability targets, where economically viable.

Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.

Our Property forecast comprises projects and programs driven by:

- **Compliance obligations** – to meet the requirements of applicable legislation including the *Environmental Planning & Assessment Act 1979* (EP&A Act) and Regulations (EP&A Regulation); NSW Workplace Health and Safety (WHS); the Building Code of Australia (BCA, where upgrade works have been or are proposed to be undertaken) and associated Australian Standards (where applicable) and the directions of public authorities made under such legislation; as well as fire, electrical and numerous other standards and codes of practice such as AS/NZS2293.1.2018 Emergency Lighting and Exit Signs, AS/NZS 3000:2018 Installations and Wiring, AS 2419.1-2005 Fire Hydrant Installations; AS 1851-2012 Routine Service of Fire Protection Systems and Equipment,
- **Workforce demand** – to address identified building issues, or an increased need for accommodation to meet our workforce demands to deliver transmission services, and
- **Utilisation** of Property assets.

Several of our depots were constructed prior to the application of the BCA and relevant standards, which do not have retrospective application in that building owners are not required to proactively bring buildings into compliance with those standards unless a change of use or alteration of the building is proposed. Numerous alterations and additions have been carried out across the depot assets over time, but a fire safety schedule (which must identify the statutory fire safety measures as defined under the EP&A Regulation that are required to be implemented in the building) is only required if complying development certificates or development or modification applications requiring construction or occupation certificates are made for those alterations. All office and depot assets lodge annual fire safety statements.

Taking this into account, we apply a consistent, risk-based compliance process to understand our current compliance obligations, material changes that require investment, and evaluate solutions to determine the least cost preferred option. This is based on independent conditions assessments (audits) which we commission every 5-years. Where independent audits recommend certain works to achieve compliance, for example with current fire protection standards, we work towards achieving that standard.

We have carried out a high level review of utilisation over recent years, and make the following observations:

- 2018 – 2020:
  - **Office and depot in the Sydney Basin** experienced medium - high utilisation, with increasing demand due to growth of project teams from major ISP project scoping and development.
  - **Depots in regional areas** experienced medium utilisation, with peaks during Delivery team onsite times, and low utilisation when Delivery teams are offsite.
  - **Workshops, Warehouses, and supporting facilities** continue to be utilised for projects, testing, maintenance, and support activities.

- 2020 – 2021:
  - COVID-19 impacts forced much of the workforce to work from home with minimal office use.
  - As at mid-2021, office and depot assets were experiencing medium utilisation as workers returned to the office, with increased flexibility and work from home arrangements (typically 1-4 days per week). From July to November 2021 office and depot assets utilisation has dropped significantly with the NSW lockdown. Utilisation is dependent on COVID-19 government advice, with no to minimal utilisation during lockdown periods.
  - In 2021, we developed strategic workplace/accommodation principles, which are to:
    > deliver value to shareholders, stakeholders and customers,
    > provide safe workplaces,
    > achieve effective utilisation,
    > provide appropriate facilities for Board and high level stakeholder engagement,
    > separate contestable business activities, and
    > plan for a scalable workforce.
  - These strategic accommodation principles are supported by a New Ways of Working guide, which supports a hybrid model of working from the office and working from home.
- COVID-19 continues to require flexibility and support hybrid working arrangements.
- A longer term accommodation utilisation strategy work has commenced, which is expected to be completed in early – mid 2022.

3. Fleet, Plant and Equipment, and Property profile

Our Non-network Other capex has decreased significantly over the 2018-23 regulatory period compared with the 2014-18 period due to the construction of our Ultimo premises during the previous and prior periods. We expect our Non-network Other capex to increase over 2023-28 regulatory period compared with the current period given the need to replace plant and equipment at the end of its life, and to maintain our Property assets to a safe, compliant standard.

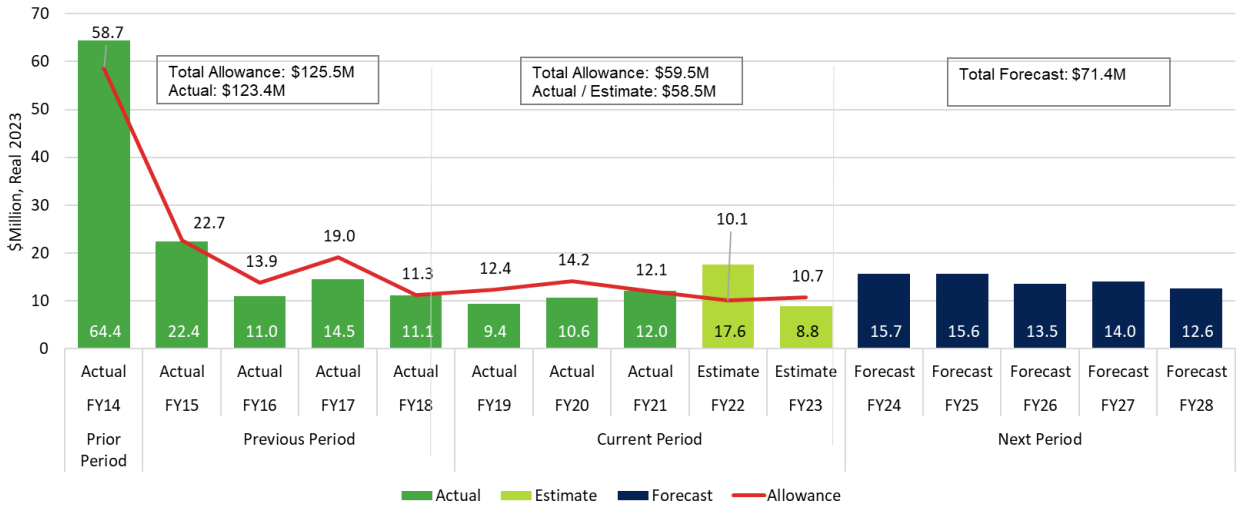
This chapter overviews:

- the profile of our Fleet, Plant and Equipment, and Property capex over 2013 to 2028
- our actual/estimated Fleet, Plant and Equipment, and Property from the 2014-18 and 2018-23 regulatory periods, and compares it to the AER's allowances.

3.1. Previous, current and forthcoming period expenditure

Figure 3-1 compares our actual fleet, plant and equipment and property expenditure to the AER's allowance over the 2014-18, 2018-23 and 2023-28 regulatory periods.[1]

Figure 3-1:Actual and estimated Fleet, Plant and Equipment, and Property for the 2014 to 2028 period compared to the AER's allowance ($Million, Real 2022-23)



3.2. Variance in forecast and actual capex compared with AER allowances

Table 3-1 shows our Fleet, Plant and Equipment, and Property capex for each regulatory period compared to the AER allowance and the variances.

[1] This information is presented in accordance with clause S6A.1.1(6) of the Rules

Table 3-1: Historical and forecast Fleet, Plant and Equipment, and Property for the 2014-18 regulatory period compared to the AER's allowance ($Million, Real 2022-23)

	2014-2018[2] Actual	2018-2023 Actual & Estimated	2023-2028 Forecast
Fleet			
AER allowance	49.6	43.3	
Actual / estimated	48.7	36.0	36.4
Variance (Actual minus AER allowance) $ Million and %	(0.9) (1.7%)	(7.3) (16.8%)	
Plant and Equipment			
AER allowance	12.9	10.1	
Actual / estimated	12.7	7.2	12.2
Variance (Actual minus AER allowance) $ Million and %	(0.2) (1.7%)	(2.9) (29.0%)	
Property			
AER allowance	63.1	6.1	
Actual / estimated	62.0	15.3	22.8
Variance (Actual minus AER allowance) $ Million and %	(1.1) (1.7%)	9.2 151.5%	
Total Non-Network Other			
AER allowance	125.5	59.5	
Actual / estimated	123.4	58.5	71.4
Variance (Actual minus AER allowance) $ Million and %	(2.2) (1.7%)	(1.0) (1.6%)	

Key drivers of the decrease between the 2014-18 and 2018-23 regulatory periods for Fleet are:

- additional rebates and discounts received from new service provider SG Fleet
- improved utilisation monitoring and redistribution of assets, and
- extending the life of ute bodies to span multiple vehicles.

The key driver of the decrease between the 2014-18 and 2018-23 regulatory periods for Plant and Equipment is building multi use plant items to maximise efficiency.

The key driver of the decrease between the 2014-18 and 2018-23 regulatory periods for Property is the construction of 180 Thomas Street (Ultimo premises) during the 2014-18 regulatory period.

[2] Five years presented for comparison purposes, 2013-14 to 2017-18.

4. 2018-23 Fleet, Plant and Equipment, and Property outcomes

Our expenditure on Non-network Other during the 2018-23 regulatory period has focused on efficiencies to drive down the costs incurred by us in providing these services wherever possible, whilst addressing applicable statutory compliance and work health and safety (WHS) requirements. We maintained our fleet, plant and equipment assets to support our wider transmission network and, where appropriate, replaced vehicles, plant and equipment on a like-for-like basis. For our property assets, we delivered safe workspaces to accommodate both office and depot-based work and to address compliance matters.

4.1. Current period expenditure compared to the AER's allowance

Table 4-1 sets out our actual and estimated Fleet, Plant and Equipment, and Property capex over the 2018-23 regulatory period compared with the AER's allowance.

