UNITED ENERGY

Non-network General Assets

- *Non-Network—Buildings and Property Expenditure*
- *Non-Network—Motor Vehicles Expenditure*
- *Non-Network—Other Expenditure*

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Approval and Amendment Record

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1. Purpose and structure of this document

The purpose of this document is to assist the AER and our customers in understanding our forecast capital expenditure. It focuses on a specific sub-category of capital expenditure, namely Non-network General Assets (or "Non-network General"). For our internal expenditure forecasting purposes, we subdivide this category into the following components, which are our "business-as-usual" expenditure categories:

- operational property;
- office accommodation and fit out;
- fleet, being motor vehicles, specialist trucks and other mobile plant; and
- miscellaneous tools and equipment.

A more detailed definition of these components is provided in section 3.1.

With the exception of zone substation land[1], the expenditure described in this overview document will be allocated to the following expenditure categories in Table 2.6.1 of the Reset RIN spreadsheet:

- Non-Network—Buildings and Property Expenditure;
- Non-Network—Motor Vehicles Expenditure; and
- Non-Network—Other Expenditure.

This overview document forms part of a suite of similar documents that explain and substantiate our capital expenditure forecasts, by sub-categories of capital expenditure. Together, these overview documents and the supporting papers that underpin them demonstrate that our total capital expenditure forecast complies with the requirements of the National Electricity Rules (the Rules) and should be approved by the AER.

This document is structured as follows:

- Section 2 presents data on our actual and forecast capital expenditure for Non-network General from 2006 to 2020.
- Section 3 describes the nature of the forecast capital expenditure, our compliance obligations and other expenditure drivers.
- Section 4 examines our capital expenditure during the current regulatory period and explains why our actual expenditure significantly exceeded the AER's allowance.
- Section 5 discusses our expenditure forecasting methodology, the key drivers and assumptions.
- Section 6 sets out our forecast capital expenditure.
- Section 7 demonstrates that our forecast capital expenditure complies with the Rules requirements.
- Section 8 lists the supporting documents.

[1] Forecast expenditure for zone substation land is recorded in Table 2.3.4 of the Reset RIN.

2. Expenditure profile

This section provides an overview of our actual, estimated, and forecast Non-network General capital expenditure for the previous, current and forthcoming regulatory control periods. Table 2-1 presents this information in tabular form. The historic data has been prepared on a consistent basis with the forecast for the forthcoming regulatory period.

Table 2-1: Previous, current and forecast Non-network General capital expenditure ($M Real 2015)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Regulatory Proposal	3.81	3.85	3.89	3.92	3.96	9.93	4.84	2.86	3.17	2.89	14.04	3.99	3.52	4.29	5.09
Distribution Determination	3.20	3.21	3.26	3.35	3.40	9.06	3.97	1.99	2.30	2.02					
Actual / Estimated	2.79	3.28	3.68	6.60	6.17	10.32	13.20	8.29	4.13	3.59					

To ensure consistency of data across successive regulatory periods, the actual expenditure data presented in this document excludes amounts of $225,300 (in 2012) and 391,800 (in 2013) being a total of $617,100 actual expenditure on “SCADA / control room” that was reported by United Energy as non-network capital expenditure. The regulatory allowance for “SCADA” expenditure in the current period totalled $4.2 million, which is also excluded from the above table in order to provide a like-of-like comparison. For the forthcoming period all SCADA-related expenditure is allocated to Non-network IT and Communications capex or Replacement capex, in accordance with the definitions set out in Appendix F of Schedule 1 of the reset RIN.

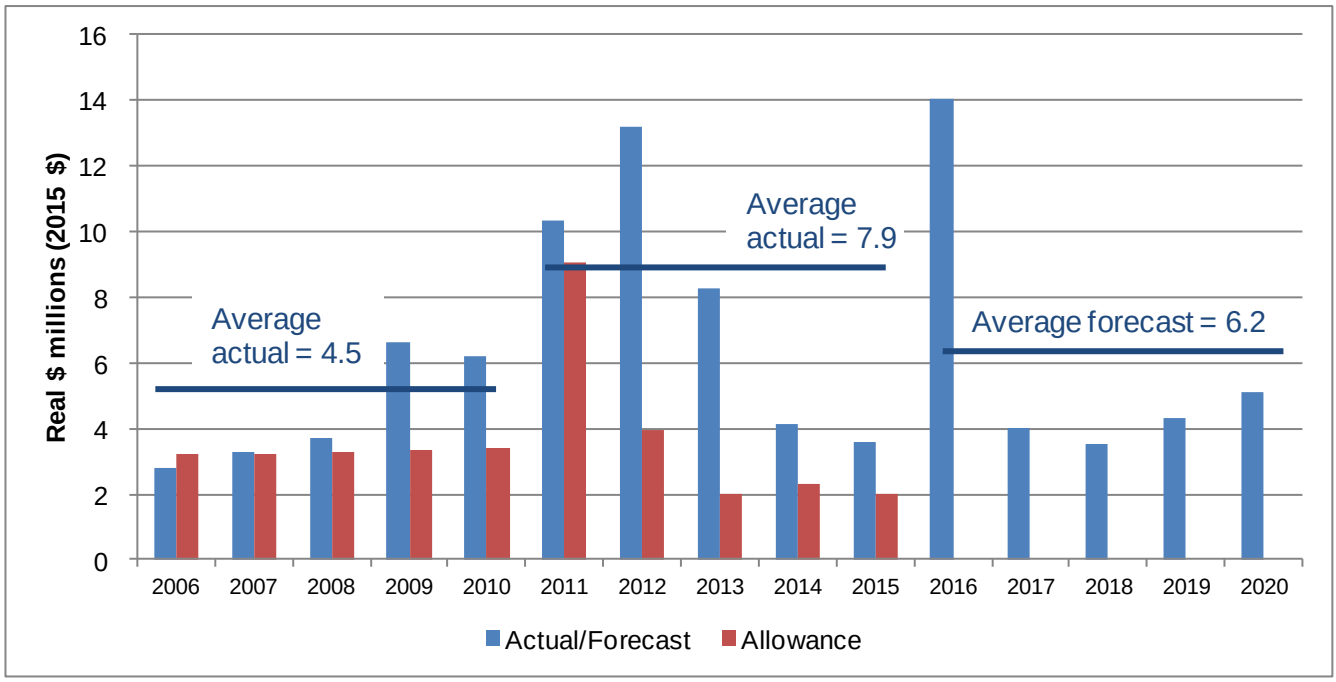
The information in the above table is shown in graphical form in Figure 2-1 on the following page. It shows that our actual capital expenditure during the current regulatory period substantially exceeded the AER’s allowance for the period. We discuss the reasons for this variance in Section 4 of this paper.

The table below shows the totals for each of the three regulatory periods.

Table 2-2: Previous, current and forecast Non-network General total capital expenditure, by regulatory period ($M Real 2015)

	2006-10 total	2011-15 total	2016-20 total
Regulatory Proposal	19.43	23.70	30.94
Distribution Determination	16.43	19.34	n/a
Actual / Estimated	22.53	39.52	n/a

Figure 2-1: Previous, current and forecast Non-network General capital expenditure ($M Real 2015)



The data presented above shows that:

- Our forecast Non-network General capital expenditure for the forthcoming period totals $30.9 million (with an annual average of $6.2 million), compared with total expenditure of $39.5 million (annual average of $7.9 million) in the current period.
- Our forecast for the forthcoming period is approximately 20% lower than our actual expenditure in the current period.

It is noted that $10.2 million of the apparent spike in expenditure in 2016 is due to “lumpy” once-off capital expenditure on:

- the acquisition of a zone substation site ($2 million);
- fit-out of office accommodation at Pinewood ($4.9 million); and
- additional investment ($6.6 million over the period, including $3.3 million in 2016) to increase our level of fleet ownership to 85% of total fleet requirements.

3. Nature of expenditure

3.1. Definition of Non-network General capital expenditure sub-category

As explained in section 1, Non-network General capital expenditure consists of the following components:

- Operational property;
- Office accommodation and fit-out;
- Fleet; and
- Miscellaneous tools and equipment.

Further details on these four components are provided below. As noted in section 2, for the forthcoming period all SCADA-related expenditure is allocated to Non-network IT and Communications capex or Replacement capex.

3.1.1. Operational property

Our operational property assets consist of land and buildings for depots, easements for poles and wires, and land for zone substations. Further details are provided below.

Our network supplies power to over 660,000 customers over an area of 1,472 square kilometres. The ongoing operation and maintenance of the network requires field crews, fleet and equipment to be located in areas that enable us to quickly respond to network faults, to minimise disruption of power supply to our customers. To meet this requirement, we require strategically located depots that will minimise travel times for field resources to attend to a fault wherever it occurs on the network.

In addition to depots, we also require amendments to existing easements where projects are planned that require a wider easement, or in some cases we must acquire easements for new feeders.