Table 4-1: Current period Fleet, Plant and Equipment, and Property ($Million, Real 2022-23)

	2018-19 Actual	2019-20 Actual	2020-21 Actual	2021-22 Estimated	2022-23 Estimated	Total
Fleet						
AER Decision	10.8	11.0	7.9	6.6	7.0	**43.3**
Actual / estimated	8.2	8.2	7.9	7.7	4.0	**36.0**
Variance	(2.6)	(2.7)	(0.0)	1.1	(3.1)	**(7.3)**
Plant and Equipment						
AER Decision	1.5	2.2	2.3	2.0	2.1	**10.1**
Actual / estimated	1.2	1.6	2.3	1.0	1.0	**7.2**
Variance	(0.4)	(0.5)	(0.0)	(0.9)	(1.1)	**(2.9)**
Property						
AER Decision	0.0	1.0	1.8	1.5	1.6	**6.1**
Actual / estimated	0.0	0.8	1.8	8.8	3.9	**15.3**
Variance	(0.0)	(0.3)	(0.0)	7.3	2.2	**9.2**
Total Non-Network Other						
AER Decision	12.4	14.2	12.1	10.1	10.7	**59.5**
Actual / estimated	9.4	10.6	12.0	17.6	8.8	**58.5**
Variance	(3.0)	(3.6)	(0.0)	7.5	(1.9)	**(1.0)**

Our net variance in Non-network Other expenditure for the current period compared with the AER allowance is driven by the following:

- Fleet decrease of $7.3M:
  - equipment rationalisation, procured outcomes and improved utilisation has led to efficiencies
- Plant and Equipment decrease of $2.9M:
  - hiring in of low utilisation specialty equipment has reduced the need for capex intensive specialised equipment
- Property increase of $9.2M has resulted from unforeseen reactive capital projects to address recommended compliance works, WHS, asset condition (or performance) issues, or strategic property requirements, including:
  - Aluminium Composite Panel (ACP) replacement at Ultimo due to a change of regulation and draft Council fire safety order (estimated at $2.7M)
  - air conditioning, drainage and remediation works at Ultimo (prescribed portion), resulting in improved energy efficiency and building life/performance (estimated at $0.7M)
  - capital projects required to rectify priority WHS and compliance issues, including recommended fire safety upgrade works (estimated at $2.4M), and
  - numerous minor capital works across the portfolio to keep in adequate state of condition to support the network.

4.2. Fleet outcomes

We have managed to deliver our Fleet business requirements at a lower cost over the 2018-23 regulatory period. We have reduced the costs of providing fleet services through:

- appointing a new service provider, SG Fleet, who manages the purchase and delivery of our vehicles and equipment including safety inspection and system setup. This replaced our hybrid model for providing fleet services (via Toyota Fleet Management)
- re-scoping requirements toward multipurpose plant and vehicles that have driven efficiency through reducing the number of crew deployments required to attend to a job, and
- migrating to an opex model rather than a capex model for specialised vehicles and plant, through sale and leaseback arrangements. This approach avoids downtime, drives efficiency and reduces costs associated with ownership.

4.3. Plant and Equipment outcomes

Our Plant and Equipment expenditure over the 2018-23 regulatory period has enabled us to:

- remain agile and responsive to issues impacting the network, notably having fast access to equipment during the bushfires of 2019-20 necessary to repair and rebuild the network to limit any widespread outages, and
- keep costs down on the routine maintenance and construction items by tailoring equipment to manage multiple tasks on site.

Key projects delivered over the 2018-23 regulatory period include the purchase of a:

- 60 meter elevated work platform to enable safer maintenance and construction of network assets, and
- crane borer to replace multiple items and improve efficiency on site.

4.4. Property outcomes

In general, our Property expenditure over the 2018-23 regulatory period has been reactive and focused on efficiencies, rather than based on a long term, strategic preventative maintenance strategy designed to extend the life of the office and depot assets. We have delivered the following key outcomes:

- delivered workspaces to accommodate both office and depot based work and address priority compliance matters, including WHS requirements, and responded to minor accommodation requirements, electrical board upgrades and minor fire safety upgrade measures
- completed a 5-yearly, detailed condition assessment audit and developed resulting capex management plans for all depots and offices
- reactively addressed issues identified at each site, ranging from minor defects through to high priority WHS and compliance risks. Major property capex projects included:
    - recommended office and depot fire (compliance) upgrade works
    - ACP replacement project – as a result of a draft Council Fire Safety Order and changes to legislation, we have carried out a project to replace existing (prohibited) ACP panels on its Haymarket building, and
    - Haymarket building remediation and drainage works.

Capex on minor office and depot projects (effective asset management and replacement) throughout the regulatory period has been conservative and minimal, maintaining the functionality of the office and depots, while reflecting budgetary efficiency and the level of risk from office and depot spaces to support the network. For example, capex on external, internal and facade elements (such as repainting, replacing broken tiles, roof replacements, driveway upgrades) has typically been minimal, and/or deferred. As a result:

- some assets (for example, Waratah West), are now in poor condition and have increased WHS and operational risks, and components of the buildings are at their end of life, and
- therefore now require additional capital works to maintain safe, compliant, reliable office and depot workspaces.

5. 2023-28 Fleet, Plant and Equipment, and Property forecast and outcomes

During the 2023-28 regulatory period the key drivers of our Fleet, Plant and Equipment forecast are to maintain the suitability and safety of our current fleet. Our Fleet forecast capex is in line with what we estimate to incur over 2018-23 regulatory period, and expect a $5.0M increase for Plant and Equipment associated with major replacement.

The key drivers for our Property forecast are continuing to provide safe, compliant and productive workspaces for both office and depot-based work that support the level of activity of our network operations. We are forecasting a $7.5M increase compared with the current period expenditure (a $16.7M increase compared with the current period AER allowance) as a result of necessary capex on minor projects across our aging office and depot assets required to retain a minimal standard of safe and compliant workplaces.

5.1. Forecast Fleet, Plant and Equipment, and Property for the 2023-28 period

Table 5-1presents our forecast Fleet, Plant and Equipment, and Property capex by sub-category.

Table 5-1: Fleet, Plant and Equipment, and Property by category 2023-28 ($Million, Real 2022-23)

	2023-24	2024-25	2025-26	2026-27	2027-28	Average Annual	Total 2023-28
Fleet							
Light Commercial	6.6	6.9	6.5	6.5	6.0	6.5	**32.5**
Passenger	0.8	0.7	0.8	0.7	0.8	0.8	**3.9**
Subtotal	**7.4**	**7.6**	**7.4**	**7.3**	**6.8**	**7.3**	**36.4**
Plant and equipment							
Agricultural	-	-	-	-	-	-	**-**
Excavation	-	-	0.2	-	0.1	0.1	**0.3**
Heavy Commercial	0.7	0.3	0.4	1.3	0.5	0.6	**3.2**
Material Handling	0.7	1.2	1.2	1.2	1.1	1.1	**5.3**
Motorcycle/ATV	0.3	0.0	0.2	0.2	-	0.1	**0.6**
Plant	0.0	0.2	-	-	0.0	0.0	**0.2**
Trailer	0.2	0.6	0.4	0.2	0.8	0.4	**2.1**
Other Fleet	-	0.0	-	-	0.3	0.1	**0.3**
Subtotal	**1.8**	**2.2**	**2.4**	**2.9**	**2.8**	**2.4**	**12.2**
Property							
Buildings and property	6.5	5.8	3.8	3.8	3.0	4.6	**22.8**
Subtotal	**6.5**	**5.8**	**3.8**	**3.8**	**3.0**	**4.6**	**22.8**

	2023-24	2024-25	2025-26	2026-27	2027-28	Average Annual	Total 2023-28
Total Non-Network Other	**15.7**	**15.6**	**13.5**	**14.0**	**12.6**	**14.3**	**71.4**

We set out below what we propose to deliver over the 2023-28 regulatory period.

Fleet

During the 2023-28 regulatory period the key drivers of our Fleet forecast are to maintain the suitability and safety of our current fleet. The current strategy is to align light vehicles service life with manufacturer warranty periods. We will continue to partner with our suppliers to ensure that vehicles are maintained and costs are optimised over their life cycle. The key investments in the 2023-28 forecast include:

- providing Fleet capabilities consistent with our Motor Vehicles and Mobile Plant Renewal & Maintenance Strategy, to effectively support network operations and the delivery of major ISP transmission projects, and
- electrifying our Fleet vehicles by continuing to transition our pool car fleet to full electrical vehicles (EVs) and commence the transition of our light commercial vehicles when commercially available.

Plant and Equipment

During the 2023-28 regulatory period the key drivers of our Plant and Equipment forecast are to maintain the suitability and safety of our current Plant and Equipment. Our replacement policy is to replace like for like provided it meets our business requirements at the end of useful life. Our proposed capex over the 2023-28 regulatory period will improve our equipment utilisation in order manage our construction and maintenance costs and we plan to:

- purchase an additional 60 meter elevated work platform to replace a 46 meter unit, and
- replace two 35 meter elevated work platforms that will reach the end of life.

Property

During the 2023-28 regulatory period the key drivers for our Property forecast are continuing to provide safe, compliant and productive workspaces for both office and depot-based work that support the level of activity of our network operations. Where economically viable, we will increase energy efficiency at our offices and depots.

Our capex forecasts are based on the outcomes from an independent condition audit by Nutbrook (2020 Audits) for our office and depots, which assessed all aspects of our Property assets including the electrics, external areas and façade, internal areas, fire safety, roof condition, hydraulic and mechanical functionality of each asset. These condition audits are undertaken every five years as part of our detailed site inspection cycle, and reviewed by an independent party (Aptness) to advise on how we prioritise expenditure. The key drivers of our expenditure is the priority work identified in the independent condition audits and review to ensure that we maintain our depots to a safe and compliant standard.

The 2020 audits recommended $20.6 million[3] ($26.2 million including unbudgeted works that would need to be deferred, at least in part, from 2020-21 and 2021-22) baseline expenditure (excluding on-costs) over the

[3] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.9 (Aptness, October, 2021), CAPEX Clean Copy Tab, sum of cells P3264 to T3264.

2023-28 regulatory period. Nutbrook identified over 3,200 items requiring repair or replacement at our Haymarket office and depots. The 2020 Audits were peer reviewed by Aptness and workshopped internally at Transgrid, resulting in items being removed, deferred or otherwise managed to achieve maximum efficiencies, and reach an overall estimate of $24.4 million (including on-costs).