We also require land to accommodate new zone substations or augmentation of existing zone substations. Further information on our land acquisition plans and expenditure forecasts for zone substation development is set out in:

- the Reinforcement Capital Expenditure Overview document; and
- Document № UE PL 2211, Land Acquisition for New Zone Substations Strategic Direction Analysis Plan.

3.1.2. Office accommodation and fit-out

We require appropriately fitted-out office space to accommodate all of our employees and contractors involved in delivering network operations and planning, and corporate functions. The provision of 'fit for purpose' accommodation facilities for our staff is essential to ensuring that the business remains capable of delivering all of its standard control services in accordance with customers' needs.

3.1.3. Fleet

Interruption of power supply necessitates a response to restore supply. This requires:

- a fleet of vehicles fitted out with appropriate tools and equipment; and
- a suitably qualified workforce to operate and maintain the fleet.

Most importantly, the fleet is required to respond to unplanned events which may occur at any time, and that interrupt power supply to our customers. The fleet is also required to enable the carrying out of construction activities and preventative maintenance - i.e. maintenance to prevent faults and maintain network reliability.

Our fleet is free-issued to our service providers, and comprises the following:

- Elevating Platform Vehicles (EPV)

- Heavy Construction Vehicles (HCV)
- Light Construction Vehicles (LCV)
- Passenger Vehicles (PV)
- Trailers (TRL)
- Forklifts (FRK)

We own 174 items of fleet that are in use by Northern and Southern region service providers. The following table summarises the total fleet by type, service provider and location (depot) of vehicle as of August 2014.

Table 3-1: Fleet Distribution by Region / Service Provider

Fleet Type	Service Provider					Total
	Northern[2]			Southern 2[3]		
	BUR	CLY	MW	KBH	MTN	
EPV	11	4	0	15	17	**47**
HCV	9	3	0	13	12	**37**
LCV	3	12	0	2	9	**26**
PV	5	11	1	0	0	**17**
TRL	12	19	0	1	12	**44**
FRK	1	1	0	0	1	**3**
Total by Location	**41**	**50**	**1**	**31**	**51**	**N.A.**
Total by Service Provider			92		82	174

KEY:
BUR - Burwood Depot
CLY - Clayton Depot
MW - Mount Waverley
KBH - Keysborough Depot
MTN - Mornington Depot

3.1.4. Miscellaneous tools and equipment

Tools and equipment are required to construct, repair and maintain the network. These activities involve the utilisation of a significant array of tools and equipment, some of which is highly specialised and highly technical.

Capital expenditure is required to ensure that our service providers have access to the tools and equipment they need to construct, repair and maintain the network in a safe, efficient and timely manner.

3.2. Distinction between this and other expenditure categories

Clause 5.5(b) of the RIN requires us to provide an explanation of how expenditure is distinguished between:

- demand driven and non-demand driven augmentation capital expenditure;
- connections expenditure and augmentation capital expenditure;
- replacement capital expenditure driven by condition and asset replacements driven by other drivers; and

[2] Source: Appendix A-1, UE Fleet Life Cycle Management Plan, Document № UE PL 2301

[3] Source: Appendix A-2, UE Fleet Life Cycle Management Plan, Document № UE PL 2301

- any other capex category or opex category where we consider that there is reasonable scope for ambiguity in categorisation.

The scope of Non-network General capital expenditure is explained in section 3.1 above. It forms part of our non-network capital expenditure. It does not include SCADA, Network Control and Protection System capital expenditure, and IT capital expenditure. Non-network General capital expenditure is readily distinguishable from other capital expenditure categories.

3.3. Regulatory obligations or requirements

Our capital expenditure plans must enable us to achieve the capital expenditure objectives set out in clause 6.5.7(a) of the Rules, which include compliance with all applicable regulatory obligations or requirements.

The assets and facilities procured through Non-network General capital expenditure are critical to supporting our network and corporate functions. Those functions, and in particular, our network functions must be undertaken in accordance with the key regulatory obligations outlined below.

Victorian Electricity Distribution Code	Clause 3.1 of the Victorian Electricity Distribution Code requires us to manage our assets in accordance with the principles of good asset management. Under this provision, we must, among other things, develop and implement plans for the acquisition, creation, maintenance, operation, refurbishment, repair and disposal of its distribution system assets: • to comply with the laws and other performance obligations which apply to the provision of distribution services including those contained in the Distribution Code; • to minimise the risks associated with the failure or reduced performance of assets; and • in a way which minimises costs to customers taking into account distribution losses.
Electricity Safety Act 1998	The Electricity Safety Act 1998 (the Act) makes provisions relating to: • the safety of electricity supply and use; • the reliability and security of electricity supply; and • the efficiency of electrical equipment. Under section 98 of the Act, we must design, construct, operate, maintain and decommission our supply network to minimise as far as practicable: 1. the hazards and risks to the safety of any person arising from the supply network; and 2. the hazards and risks of damage to the property of any person arising from the supply network; and 3. the bushfire danger arising from the supply network.
	Section 99 of the Act requires us to prepare and implement an electricity safety management scheme, which specifies our safety management system for complying with our obligations under section 98.
Electricity Safety (Management) Regulations 2009	Under the Electricity Safety (Management) Regulations 2009, it is mandatory for network operators to implement an Electricity Safety Management Scheme (ESMS). This change in regulation represents a shift away from prescribed regulations to a system that is underpinned by identification and management of risks associated with the assets to a level that is "As Low As Reasonably Practicable" (ALARP). The ESMS must be submitted to Energy Safe Victoria (ESV) every five years for acceptance, and is audited by ESV. United Energy's ESMS incorporates all network asset policies, procedures, systems, standards and controls in place to manage network safety.

The Environment Protection Act 1970	The Environment Protection Act 1970 empowers the Environment Protection Authority (EPA) to issue regulations and other compliance instruments relating to protection of the environment. Areas covered by the legislation include: Clean Water; Clean Air; Control of solid wastes and pollution of land; Control of noise; Transport of prescribed waste; and Environmental audits. We have detailed plans to ensure that we comply with the EPA regulations, as set out in the Environment Strategy and Plan document UE PL 2038.
Counter-terrorism requirements	Part 6 of the Victorian Terrorism (Community Protection) 2003 Act, together with the following State and Federal Government documents set out requirements for protecting critical assets from acts of terrorism: • Department of the Prime Minister and Cabinet, Strong and Secure: A Strategy for Australia's National Security, January 2013; • Commonwealth of Australia National Counter-Terrorism Committee, National Guidelines for Protecting Critical Infrastructure from Terrorism, 2011. • Department of Premier and Cabinet, A Roadmap for Victorian Critical Infrastructure Resilience, December 2012.

Our Non-network General capital expenditure is focused on providing the tools and equipment, operational property, office accommodation, and fleet resources that enable us to undertake our network functions in accordance with all of these regulatory obligations at an efficient cost.

3.4. Key drivers of expenditure

The key expenditure drivers for this category of capital expenditure vary significantly across its constituent components. In particular, the drivers for operational property differ materially from those relating to office accommodation or capital expenditure associated with fleet. We discuss each of these categories briefly in turn below.

3.4.1. Operational property

As already explained, operational property is required to facilitate the efficient delivery of reliable network services to customers. In relation to depots, for example, the capital expenditure drivers depend on the extent to which the current ownership, number and location of depots is optimal in terms of delivering the most efficient outcome for customers.

The current depots are located at Burwood, Clayton, Keysborough and Mornington, as shown in Figure 3-1 on the next page. United Energy owns the properties at Burwood, Keysborough and Mornington, while the Clayton site is leased. The table below shows travel times between the depots and customer sites in the far north (Templestowe) and south (Cape Schanck) of the network.

Table 3-2: Estimated Travel Times4

		Northern Depots		Southern Depots		
Location	**Templestowe Customer**	**Burwood (Depot)**	**Clayton (Depot)**	**Keysborough (Depot)**	**Mornington (Depot)**	**Cape Schanck Customer**
Templestowe Customer		22 min	34 min	35 min	56 min	73 min
Burwood (Depot)	22 min		18 min	18 min	41 min	61 min
Clayton (Depot)	34 min	18 min		7 min	31 min	51 min
Keysborough (Depot)	35 min	18 min	7 min		29 min	50 min
Mornington (Depot)	56 min	41 min	31 min	29 min		28 min
Cape Schanck Customer	73 min	61 min	51 min	50 min	28 min	

Based on the above analysis, the current number and location of depots is optimal. Three of the 4 depots have a predominately northern aspect reflecting the location of a large proportion of our customers. The increased density of customers in the north impacts travel times (due to traffic) and this in turn has implications for the number and location of depots required to reach customers in a reasonable time.

[4] Google Maps used to estimate shortest travel time between indicated locations. These estimates exclude traffic conditions as noted by Google Maps

Figure 3-1: Current location of depots

The division of the network into a northern and southern region in 2011 required refurbishment of the existing Keysborough depot to accommodate a larger workforce when Tenix was awarded the contract as the new southern service provider. The only other depot in the southern region, at Mornington, was too small to accommodate the fleet, materials, stock, spares and staff required to service the Southern region and was too distant from customers in the north of the southern region, potentially increasing response times to faults.