During the 2023-28 regulatory period the major areas that we plan to invest in for our office and depots is:

- $11.0 million (Façade $3.3 million, Internal $7.5 million, Prescribed Portion of Ultimo works $0.2 million, and Corrosion $40 thousand)[4] on internal office and depots façade works, including replacing and or repairing ceiling sub-structures, car park entry doors, walls, steel structures around lifts, common areas and amenities. The largest component planned is at the Waratah West depot (which has significant asbestos material) to complete a major refurbishment
- $5.0 million[5] on roof repairs and replacement at our six depots, of which we plan to spend almost half of this replacing the roof of the Waratah depot
- $2.7 million[6] in sustainability initiatives at our six depots including the installation of LED lights and solar PV systems where appropriate
- $1.6 million[7] on electrical work including life cycle replacement and addressing electrical non-conformances at the Orange, Wallgrove, Waratah West and Yass depots
- $1.6 million[8] replacing and repairing the air conditioning systems across the depots which have reached end of life
- $2.2 million[9] resurfacing tarmac, repairing concrete hardstand, and other external elements requiring repair, and
- $0.4 million[10] on recommended fire and hydraulic compliance works.

[4] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.9 (Aptness, October, 2021), Pivot Tab Summary cell references O29, O32, O36, O26. Values converted from Real $2021 to Real $2023.
[5] As above, cell reference O34. Value converted from Real $2021 to Real $2023.
[6] As above, cell reference O35. Value converted from Real $2021 to Real $2023.
[7] As above, cell reference O27. Value converted from Real $2021 to Real $2023.
[8] As above, cell reference O33. Value converted from Real $2021 to Real $2023.
[9] As above, cell reference O28. Value converted from Real $2021 to Real $2023.
[10] As above, cell references O30 and O31. Value converted from Real $2021 to Real $2023.

6. Fleet, Plant and Equipment governance, forecasting method, inputs and assumptions

An established, integrated and continually improving portfolio governance process is in place for Fleet, Plant and Equipment expenditure.

6.1. Our governance arrangements

The key steps to determining the need and optimal solutions for Fleet, Plant and Equipment investment are set out in the Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring) Policy document. We prepare an annual investment list which is submitted as part of the annual budget approved by the Board. The approved budget is managed via the PPM system.

For approval of Fleet, Plant and Equipment capex:

- Additional purchases require a business case addressing alternative arrangement options and benefits to servicing the network.
- For replacement of Fleet, Plant and Equipment, management approvals of a business case are required.

6.2. Asset management framework

Our Fleet, Plant and Equipment capex aims to align with asset management industry standards such as ISO 55001 and our corporate policies, frameworks and management systems.

The following documents support our Fleet, Plant and Equipment capex forecast and methodology:

- Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy
- Fleet Risk and Condition Frameworks

Key elements of these frameworks for our Fleet, Plant and Equipment expenditure are described below.

6.2.1. Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy

The Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy defines the renewal, disposal, and maintenance strategies for our motor vehicle and mobile plant fleet. In doing this it applies the overarching asset management strategy and objectives.

6.2.2. Fleet Risk and Condition Framework

The Management of Motor Vehicles and Mobile Plant policy outlines the retention thresholds we work towards to ensure we maximise the economic life of our mobile assets.

Replacement parameters may be extended or reduced depending on analysis during the life of the Motor Vehicle or Mobile Plant. Commercial Motor Vehicles of five tonne or greater capacity and Mobile Plant will be retained until the end of their economic life, taking into account current and expected utilisation. The condition, running costs, acceptable downtime and ongoing business need of such Motor Vehicles or Mobile Plant is reviewed periodically.

Typically, we retain light commercial vehicles for 5 years or 150,000kms, and passenger vehicles for 4 years or 120,000kms, whichever occurs first. Heavy commercial and plant items typically are retained for 10 and 15 years respectively.

6.3. Fleet, Plant and Equipment forecasting method

In the 2018-23 regulatory period, refinements have taken place to improve strategic procurement and efficiency of equipment being purchased. We have ensured our equipment is safe, able to meet the needs of our technicians, and perform multiple tasks maximising utilisation. Our forecast has been developed to continue to achieve these outcomes and to continue to provide value.

The Fleet forecasting method provides an understanding of the condition of the asset and expected risk cost over the expected service life. For our Fleet it includes the following steps which are provided by our fleet management organisation:

- address the needs and fit for purpose requirements with the field resource team
- confirm the current and forecast utilisation, and
- investigate other options for replacement.

The process is repeated for each asset class to form the condition and risk-based program. We adjust scope or timing of the program to incorporate potential overlap with other capex and constraints from business planning processes, to ensure deliverability and optimised outcomes.

6.3.1. Fit for purpose requirements

Business use vehicle requirements are selected based on the following criteria:

- suitability based on the vehicle's ability to perform the intended duties
- safety based on the relative safety characteristics for comparable suitable vehicles
- economics based on the least whole-of-life cost vehicle with comparable suitability and safety
- environment based on the vehicle with least environmental impact with comparable suitability and safety, and
- standardisation based on the vehicle which is in keeping with others used for similar tasks.

Business use Plant and Equipment requirements are selected based on the following criteria:

- business operational needs
- fit for purpose equipment that operates safely, and
- the least cost option between whole-of-life cost versus hiring.

6.3.2. Utilisation

We undertake rigorous utilisation criteria assessment before replacements are confirmed, to ensure timing is optimal. This includes assessing historic usage data and forecast data for vehicles, plant and equipment, to ensure the timing for replacement is optimal. This means that the retention period aligns with the economic and safe operating life-cycles.

6.3.3. Replacement strategy

We confirm that like-for-like replacement of vehicles, plant and equipment is required before making purchases on this basis.

In developing our Fleet capex forecast, our replacement strategy for our equipment is that we have:

- aligned light commercial and passenger vehicle retention and replacement to warranty periods and industry standards which are 5yrs/150,000kms for light commercial vehicles and 4 years/120,000kms for passenger vehicles
- assessed heavy commercial and plant items on utilisation and ability to be optimised for greater usage in the field. Maximising fleet utilisation is putting downward pressure on our forecast capex
- extended the equipment life where it can be safely extended by re-certification which further reduces the required level of our forecast capex, and
- replaced multiple items with a single unit that can improve operating efficiencies and reduce the overall capex.

The forecasting approach applying across the Fleet, Plant and Equipment forecasts are summarised Table 6-1.

Table 6-1: Summary of forecasting methodologies by fleet, plant and equipment asset

Fleet type	Forecasting approach
Fleet asset category:	
Agricultural	Age based (15 years)
Excavation	Age based (15 years)
Heavy Commercial	750,000kms or 15 years
Light Commercial	150,000kms or 5 years
Material Handling	12 years
Motorcycle/ATV	12 years
Passenger	120,000kms or 4 years
Plant	12 years
Trailer	15 years
Tracking units	5 years
Other Fleet	Condition based
Plant asset category	
Plant	12 years
Equipment asset category	
Auxiliary tools	Condition based

We plan to move towards hiring in of specialist equipment that is not required for emergency response or regular maintenance, rather than owning such equipment in future, as a lower cost solution for our customers. This reduces the need to purchase capex intensive plant items like heavy duty cranes that may only be required on site for a short period of time. It also avoids the need for us to service, store and eventually dispose of them. Consequently a daily rate is far more economical and will reduce our overall cost to our customers.

In developing our Plant and Equipment capex forecast, our replacement strategy for our equipment is that:

- we have the right equipment that is fit for purpose
- the equipment is utilised sufficiently, and
- the acquisition has an economic benefit.

6.4. Risk types

Economic justification of Fleet, Plant and Equipment expenditure to address an identified need is supported by risk monetised benefit streams, to allow the costs of the project or program to be assessed against the value of the avoided risks and costs.

The major risks we consider for Fleet, Plant and Equipment justifications are as follows:

- **Non-Compliance risk** – equipment is not compliant with road safety rules and cannot be used on public roads
- **Business interruption risk** – plant or equipment is not able to be used in a timely manner to respond to maintenance issues or outages
- **Operational productivity risk** – unsafe items may impact operational productivity or create health risks for staff
- **WHS risk –** equipment presents a safety risk for our employees, contractors or the public, and
- **Capital risk –** additional capex may be required to replace or repair items that have fallen beyond repair.

6.5. Risk models and tools

We commence our risk-cost assessment by utilising the findings of the items inspected/audited in the asset condition reports. In our risk modelling, we consider the prioritisations of each finding based on its condition, the associated risk type and its potential consequence. This informs the economic evaluation assessments to justify our Fleet, Plant and Equipment forecast. The process we use for risk assessment involve the following elements:

- plant and fleet equipment is assessed for condition and utilisation throughout its life. This continuous assessment enables equipment to be optimally utilised throughout the lifecycle, and
- once the equipment has reached a trigger for replacement each item is further assessed for economic viability and forecast utilisation across maintenance programs and construction programs.

6.6. Key assumptions

Clause SA6.1.1(4) of the Rules requires us to list the key assumptions that underpin our capex forecast, which are stated in Chapter 8 of our Revenue Proposal document.

6.7. Unit costs

Our Fleet, Plant and Equipment forecast comprises unitised programs forecast using standardised unit rates.

6.7.1. Unitised programs

We forecast the costs of unitised programs by multiplying volumes by unit rates which are based on:

- our historical costs with movement in unit costs determined from most recent costs, and
- contract unit rates from our service providers.

We undertake competitive tendering of all our fleet purchases and have derived significant value through this procurement approach over the 2018-23 regulatory period. We have leveraged the supply chain by aggregating our orders to suppliers offering the best value. This has been a successful approach ensuring we receive the maximum value on offer. This has enabled us to negotiate additional discounts above the standard national fleet discounts. For our Fleet, we then asked our current service provider, SG Fleet, to approach the dealer network to tender out our volume of orders to obtain additional discounts previously unrealised.

The capital cost of motor vehicles and mobile plant (including accessories) are then further negotiated and agreed during procurement with the manufacturers, vehicle dealers and accessory providers, based on the volume of orders, to obtain best value and drive cost efficiency on vehicles and plant items we purchase.