While the number and location of depots is optimal, our longer term objective is to own, rather than lease, depots. We discuss this strategy in further detail later in this document.

3.4.2. Office accommodation and fit out

In mid 2011, we commenced implementing our new business model, which entailed among other things, the in-sourcing of a number of key functions such as network planning, asset management and operations, and a range of corporate functions including regulatory, legal, corporate communications, finance, IT, and human resources. Previously, all of these functions were out-sourced to our primary service provider at that time (Jemena Asset Management). Accordingly, the implementation of our new business model resulted in a significant increase in the number of internal staff and contractors to be accommodated in office premises.

In December of 2012, the Boards of United Energy and Multinet approved an accommodation strategy enabling the companies to meet their joint requirement to provide additional seats to accommodate:

- 320 employees;
- 70 IT applications support contractors; and
- 15% contingency (around 50 seats) to accommodate minor projects that arise across the business from time-to-time.

These arrangements included the construction of the primary Network Control Centre (NCC) at our premises at Pinewood.

The table below summarises the current office accommodation arrangements.

Table 3-3: Office accommodation arrangements at February 2015

Location	Seats
[redacted]	168
[redacted]	76
[redacted]	100
[redacted]	75
Total seats	**419**

In addition, we have a back-up Network Control Centre facility located at Burwood, a site at [redacted] which accommodates our on-going AMI seating requirements, and a site in Forest Hill for IT projects. The Forest Hill site has replaced the Armadale site formerly used to house IT projects, but which has recently been demolished.

The key driver of office accommodation capital expenditure in the current period has been the need to accommodate the significant increase in internal staff and contractors following the implementation of United Energy's new business model.

3.4.3. Fleet

As explained below, our fleet capital expenditure during the current regulatory period has been significantly influenced by the change in our business model.

We contracted an additional service provider (Tenix) from 1 January 2012 to exclusively service the operating expenditure and non-contestable capital works for the Southern Region while ZNX (formerly Jemena) continued to service the Northern Region. Our fleet consisted of approximately 108 vehicles before the network was split into a Northern and Southern Region, with Jemena or its subcontractors supplying all other required fleet. At that time, the United Energy fleet was divided between Tenix and ZNX - i.e. roughly 54 items of fleet was provided to both service providers.

Our strategy is to provide fleet to our service providers on a free issue basis. Not only is this approach consistent with minimising our fleet costs, it also creates additional flexibility to engage alternative service providers. As fleet

is owned by us, we make it easier for alternative service providers to enter the market and expose our current service providers to increased competitive pressure.

In accordance with our strategy, the total United Energy free issue fleet with service providers has increased from 108 vehicles in January 2011 to 174 as of July 2014. We determined that the free issue fleet for both the Northern and Southern service providers should be of sufficient size to allow a new service provider to commence work should an incumbent service provider need to be replaced or become uncompetitive. The estimated size of the required fleet was based on input from the Northern and Southern service providers at the time of tendering for the current OMSAs.

3.4.4. Miscellaneous tools and equipment

As previously noted, capital expenditure is required to ensure that our service providers have access to the tools and equipment they need to construct, repair and maintain the network in a safe, efficient and timely manner.

We have a policy of providing these tools to our service providers on a free-issue basis for the following reasons:

- Many of the tools are specific to our needs as a DNSP, so it minimises long term costs if we maintain an inventory of the required tools and equipment for the use of our service providers. This is a particularly important consideration where a single piece of equipment is sufficient to meet the needs of our network as a whole, and that equipment is made available to both service providers.

- Our ownership of specialised tools and equipment gives us greater flexibility to change service providers, enabling us to maintain competitive pressure on incumbents, and take advantage of opportunities that may be offered by alternative service providers.

3.5. Relevance to incentive schemes

United Energy is subject to a Service Target Performance Incentive Scheme (STPIS), which establishes reliability and customer service targets consistent with maintaining historic performance. Our Non-network General capital expenditure is focused on the efficient provision of the non-network resources that we need to achieve our network reliability and customer service targets.

From the commencement of the next regulatory period, United Energy will also be subject to a capital expenditure sharing scheme (CESS). That scheme will provide financial rewards if our capital expenditure becomes more efficient, and will impose financial penalties if our capex becomes less efficient. Consumers benefit from our improved efficiency through lower regulated prices. We expect that our forecasts of Non-network General capital expenditure in future regulatory periods will reflect the positive impacts of the incentives for improved efficiency provided by the CESS.