SG Fleet manages the purchase and delivery of our vehicles and equipment including safety inspection and system setup. The purchase cost of the vehicle is charged to us, with SG Fleet receiving no mark-up. Rather, SG Fleet charges us a fixed fee to cover safety inspection and system setup costs.

Individual vehicles are ordered in accordance with our Management of Motor Vehicles and Mobile Plant procedure with management approval. New vehicles are only sourced if there are no suitable vehicles available in our existing inventory. Purchases of new and replacement vehicles are closely scrutinised to ensure each item requested meets a prudent business need. Each replacement request is required to meet a minimum standard for mileage driven per year.[11] Anything that falls short of the 15,000km per year threshold requires a business case to replace.

[11] Some emergency response items have low kilometers given that they are only needed in an emergency or for on call.

7. Property governance, forecasting method, inputs and assumptions

This chapter explains our regulatory obligations, our asset management framework, our capital governance arrangements that we have applied to develop our Property capex forecast.

7.1. Introduction

We do not make an investment unless the investment delivers demonstrable customer benefit or is needed to meet a statutory obligation or WHS requirement. These benefits are assessed through the risk and condition framework.

For Non-network Property assets, net present value and future costs of risks are key considerations, however expenditure is based on achieving the overarching non-network property objectives or drivers, discussed in chapter 2. The office and depot facility assets do not form part of our network assets, but they do provide all the necessary support functions and materials that are required to build, operate, monitor, and maintain the network assets. These facilities provide office accommodation for our staff, and consequently the additional business drivers and objectives relate to human resources and team functionality that influence decisions made in relation to office and depot facilities.

For example, ongoing capital investments are required to fulfil statutory or regulatory obligations, such as complying with the NSW Fire Safety Standards. In these cases, technical justification becomes the main driver as to whether an investment is required, supported by robust technical planning. Notwithstanding this, these investments are also subject to tests of economic efficiency, with any proposed solution to address a need being the least-lifecycle cost and most technically effective solution.

7.2. Our governance arrangements

An established, integrated and continually improving portfolio governance process is in place for Property expenditure. Our property capex must pass through an internal decision gate approval prior to project commencement and delivery as part of our investment governance. We prepare an annual investment list which is submitted as part of the annual budget approved by the Board. The approved budget is managed via the PPM system.

Our Non-network Property Capex Procedure sets out the governance process for capital investment into non-network property (office & depot) assets.

7.3. Asset management framework

Our Property capex aims to align with asset management industry standards such as ISO 55001 and our corporate policies, frameworks and management systems.

The following documents support our Property capex forecast and methodology:

- Non-network Property Renewal and Maintenance Strategy
- Property Risk and Condition Frameworks.

Key elements of these frameworks for our Property expenditure are described below.

7.3.1. Non-network Property Renewal & Maintenance Strategy

The Non-network Property Renewal & Maintenance Strategy defines the renewal, maintenance and disposal strategies for our office and depot assets. This document applies our overarching asset management strategy and objectives.

This document identifies the emerging requirements with our office and depot assets and details the renewal and maintenance initiatives to be implemented in response to these relevant issues.

The objectives of the Strategy are to:

- maintain safe, compliant, and reliable workplaces for employees
- provide effective property asset management over the life of the asset, and
- manage cost versus risk and asset performance of the assets on a like-for-like basis.

Depot asset capex is expenditure for replacements and repairs undertaken on demand or on a planned cyclic basis resulting in:

- an increase in the asset's useful function or service capacity
- an extension of its useful life
- an improvement to the quality of the asset's services
- a reduction in future operating costs, and
- the upgrade or enhancement becoming an integral part of the asset.

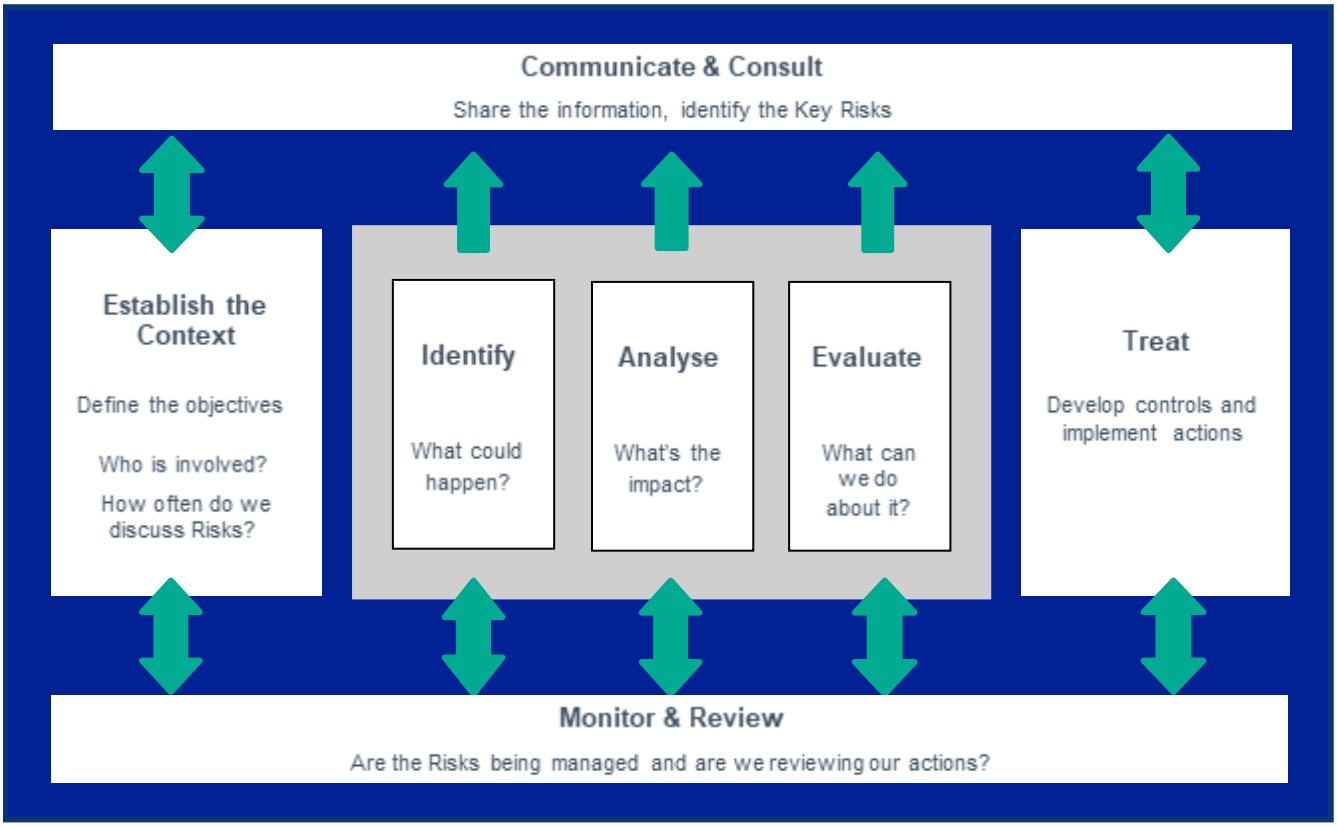
7.3.2. Property Risk and Condition Framework

As per the Risk Management Framework, Property follows the risk management process:

- Establish the context
- Identify risks
- Analyse risks
- Current risk rating
- Evaluate risks
- Treat risks
- Monitor and review
- Communicate and consult.

Figure 7-1 shows our property risk management process.

Figure 7-1: Property risk management process



Capital works of Property are justified under established principles and guidelines of the Risk Management Framework based on evaluation of reports undertaken by independent experts.

Our Property Risk and Condition Framework involves undertaking five-yearly condition audits of each of our depots and offices by an independent engineering consultant, which forms the basis for our Property capex plan.

The condition audit recommendations are then reviewed against our business objectives with priority given to Priority 1 WHS and potential non-compliance risks. We then consider how we can defer any expenditure where asset failure should not normally pose immediate risk to the building or occupants. We generally appoint an independent expert to peer review the audits.

In addition, a small amount of capex is allocated each year for minor capital works, which arise and are prioritised throughout the year (for example, change to accommodation requirements for a growing team).

7.4. Property forecasting method

The Property forecasting method applies risk based condition assessment for each property to understand the condition of each asset and the expected risk cost over the expected service life. It includes the following steps:

- 5 yearly conditions assessments are completed across the office and depots to set 5 or 10 year capex plans
- review and prioritisation of recommendations in 5-yearly conditions assessments against operational, accommodation and budgetary requirements of the business

- annual review and prioritisation of business unit requests for upgrades, improvements, and other minor capital projects related to the office and depots against business objectives in accordance with the Non-network Property Capex Procedure
- annual prioritisation of capex requirements across the office and depots, and proposal for budget to cover those requirements in accordance with the Non-network Property Capex Procedure
- annual capex plans are then set according to the capex allocation obtained
- Needs and Options Screening Assessments (NOSA) (incorporating options evaluation) completed for each office and depot capex project, approved according to the Financial Authorities Procedure
- Project Approval Documentation (PAD) then completed and handed over for delivery of works, and
- Project Completion Report approved once project completed.

The process is repeated for each project at each site to form the condition and risk-based program. We adjust scope or timing of the program to incorporate potential overlap with other capital expenditures and constraints from business planning processes, to ensure deliverability and optimised outcomes.

The assumptions applying across the Property capex forecast over the 2023-28 regulatory period are:

- We will retain our existing non-network office and depot assets, with expenditure driven by the need to maintain them to a safe, compliant standard for a productive workforce, and based on independent condition assessment and prioritisation.
- We expect our workforce and existing office/depot (including workshops and warehouses) use to remain steady due to the need to deliver major ISP projects in the NEM (noting that any requirement for office assets specific to projects will be delivered by those projects).
- We need to remain responsive to the impact of COVID-19 assuming that remote working will decline over time as the vaccination rollout progresses.
- Sustainability measures will be adopted where they are economically viable.

7.4.1. Step 1 - 2020 Audit Reports

In late 2020, as part of our five-yearly detailed site inspection cycle, we engaged Nutbrook Engineering to carry out condition audits (2020 Audits) for each asset based on:

- visual inspections/audit of buildings - condition, form of construction, facades, roofs, lifts, roads, fencing, and general state of repair
- fire safety, BCA compliance, building services
- sustainability/ecologically sustainable development recommendations, and
- estimated costs for repair to maintain safe place of work.

In the 2020 Nutbrook Audits, Nutbrook assessed the risks and the condition of our office and depots against the risk types set out in Table 7-1.

Table 7-1: 2020 Nutbrook Engineering conditions audit risk assessment

Risk type*	Nutbrook definition
Non-compliance statutory	Item is not compliant with BCA and retroactive rectification is required due to legislation or council orders

Risk type*	Nutbrook definition
Non-compliance – business risk	Item is not compliant with BCA however there is no retroactive obligation to achieve compliance. Despite this, Nutbrook believes the item presents sufficient risk (safety or business interruption) that it should be addressed
Operational risk	Unaddressed items may impact operational productivity or create health risks for staff
WH&S Risk	Item presents a safety risk
Capital risk	Capex may be required to address item
Site improvements	Item is discretionary and aimed at improving asset

* Note: See section 2.2.2 – compliance with current BCA standards is not required retrospectively, only in instances such as an upgrade, change of use or alteration.

Nutbrook assigned the following priority grades to each property item over a 10 year period 2022-31 using the risks and priorities outlined in Table 7-2.

Table 7-2: Property Risk Assessment

The following priority grades are recommended in the context of a 10 year planning period	
Priority 1	Urgent work that will prevent closure of premises and / or address an immediate high risk to the health and safety of occupants and / or remedy a serious breach of legislation or cause major defects if not attended to
Priority 2	Essential work required that will prevent serious deterioration of the fabric or services and / or address a medium risk to the health and safety of occupants and / or remedy a less serious breach of legislation
Priority 3	Desirable work required that will prevent deterioration of the fabric or services and / or address a medium risk to the health and safety of occupants and / or remedy a minor breach of legislation or add aesthetic value to the asset
Priority 4	Long term work required that will prevent deterioration of the fabric or services or would benefit the asset but are in areas not used on a regular basis

The 2020 Audits made recommendations[12] over a 10-year period, based on the risk types and priority grades set out in Table 7-2 above, and have itemised the different building elements, their condition, priority of works and year at which the works require undertaking. The types of work are split into three main categories:

- building structure and fabric capex
- building services capex, and
- sustainability.

Our seven depots and offices range in size, age and condition. The 2020 Audits estimate the costs that are required to continue to maintain the assets in a condition and standard required to fulfil their use and role,

[12] Nutbrook Building Condition Review and Capex Plans – Orange, Tamworth, Newcastle, Yass, Wallgrove, Wagga Wagga, and Haymarket (Nutbrook, 4 December 2020).

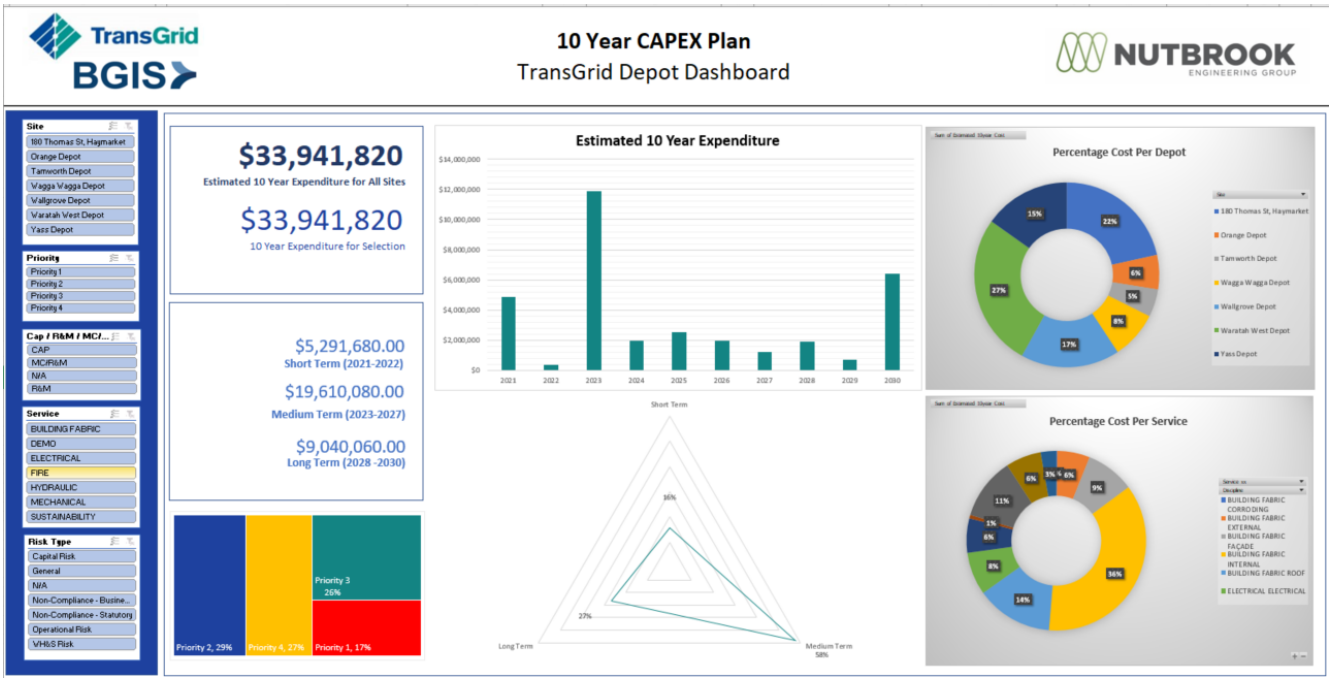
and meet regulatory obligations. None of the forecast costs include upgrades or improvements to the assets but are focussed on maintenance or replacement of building elements and services, in addition to sustainability recommendations. The 2020 Audits were prepared (and assets all physically inspected by competent engineers) detailing what works are required. Where items and costs have been identified, these are prioritised using our priority table and risk rating tool and allocated into the year according to those tools.

The 2020 Audits recommended:

- over 3,000 separate line items of recommended actions, and
- a total of about $24.9 million[13] ($Real 2021 baseline capex from 2021-22 to 2027-28 across all priority and risk items), to maintain the office and depots.

Figure 7-2 sets out Nutbrook's recommendations.

Figure 7-2: Nutbrook 2020 condition assessment audits recommendations[14]



We note that if the next condition assessments in 2025 identify further issues to be addressed, we may need to increase our Property related capex in the later years of the 2023-28 regulatory period above what we are proposing for the 2023-28 period.

7.4.2. Step 2 – Independent Peer Review of 2020 Audits

Taking into account budgetary constraints and efficiency drivers, we appointed Aptness to complete an independent peer review of the 2020 Audits.

[13] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.9 (Aptness, October, 2021), CAPEX clean copy, cell references N3264, O3264, P3264, Q3264, R3264, S3264, T3264.
[14] Augmented Dilapidation Report, EB110 Capex – Office & Depots (Nutbrook, Dec 2020).

Aptness's[15] approach to reviewing Nutbrook's recommendations was to:

- review the audit recommendations and identify items that can be reasonably considered for delay where asset failure should not normally pose immediate risk to the building or occupants, or for bringing forward to reduce risk or provide benefits to us (including the 2020-21 to 2022-23 unbudgeted items)
- provide justification for each recommendation
- identify assets of a similar nature and analysis results to create collective elements that could form capital programs to provide consistent and efficient results across the portfolio of properties
- identify programs to be re-assigned to a financial year that could support a more consistent spend year on year, as well as support achievable annual delivery programme of works for the project delivery teams
- reallocate programs to appropriate financial years within the next regulatory period
- desktop audit of the property's Asbestos registers to find opportunities to delay remediation or added additional recommendations to the capex program, and
- identify sustainability initiatives (such as LED lights) that could create costs savings for us and be brought forward to allow us to benefit from the cost savings earlier.

7.4.3. Step 3 - Aptness and Transgrid workshop

Aptness and our internal property facilities team then workshopped the Aptness Peer Review to sense check the Aptness recommendations, based on knowledge and experience of the assets.

In general, it was determined that:

- Priority 1 (P1) non-compliance and WHS fire safety and electrical recommendations should be addressed in the recommended year (including previously unbudgeted spend in 2021-22 and 2022-23)
- lower risk facade, internal and external recommendations could be bundled for efficient delivery of projects, and undertaken on a site by site basis per year, instead of annually across the entire portfolio
- a number of other items were recommended for deferral or extraction, for example:
    - asbestos (other than P1 asbestos recommendations) will be controlled until Friable rather than removed, in accordance with our Asbestos Management Plan and procedures.
    - concrete hardstands and roads renewal will be deferred, with patch and repair works occurring instead.

Table 7-3 includes the capex forecast for the 2023-28 regulatory period recommended by Aptness[16] (not including labour and on-costs), which is the basis of our Property capex forecast.

Table 7-3: Preliminary Aptness recommended Property capex budget 2023-28 ($Million, Real 2020-21)

Property forecast	2023-24	2024-25	2025-26	2026-27	2027-28
Corrosion	0.02	-	0.01	-	-
Electrical	0.45	0.31	0.11	0.08	0.21

[15] Transgrid Revenue Reset Analysis Peer Review (Aptness, 30 July 2021).
[16] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.5 (Aptness, July, 2021).