In accordance with clause 6.5.7(e)(8) of the Rules, the capital expenditure forecasts set out in this document are consistent with the incentives provided by the STPIS and the CESS.

4. Current period expenditure and outcomes

4.1. Actual expenditure versus AER allowance

The table below lists our total actual expenditure for the current regulatory period alongside the AER allowance. The expenditure forecast from our regulatory proposal for the same period is also shown.

Table 4-1: Current period expenditure and AER allowance: Non-network General ($M Real 2015)

Non-network General	Total for 2011 to 2015
UE regulatory proposal	23.70
UE actual expenditure	39.52
AER allowance	19.34
Variance between actual and AER allowance	20.18

The table below shows our actual annual capital expenditure in each of the 4 main Non-network General categories. A fifth category ("Other") is also shown, as United Energy reported a small amount of expenditure in the current period in this category. That expenditure included capital investment on our records management system, corporate IT hardware, and miscellaneous minor non-network assets. In the forthcoming regulatory period, we will be allocating all such costs to specific categories.

Table 4-2: Current period annual capital expenditure: Non-network General ($M Real 2015)

Non-network General	2011	2012	2013	2014	2015	Total
Accommodation	4.23	1.68	4.50	2.19	0.20	12.80
Operational Property	1.30	2.32	1.86	0.32	0.33	6.12
Fleet (motor vehicles plus trucks)	4.09	7.59	1.41	1.34	2.57	17.00
Other	0.65	0.55	0.41	0.23	0.00	1.85
Tools & Equip	0.05	1.06	0.10	0.04	0.48	1.75
Total	**10.32**	**13.20**	**8.29**	**4.13**	**3.59**	**39.52**

4.2. Explanation of current period outcomes

Table 4-1 above shows that the AER's determination provided an allowance that was $4.36 million (18%) lower than our forecast. Despite this, our actual Non-network General capital expenditure for the current period exceeded the AER allowance by $20.18 million. The following sections provide an explanation of our Non-network General capital investment outcomes in the current period.

4.2.1. Operational property

Total operational property capital expenditure for the current period was $6.12 million.

The main items of expenditure in the current period related to:

- Building construction and minor capital works at 8 zone substations;
- Building construction and miscellaneous minor capital works at United Energy's depots at Templestowe and Burwood, and at a United Energy site at Keysborough.

In particular, the division of the network into a northern and southern region in 2011 required refurbishment of the existing Keysborough facility to accommodate a larger workforce when Tenix was awarded the contract as the new southern region service provider. That project was the largest operational property investment undertaken during the period, at a total cost of $2.48 million.

4.2.2. Office accommodation and fit out

As noted in section 3.4.2, our office accommodation and fit out capital expenditure in the current period has been driven by the need to accommodate the significant increase in internal staff and contractors following the in-sourcing of a range of functions under our new business model.

During the current regulatory period, our total capital expenditure on office accommodation and fit out was $12.8 million, which significantly exceeded the AER's allowance.

During the period, we undertook office accommodation and fit out projects to provide accommodation for 440 personnel across two principal locations, being United Energy's main office at Pinewood, and a smaller office accommodating the CEO and various corporate functions at Nexus Park in Mulgrave. To achieve this, we undertook the following office accommodation and fit out capital works:

- Fit out of the Pinewood and Nexus offices including:
  - design and construction
  - project management
  - audio-visual fit out
  - video conference facilities
  - IT and communications infrastructure including external fibre
  - procurement and installation of telephone systems
  - power supply risk mitigation.
- Facilities capex for the Pinewood and Nexus offices including:
  - furniture
  - office equipment
  - work stations
  - cabling
  - other fixtures and fittings
  - security.

4.2.3. Fleet

Actual Fleet expenditure for the current period was $17.0 million. This exceeded the AER's allowance, which was broadly consistent with historic levels of fleet investment at the time of the distribution price review in 2010.

As explained in section 3.4.3, prior to the separation of our network into a Southern and Northern region, we owned a total of 108 fleet items. Following the appointment of the two service providers for these regions in 2012, we determined that there was a need to increase our ownership of the fleet in order to reduce overall costs, and provide us with flexibility to change service providers if the performance of either incumbent warranted this.

Accordingly, over the course of the current regulatory period, our total free issue fleet has increased from 108 vehicles in January 2011 to 174 as of July 2014. This increase explains the actual capital expenditure over the current period.

4.2.4. Miscellaneous tools and equipment

During the current period we invested a total of $1.75 million in miscellaneous tools and equipment. Over half of this expenditure was incurred in 2012, and was associated with procurement of the tools and equipment required to equip our two service providers under the two region model which commenced in 2012.