Property forecast	2023-24	2024-25	2025-26	2026-27	2027-28
External	0.56	0.34	0.32	0.32	0.02
Façade	0.90	0.44	0.40	0.29	0.29
Fire	0.07	0.02	0.02	0.02	0.03
Hydraulic	0.04	0.00	0.02	0.01	0.02
Internal	1.66	2.15	0.87	0.11	0.49
Mechanical	0.04	0.02	0.20	0.82	0.03
Roof	0.16	0.19	0.88	1.18	1.10
Sustainability	0.95	0.84	0.04	-	0.05
Total	**4.87**	**4.33**	**2.86**	**2.82**	**2.24**

The Aptness review recommended total capex for Non-network Property (excluding other on-costs/overheads) at $17.1 million (Real $2021).[17]

7.4.4. Step 4 – Further Aptness Review

Taking into account further feedback from us, a challenge to find additional efficiencies, and to assess an appropriate percentage of on-costs, we carried out a further review with Aptness.[18]

The further review assessed the Nutbrook Audit Report recommended allowance for additional costs that should be included in assessment of baseline costs provided. In summary, Nutbrook (and outsource provider BGIS) recommended an allowance for additional on-costs as follows:

- 35% Builders margin
- 10% GST
- 12% BGIS management fees
- 18% Preliminaries
- 15% Mark-up
- 5% Year on Year increase as indicated by BGIS
- Design fees for larger/complex works
- TOTAL: minimum of 95% increase on baseline costs for allowance of additional on-costs.

We determined (supported by Aptness), that an allowance of 35% (rather than 95%) was justifiable, and efficiencies would need to be found where required. In addition, 34% of prescribed common area costs for

[17] As above, Pivot Tab, cells G17, I17, K17, M17, O17.
[18] Transgrid Revenue Reset Analysis Nutbrook Disclaimer Review (Aptness, 14 September 2021).

Ultimo, which should have previously been included, were identified, resulting in a total Property forecast of $23.3 million[19] (Real $2021) over 2023-28 regulatory period.

Table 7-4 sets out the updated capex forecast for 2023-28 regulatory period recommended by Aptness[20] (including labour and on-costs), which is the basis of our Property capex forecast.

Table 7-4: Aptness recommended Property capex budget 2023-28 ($Million, Real 2020-21)

Property forecast	2023-24	2024-25	2025-26	2026-27	2027-28
Corrosion	0.02	-	0.01	-	-
Electrical	0.45	0.31	0.11	0.08	0.21
External	0.56	0.34	0.32	0.32	0.02
Façade	0.90	0.44	0.40	0.29	0.29
Fire	0.07	0.02	0.02	0.02	0.03
Hydraulic	0.04	0.00	0.02	0.01	0.02
Internal	1.66	2.15	0.87	0.11	0.49
Mechanical	0.04	0.02	0.20	0.82	0.03
Roof	0.16	0.19	0.88	1.18	1.10
Sustainability	0.95	0.84	0.04	-	0.05
Ultimo	0.00	0.03	0.06	0.03	0.00
Base total	**4.87**	**4.36**	**2.91**	**2.85**	**2.25**
Total with 35% delivery cost added	**6.57**	**5.88**	**3.94**	**3.85**	**3.03**

As noted in the Aptness 14 September 2021 Review, where the audit minor repair and maintenance recommendations are consistently delayed over time, opex is expected to increase year on year as asset conditions worsen or fail.

7.5. Risk models and tools

As set out in sections 7.4 and 7.4.2, our risk assessment is based on the 2020 Audits prepared by Nutbrook for each site to capture priorities and risks associated with the office and depot assets. The Nutbrook condition reports identify a range of capital works required based on these risks and priorities.

The recommendations are then assessed against our risk framework and business objectives.

[19] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.9 (Aptness, October, 2021), Pivot Tab, cell reference O21.
[20] Augmented Dilapidation Report, EB110 Capex – Office & Depots Aptness 2.9 (Aptness, October, 2021).

7.6. Risk types

The major risks we consider for Property justifications are as follows:

- **Non-Compliance risk** – an item is not compliant with BCA (where applicable), changes to regulations (e.g. ACP non-compliance) or fire safety standards, and retroactive rectification is recommended
- **Business Interruption risk** – an item is not compliant with BCA however there is no retroactive obligation to achieve compliance. Despite this, the item presents sufficient risk that it should be addressed
- **Operational Productivity risk** – unaddressed items may impact operational productivity or create health risks for staff
- **WHS risk** – an item presents a safety risk for our employees, contractors or the public
- **Capital risk** – unplanned additional capex may be required to address items if they remain unaddressed.

7.7. Key assumptions

Clause SA6.1.1(4) of the Rules requires us to list the key assumptions that underpin our capex forecast, which are stated in Chapter 8 of our Revenue Proposal document.

7.8. Unit costs

Our Property forecast comprises non-unitised projects which are individually costed projects based on independent estimates. We build up our Property costs on a specific project-by-project basis. We generate a detailed scope of works which is compiled with itemised cost elements using external expert estimates. The estimates incorporate cost factors to determine the internal labour support requirements and construction costs.

The outputs of this feed directly into our capex forecast which is included in our Revenue Proposal.

8. Cost escalation, overheads and validation of our forecasts

This chapter explains the cost escalation we have applied to our Non-network Other capex forecasts, and the level of overheads we expect to recover through Non-network Other capex over the 2023-28 regulatory period. We discuss opex-capex substitution opportunities and our internal and external validation approaches.

8.1. Cost escalation

The costs we incur in delivering transmission services do not always increase in line with the basket of goods and services used by the Australian Bureau of Statistics (ABS) to calculate the consumer price index (CPI).

Therefore, in order to ensure that we are compensated for appropriate real cost increases that we will incur in acquiring the inputs necessary to provide services, we have engaged an external economic consultant BIS Oxford Economics to forecast real increases in the cost of labour that we expect to incur during the 2023-2028 regulatory period.

These cost escalators have been applied to our capex forecasts using appropriate weightings based on an estimated use of internal and contracted labour services to deliver work programs. While our Fleet, Plant and Equipment, and Property capex forecasts include the impact of cost escalation, our analysis in preparing the forecasts is conducted without the effect of cost escalation.

For example, the detailed analysis is conducted exclusive of cost escalators for the 2023-28 regulatory period. To assist the AER, however, each of the Capital Expenditure Explanatory Statements includes a reconciliation table showing the escalated forecasts submitted in the Reset RIN templates. The table below shows the aggregate impact of the cost escalators on our Fleet, Plant and Equipment, and Property capex forecast for the 2023-28 regulatory period.

Table 8-1: Impact of labour and materials escalation ($Million, Real 2022-23)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Total un-escalated Fleet, Property, Plant and Equipment	15.7	15.6	13.5	14.0	12.6	71.4
Escalation for material and labour	(0.0)	0.0	0.0	0.0	0.0	0.0
Total Fleet, Property, Plant and Equipment	**15.7**	**15.6**	**13.5**	**14.0**	**12.6**	**71.4**

Further details regarding our cost escalators are provided in the supporting document titled “BIS Oxford Economics - Labour Cost Escalation Forecast to 2027-28”.

8.2. Overheads

Overhead activities, such as corporate support, are needed to support Non-network Other. The costs of those activities are capitalised in accordance with our Capitalisation Policy[21] and relevant accounting standards, including AASB 116.

[21] Expenditure Capitalisation Procedure, Transgrid, 2018.

Capitalised overheads are split between network and corporate overheads, consistent with the AER's RIN definitions. We have forecast our overhead costs using the AER's default approach based on:

- 75 per cent of capitalised overheads are fixed based on the most recent available year of actual capex (i.e. 2021-22), and
- 25 per cent of capitalised overheads vary with direct capex.[22]

The capitalised overhead forecast related to Fleet, Plant and Equipment, and Property is set out below. As shown in the table, changes to total escalated Non-network Other from one year to the next affects the level of capitalised overheads allocated to Non-network Other.

Table 8-2: Addition of capitalised overheads ($Million, Real 2022-23)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Total escalated Non-network Other	15.7	15.6	13.5	14.0	12.6	71.4
Capitalised network overheads	-	-	-	-	-	-
Capitalised corporate overheads	0.3	0.3	0.2	0.3	0.2	1.3
Total escalated Non-network Other with overheads	**16.0**	**15.9**	**13.8**	**14.2**	**12.8**	**72.7**

Capitalised overheads are forecast within our "2023-28 Capital Expenditure Model".

8.3. Capex-opex substitution

Opex-capex substitution opportunities are assessed at the project and program justification level, not at the portfolio level.

For our Fleet, cost analysis of leasing suitable fleet equipment is reviewed periodically for benchmarking and feasibility. Similarly, large plant items such as cranes and elevated work platforms are assessed on utilisation frequently. If the business case for the replacement or retention of an item doesn't meet economic thresholds we may turn to hiring in some of these items (opex). Specialty items such as large cranes used for construction projects can be hired in by the hour, day or week.

8.4. Validation

8.4.1. Internal validation

We validate our bottom-up build of Fleet capex forecasts by:

- using equipment utilisation figures to verify the required need
- engaging with the business units using the equipment to validate the need. If the needs can't be justified to purchase the equipment we consider if hiring is a suitable alternative, and
- historical expenditure trending – we consider our forecast spend against historic trends. Where there is a material difference we confirm the needs and evaluate the alternatives.

[22] This approach was adopted by the AER in its April 2021 decisions for the Victorian electricity distribution networks.

Given the relatively small size of our Plant and Equipment capex spend, we validate our forecasts primarily by considering our forecast spend against historic trends. Where there is a material difference we consult with our external fleet management organisation and adjust forecasts according to industry trends and market insights.

For our Property capex forecasts, estimates are provided by external experts as part of the 5-yearly audits, then independently peer reviewed. Prior to carrying out the actual work, quotes are reviewed and validated internally by:

- quotes are obtained according to our procurement process
- our specialist facilities team review quotes prior to creating a Needs Statement
- the Needs Statement goes through an internal governance process, and is reviewed and approved by senior leaders according to the delegated authority procedure, and
- for significant items of non-network property expenditure (for example, the ACP removal project estimated at $2.7 million) additional review and approval was provided by the Executive.

8.4.2. External validation

We engage external independent consultants to verify and validate our processes and forecasts:

- **Fleet, plant and equipment** – SG Fleet provide fleet management services to us which includes continuous process improvements and forecast tools.
- **Property** – As set out in chapter 7, our approach is:
    - We obtain property audits by an independent consultant. The 2020 Audits were undertaken by Nutbrook – known as the Nutbrook reports – to identify and budget property condition, compliance and recommendation actions.
    - The Nutbrook reports were then peer reviewed by an external independent consultant, Aptness.
    - We consider how we can defer any expenditure where asset failure should not normally pose immediate risk to the building or occupants (we generally engage independent advice).
    - The analysis has identified and grouped works of a similar nature that are considered as similar in type and appropriateness for managing the risk until capital works are undertaken as specific category Capex Delivery Programs. The Capex Delivery Programs have then been assigned to a year for delivery that prioritises items that has been identified as requirement attention first and what could be appropriately deferred, addressing high risk items sooner within the program. The programs and allocation of year for capex have been presented to the Property Facilities Management Supplier to provide feedback or concerns as part of the evaluation consultation.

8.5. Addressing uncertainty in investment requirements

Uncertainty is inherent in any forecast and our Fleet, Plant and Equipment, and Property forecasts are no different. To avoid adding additional risk-costs to our projected expenditure requirements, our forecasting approach addresses uncertainty through several mechanisms to ensure that we do not overestimate our expenditure requirements. These include:

- **Fleet, Plant and Equipment** – as set out in chapter 6, our forecasting method is based around understanding of the condition of the asset and expected risk cost over the expected service life. We ensure that like-for-like replacement of equipment is confirmed to be required before making purchases

and our costs are based on contract unit rates from our service providers, or in the case of non-unitised items we tailor cost estimates.

- **Property** – as set out in chapter 7, our forecasting method involves seeking independent condition audit recommendations which we then consider how we can defer any expenditure where asset failure should not normally pose immediate risk to the building or occupants.

9. Forecast expenditure by RIN category

Table 9-1 below lists each RIN category, the relevant supporting document, and the forecast capex over the 2023-28 regulatory period. Attachments 1 to 4 provide a high level explanation of the forecast expenditure for each Fleet, Plant and Equipment and Property category respectively.

Table 9-1: Total escalated capex forecasts by RIN category

	Cross reference to supporting documents	Expenditure forecast ($M, real 2022-23)	Percentage of Fleet and Property
Fleet			
Light Commercial	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy	32.5	45.5%
Passenger		3.9	5.5%
Sub-total		**36.4**	**51.0%**
Plant and equipment			
Agricultural	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy	-	-
Excavation		0.3	0.4%
Heavy Commercial		3.2	4.5%
Material Handling		5.3	7.5%
Motorcycle/ATV		0.6	0.9%
Plant		0.2	0.3%
Trailer		2.1	3.0%
Other		0.3	0.5%
Sub-total		**12.2**	**17.1%**
Property			
Buildings and property		22.8	31.9%
Sub-total		**22.8**	**31.9%**
Total		**71.4**	**100.0%**

Attachment 1 – Supporting documentation

The following documents support our Fleet Non-network Other and Property submission for the 2023-28 regulatory period.

Policies, Strategies and Plans

- Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy
- Non-network Property Renewal & Maintenance Strategy
- Non-network Property Capex Procedure

Business cases (justifications supporting forecast Fleet, Plant and Equipment)

- Aptness - Transgrid Revenue Reset Analysis peer review
- Aptness - Transgrid Revenue Reset Nutbrook Disclaimer Review
- Nutbrook - Orange Depot Building Condition Review and Capex Plan
- Nutbrook - Tamworth Depot Building Condition Review and Capex Plan
- Nutbrook - Yass Depot Building Condition Review and Capex Plan
- Nutbrook - Wallgrove Depot Building Condition Review and Capex Plan
- Nutbrook - Ultimo Building Condition Review and Capex Plan
- Nutbrook - Waratah West Depot Building Condition Review and Capex Plan
- Nutbrook - Wagga Wagga Depot Building Condition Review and Capex Plan

Attachment 2 - 2023-28 Fleet summary

Light Commercial

Light Commercial	
Asset description	Utilities and Vans
Deliverables	Primarily used to transport personnel, tools and equipment to sites. Also used to tow smaller plant items to sites for access to the network infrastructure
Objectives	Safe, timely transportation with the ability to access challenging sites
Main drivers of expenditure	Upfront equipment builds to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $32,525,055
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Safe and agile transportation to network sites for front line staff
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Passenger

Passenger	
Asset description	Sedans, SUV and Wagons
Deliverables	Primarily used to transport personnel, tools and equipment to sites
Objectives	Safe, environmentally sustainable transportation with the ability to access challenging sites to enable
Main drivers of expenditure	Upfront equipment purchase to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $3,897,796

Passenger	
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Safe and agile transportation to network sites for front line and support staff
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Attachment 3 - 2023-28 Plant and Equipment summary

Excavation

Excavation	
Asset description	Dozers, Excavators and Wheel loaders
Deliverables	Ready sites for construction or maintenance work
Objectives	To be readily available for emergency maintenance work, planned maintenance work and construction projects
Main drivers of expenditure	Upfront equipment build to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $278,414
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Versatile construction equipment that have a long lifecycle and can be used on multiple projects ensuring continuity and efficient project cost
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Heavy Commercial

Heavy Commercial	
Asset description	Semi and Heavy Rigid trucks
Deliverables	Move equipment and parts to site
Objectives	These units are used to transport in-stock items to substations and construction sites. They are also used to aid in equipment replacement process by using attached cranes to facilitate replacements
Main drivers of expenditure	Upfront equipment build to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)

Heavy Commercial	
Forecast expenditure	Forecast 2023-28 $3,235,906
Principal reasons for proposed expenditure	Transportation of essential equipment to sites (including Substations and construction sites)
Validation	Forecast maintenance and construction program requirements
Benefits	Versatile construction equipment that have a long lifecycle and can be used on multiple projects ensuring continuity and efficient project cost
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Material Handling

Material Handling	
Asset description	Elevated Work Platforms, Cranes and Forklifts
Deliverables	Enable personnel safe access to the network and move equipment around sites
Objectives	These units are used to access power lines, towers, substations and to move stock around sites. They are also used to aid in equipment replacement process aiding replacement process
Main drivers of expenditure	Upfront equipment build to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $5,331,890
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Enables safe and reliable network access
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Motorcycle/ATV

Motorcycle/ATV	
Asset description	Quad bike, Side by Side All Terrain Vehicles (ATV)
Deliverables	Allow low impact site transportation to minimise environmental impact
Objectives	ATV's are used to transport equipment and technicians on land that is vulnerable to heavy equipment movements
Main drivers of expenditure	Upfront equipment builds to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $639,827
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Ensure low impact site access to minimise environmental damage to vulnerable areas
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Plant

Plant	
Asset description	Winches, equipment attachments and Compressors
Deliverables	Task specific equipment used in the construction and maintenance of the network
Objectives	To safely and effectively manage civil requirements on network asset sites
Main drivers of expenditure	Life cycle replacement
Expenditure forecasting methodology	Forecast maintenance and construction program requirements
Forecast expenditure	Forecast 2023-28 $220,630
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements

Plant	
Benefits	Agile and cost effective response to civil works for both construction and maintenance works on the network
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Trailers

Trailers	
Asset description	Equipment trailers, Plant trailers and Emergency response trailers
Deliverables	To move large items like Cable drums, test equipment and oil filtration units
Objectives	To move large or bulky items to network sites safely
Main drivers of expenditure	Upfront equipment purchase to specification
Expenditure forecasting methodology	Asset replacement criteria (lifecycle, needs and utilisation)
Forecast expenditure	Forecast 2023-28 $2,145,363
Principal reasons for proposed expenditure	Life cycle replacement
Validation	Forecast maintenance and construction program requirements
Benefits	Ability to move items on short notice and keeping downward pressure on transportation and delivery costs
Procurement	Specification driven process and using Fleet management partner to obtain best market pricing after negotiations with manufacturers has been completed
Supporting documents and Model	Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy Management of Motor Vehicles and Mobile Plant (including Mobile Plant and Vehicle Monitoring Policy)

Attachment 4 - 2023-28 Property Summary

Haymarket Office

Haymarket Office	
Asset description	A 9-storey office building above the existing Metro Grid substation, 3 stories are used by Transgrid and accommodating about 320 FTE and features two cafes at street front with the Haymarket Substation underneath the building at basement level.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.
Objectives	Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.
Main drivers of expenditure	To ensure property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand. In the short term, urgent repairs are required to rectify significant corrosion found in the Level 9 plant room. Over the medium term, required upgrades to electrical and fire equipment have been identified. The majority of the anticipated expenditure is for maintenance of the building fabric necessary for completion in the long term (deferred to post 2028).
Expenditure forecasting methodology	Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.
Historic and forecast expenditure (including overheads)	
Principal reasons for proposed expenditure	To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations. Where practicable, increased energy efficiency at our offices and depots. The majority of works are fabric or services that have been deferred and packaged to be completed in the long term (2028-30), to prevent deterioration.
Validation	Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending. External validation engaging external independent consultants to verify and validate our processes and forecasts.
Benefits	• Safety and compliance • Effective asset management

$Million, real 2022-23	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Haymarket Office	0.04	0.02	1.17	5.52	-	0.01	0.04	0.08	0.04	0.02

Haymarket Office	
	• Delivering value to our customers • Leading with sustainability Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.
Procurement	Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021

Wallgrove Depot

Wallgrove Depot	
Asset description	Site comprising circa 10 buildings constructed from between 1965 – 2014 and accommodating about 290 FTE.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.
Objectives	Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.
Main drivers of expenditure	To ensure property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand. The majority of recommended works for remediation of aging office buildings and mechanical plant have been deferred or extracted, taking into account current proposed use. We propose to replace the workshop HVAC.
Expenditure forecasting methodology	Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.
Historic and forecast expenditure (including overheads)	
Principal reasons for proposed expenditure	To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations.