4.3. Efficiency of expenditure

All of our expenditure is assessed and executed in accordance with the principles underpinning our asset management framework[5]. That framework provides an integrated and structured approach to guide the development, coordination and execution of asset creation and maintenance activities so as to optimise the total lifecycle costs, risk and performance of United Energy's assets and operations, including those associated with the support functions of operational property, office accommodation and fit-out, fleet, and miscellaneous tools and equipment.

The information presented in this overview document and in the various supporting documents demonstrates that our Non-network General capital expenditure is efficient. Moreover, as explained in detail in chapter 6 of our regulatory proposal, benchmarking shows that we are an efficient business. Our high level of overall efficiency is due in part to the efficiency of our Non-network General capital expenditure, which provides essential functions that support and facilitate the efficient delivery of standard control services.

4.4. Benefits of expenditure to customers

The non-network resources of office accommodation, fleet, operational property and tools provide essential support in the delivery of reliable and safe network services. In procuring these necessary non-network resources, we aim to meet our requirements at minimum total cost. Customers benefit from the proposed expenditure as it ensures that we an optimal mix of non-network resources to enable us to deliver standard control services safely and efficiently.

[5] Further details are provided in Document № UE PR 2901, Asset Management – Governance Framework Overview.

5. Expenditure forecasting method for forthcoming period

5.1. Forecasting approach and expenditure drivers

As already noted, the expenditure drivers for Non-network General capital expenditure vary significantly across its constituent components. These differences are reflected in our forecasting approach for each expenditure category, each of which is discussed in turn below.

5.1.1. Operational property

Our operational property capital expenditure is driven by our underlying operational needs and our long term strategy in relation to depot ownership. The latter issue is closely related to our new business model, which was discussed in Section 3. In particular, our long term strategy is to own all depots required to operate and maintain our network, having regard to the constraints associated with existing leases. This approach is expected to reduce the long term costs of operating depots and provide scope for competition among service providers. Specifically, our strategy reflects the following considerations:

- It is cheaper to own than lease depots in the long run, given the stability of our operational property needs over time.
- Service providers are able to offer competitive contract pricing because:
  - they do not charge United Energy an overhead that they would otherwise charge if they were to have to lease a depot; and
  - our ownership of all depots means lower barriers of entry for new service providers, thereby creating further competitive tension.
- Service providers typically do not own depots and are therefore not exposed to the risk of escalating costs from lessors that are passed on to us.
- In the event that a service provider were replaced, we would avoid demobilisation of assets from a site leased by a service provider.

Implementation of United Energy's long term strategy is subject to evaluation of the economics of the 'lease versus own' decision on a case-by-case basis, with the objective of selecting the option that minimises total costs in present value terms, having regard to the considerations noted above. As noted in section 3.4.1 the Clayton Depot is the only depot facility that is not owned by United Energy. The Clayton Depot lease is not due to expire until 2018, and the costs associated with breaking this lease would be borne by UE.

Given these considerations, and the indicative cost estimate for establishing a new depot (see the supporting paper Operational Property Strategy and Plan, Document № UE PL 2302), we are not intending to implement our long term strategy of Depot ownership in the forthcoming regulatory period. For expenditure forecasting purposes, we have assumed that the existing lease at Clayton can be extended on terms similar to those currently applying, and therefore the current lease payment provides a reasonable proxy for the annualized costs of the Clayton facility to the end of 2020.

Our capital expenditure forecast for the forthcoming regulatory period reflects these considerations, and an over-arching objective of meeting our operational property needs in an efficient manner.

In particular our operational property expenditure forecasts for the forthcoming regulatory period include allowances for the capital costs of:

- miscellaneous minor capital works at each of our depots. These works include repair of buildings and hardstands, and installation and repair of security fencing; and
- cleaning up a site at 8-14 Railway Pde Dandenong (currently owned by United Energy) to make it suitable for storage of inventory by Tenix. This is required as because of our decision to construct a Zone Substation on part of the land occupied by the Keysborough depot, which has reduced the area available for Tenix operations.

Clauses 5.2 and 5.3 of the RIN require us to describe the methods and models used to develop our expenditure forecasts. For operational property, our expenditure forecasts reflect the estimated cost of undertaking the future program of works described in Document № UE PL 2302 - Operational Property Strategy. Cost estimates are based on the actual costs of recently completed work of comparable scope.

Our forecasts of operational property capital expenditure for the forthcoming regulatory period are set out in Section 6.1.1 below.