$Million, real 2022-23	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Wallgrove Depot	-	0.10	0.26	-	2.02	0.44	3.92	0.34	1.53	0.11

Wallgrove Depot	
	Where practicable, we are seeking increased energy efficiency at our offices and depots.
Validation	Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending. External validation engaging external independent consultants to verify and validate our processes and forecasts.
Benefits	• Safety and compliance • Effective asset management • Delivering value to our customers • Leading with sustainability Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.
Procurement	Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021

Orange Depot

Orange Depot	
Asset description	Site comprising 3 buildings ranging in construction type and age and constructed from circa 2000 onwards and accommodating about 40 FTE.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.
Objectives	Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.
Main drivers of expenditure	To ensure property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand. Repairs and upgrades to the building fabric account for most (66%) of the forecast expenditure. These include repairs and upgrades to the roof to prevent leakage, aesthetic interior upgrades, and upgrades to security infrastructure. Sustainability upgrades for energy efficiency including lighting upgrades are the next greatest expenditure item (14%).

<table>
<tr><th>Orange Depot</th><th></th></tr>
<tr><td>Expenditure forecasting methodology</td><td>Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.</td></tr>
<tr><td>Historic and forecast expenditure (including overheads)</td><td>
<table>
<tr><th>$Million, real 2022-23</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th><th>FY23</th><th>FY24</th><th>FY25</th><th>FY26</th><th>FY27</th><th>FY28</th></tr>
<tr><td>Orange Depot</td><td>-</td><td>-</td><td>-</td><td>1.01</td><td>1.01</td><td>0.12</td><td>0.21</td><td>0.08</td><td>0.44</td><td>1.15</td></tr>
</table>
</td></tr>
<tr><td>Principal reasons for proposed expenditure</td><td>To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations.

Where practicable, we are seeking increased energy efficiency at our offices and depots. We propose to replace the internal fit out items due to end of life during the 2023-28 regulatory period.</td></tr>
<tr><td>Validation</td><td>Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending.

External validation engaging external independent consultants to verify and validate our processes and forecasts.</td></tr>
<tr><td>Benefits</td><td>• Safety and compliance
• Effective asset management
• Delivering value to our customers
• Leading with sustainability
Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.</td></tr>
<tr><td>Procurement</td><td>Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.</td></tr>
<tr><td>Supporting documents and Model</td><td>Non-network Property Renewal and Maintenance Strategy

Nutbrook Building Condition Review and Capex Plan

Aptness Reviews July and September 2021</td></tr>
</table>

Wagga Wagga Depot

Wagga Depot	
Asset description	Site comprising 3 buildings constructed in the 1960's and 1970's and accommodating about 56 FTE.

<table>
<tr><th>Wagga Depot</th><th></th></tr>
<tr><td>Deliverables</td><td>Deliver safe, compliant office and depot facilities via an effective asset management strategy.</td></tr>
<tr><td>Objectives</td><td>Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.</td></tr>
<tr><td>Main drivers of expenditure</td><td>To ensure Property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand.

A large amount of building fabric aspects are in poor condition and need repairs and/or replacement in the medium term due to end of life. Mechanical plant equipment, predominantly external HVAC, need either repair in the short term or replacement due to obsolescence. Electrical equipment is also in need of short term repair and/or replacement, with some equipment non-compliant with current safety standards.</td></tr>
<tr><td>Expenditure forecasting methodology</td><td>Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.</td></tr>
<tr><td>Historic and forecast expenditure (including overheads)</td><td>
<table>
<tr><th>$Million, real 2022-23</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th><th>FY23</th><th>FY24</th><th>FY25</th><th>FY26</th><th>FY27</th><th>FY28</th></tr>
<tr><td>Wagga Depot</td><td>-</td><td>0.08</td><td>-</td><td>-</td><td>-</td><td>0.35</td><td>0.34</td><td>2.07</td><td>0.32</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>Principal reasons for proposed expenditure</td><td>To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations.

Where practicable, we are seeking increased energy efficiency at our offices and depots. Façade, internal and external recommendations to repair and replace aging or broken internal, external, mechanical elements packaged into one year (2025-26) for efficiencies.</td></tr>
<tr><td>Validation</td><td>Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending.

External validation engaging external independent consultants to verify and validate our processes and forecasts.</td></tr>
<tr><td>Benefits</td><td>• Safety and compliance
• Effective asset management
• Delivering value to our customers
• Leading with sustainability

Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.</td></tr>
<tr><td>Procurement</td><td>Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the</td></tr>
</table>

Wagga Depot	
	delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021

Waratah West Depot

Waratah West Depot	
Asset description	Site comprising of 12 buildings ranging in construction type and age constructed in circa 1992 with a few modern additions and extensions and accommodating about 124 FTE.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.
Objectives	Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.
Main drivers of expenditure	To ensure Property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand. A large amount of building fabric aspects are in poor condition and need repairs and/or replacement in the medium term. Mechanical plant equipment, predominantly external HVAC, need either repair in the short term or replacement due to obsolescence. Electrical equipment is also in need of replacement in the short term, with multiple switchboards and distribution boards at the end of their economic lifecycle.
Expenditure forecasting methodology	Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.
Historic and forecast expenditure (including overheads)	
Principal reasons for proposed expenditure	To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations. Where practicable, we are seeking increased energy efficiency at our offices and depots. Façade, internal and external recommendations to repair and replace aging or broken internal, external, mechanical elements packaged into one year (2023-24) to achieve efficiencies.

$Million, real 2022-23	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Waratah West Depot	-	0.31	-	-	-	4.85	0.57	0.95	0.45	1.61

Waratah West Depot	
Validation	Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending. External validation engaging external independent consultants to verify and validate our processes and forecasts.
Benefits	• Safety and compliance • Effective asset management • Delivering value to our customers • Leading with sustainability Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.
Procurement	Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021

Tamworth Depot

Tamworth Depot	
Asset description	Site comprising of 2 buildings constructed in 2013 and accommodating 40 FTE.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.
Objectives	Invest capital to ensure key drivers of safety and compliance, effective asset management, delivering value to our customers and leading with sustainability.
Main drivers of expenditure	To ensure Property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand. The building fabric in good condition, with no major repair and/or replacement requirements in the short-medium term. Mechanical plant equipment repair and/or replacement accounts for a relatively high 29% of anticipated expenditure.
Expenditure forecasting methodology	Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.

Tamworth Depot	
Historic and forecast expenditure (including overheads)	

$Million, real 2022-23	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Tamworth Depot	-	-	-	0.45	-	0.01	0.22	0.02	0.02	0.03

Principal reasons for proposed expenditure	To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations. Where practicable, we are seeking increased energy efficiency at our offices and depots. We only expect minor capex repair and maintenance projects over the 2023-28 regulatory period.
Validation	Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending. External validation engaging external independent consultants to verify and validate our processes and forecasts.
Benefits	• Safety and compliance • Effective asset management • Delivering value to our customers • Leading with sustainability Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.
Procurement	Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021

Yass Depot

Yass Depot	
Asset description	Site of comprising 8 buildings constructed between 1960s to 2006 and accommodating 56 FTE.
Deliverables	Deliver safe, compliant office and depot facilities via an effective asset management strategy.

<table>
<tr><th>Yass Depot</th><th></th></tr>
<tr><td>Objectives</td><td>Invest capital to ensure key drivers of Safety and compliance, Effective asset management, delivering value to our customers and leading with sustainability.</td></tr>
<tr><td>Main drivers of expenditure</td><td>To ensure property assets are maintained to a standard so that it may be safely used by all personnel and seek to comply with regulatory requirements including compliance obligations and workforce demand.

An external tarmac road and concrete slab are in need of remediation. Additionally, the workshop building is in poor condition and in need of remediation. Mechanical plant equipment, predominantly external HVAC, need either repair in the short term or replacement due to obsolescence. Electrical equipment is also in need of replacement in the short term, with multiple switchboards and distribution boards at the end of their economic lifecycle.</td></tr>
<tr><td>Expenditure forecasting methodology</td><td>Property forecasting method provides an understanding of the condition of the asset and expected risk over the expected service life identified through the Audit Reports.</td></tr>
<tr><td>Historic and forecast expenditure (including overheads)</td><td>
<table>
<tr><th>$Million, real 2022-23</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th><th>FY23</th><th>FY24</th><th>FY25</th><th>FY26</th><th>FY27</th><th>FY28</th></tr>
<tr><td>Yass Depot</td><td>-</td><td>0.09</td><td>0.07</td><td>-</td><td>-</td><td>0.68</td><td>0.48</td><td>0.25</td><td>0.98</td><td>0.07</td></tr>
</table>
</td></tr>
<tr><td>Principal reasons for proposed expenditure</td><td>To ensure continued safe, compliant and productive workspaces for both office and depot based work that support the level of activity of our network operations.

Where practicable, we are seeking increased energy efficiency at our offices and depots. Façade, internal and external recommendations to repair and replace aging or broken internal, external, mechanical elements have been packaged into one year (2026-27) to achieve efficiencies.</td></tr>
<tr><td>Validation</td><td>Internal validation comprising of using equipment utilisation figures to verify the required need, engaging with the business units using the equipment to validate the need and historical expenditure trending.

External validation engaging external independent consultants to verify and validate our processes and forecasts.</td></tr>
<tr><td>Benefits</td><td>• Safety and compliance
• Effective asset management
• Delivering value to our customers
• Leading with sustainability

Our Property assets are used in support of the wider Transgrid network and that need to be maintained to a standard that can be safely used by all personnel and seek to comply with regulatory requirements.</td></tr>
<tr><td>Procurement</td><td>Since 2016, and revised in 2021, an outsourcing service delivery model contract is utilised ensuring the Safest Lowest Cost Delivery Model without compromising compliance, employee safety, environment, customers, or the community in the delivery of routine and corrective maintenance services for both hard and soft</td></tr>
</table>

Yass Depot	
	facilities delivery services to assets. It requires the outsourcing service to follow a technical specification document process to ensure all processes are correctly met.
Supporting documents and Model	Non-network Property Renewal and Maintenance Strategy Nutbrook Building Condition Review and Capex Plan Aptness Reviews July and September 2021