5.1.2. Office accommodation and fit out

In terms of the requirements of clauses 5.2 and 5.3 of the RIN our method for developing our expenditure forecasts is as follows:

- Our forecasts of accommodation requirements are based on current and projected employee head-count, and the depreciation profile of existing furniture and fittings.
- Floor space requirements are determined in accordance with industry benchmark standards. These standards also reflect applicable occupational health and safety requirements.
- Cost estimates for future work (which includes, amongst other things, office fit out, office equipment, furniture and other facilities) reflect competitive market rates based on costs incurred recently for similar work.

As already noted, our office accommodation capital expenditure during the current period has been driven by the implementation of our new business model. For the forthcoming regulatory period, our forecast of office accommodation requirements reflects our assessment of:

- the on-going in-house staff and contract resources required to continue to manage the current two service provider / two region business model efficiently; plus
- any changes in resource requirements arising from future initiatives aimed at improving the value of the services we provide, and the efficiency of current operations.

Our original accommodation plan of 440 seats was founded on a relatively stable and predictable external operating environment. However, in August 2014, the Board endorsed our long-term corporate roadmap. This roadmap presented research that highlighted a number of important changes in our external environment, foreshadowing significant long-term change.

We have assessed the office accommodation needs associated with our long-term road map, and that assessment is reflected in our accommodation and fit out capital expenditure forecasts for the forthcoming regulatory period. A number of specific drivers for additional staff have also been factored into our accommodation planning, including:

- Innovation and continuous improvement is likely to drive alternative service models focused on efficiency and reliability that could see further targeted in-sourcing of some functions as this will provide a more cost-effective and efficient solution. This is expected to result in further in-sourcing of services, necessitating an additional 6 to 10 employees requiring office accommodation.
- Our forecast of accommodation needs provides for an additional 15 to 20 employees in the electricity network function.
- Our Effortless Customer Experience program will result in an improved customer-focused operating model, while our Future Focus theme will concentrate on innovation program initiatives and further development of AMI systems to ensure that they deliver maximum value to our customers. Our forecast of accommodation needs provides for an additional 20 employees.

Our expenditure forecasts for office accommodation include the costs of further consolidation of office-based staff at Pinewood, noting the following benefits:

- It is the most cost-effective solution over the long-term.
- The space available allows for future growth, giving us flexibility to manage uncertainty.

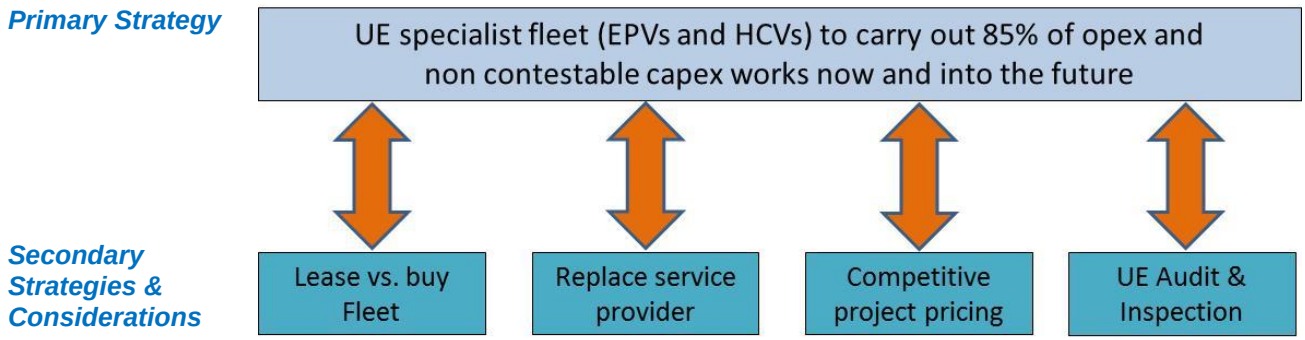
- It leverages our already sizeable investment in the Pinewood site, including the Network Control Centre and secondary data centre.
- The co-location of staff enhances our efficiency and focus on strengthening our customer-focused culture.

Our forecasts of office accommodation and fit out capital expenditure for the forthcoming regulatory period are set out in Section 6.1.2 below.

5.1.3. Fleet

Our capital expenditure forecasts are driven by our fleet strategy, which aims to minimise the total life cycle cost of meeting our efficient requirements. Our strategy is for United Energy to increase its ownership of fleet specialist vehicles (EPVs and HCVs) to the level required to carry out 85% of operating expenditure and non contestable capital works on our network. The rationale for this strategy reflects our contracting model, which was discussed in Section 3. In short, out fleet strategy ensures that we will be positioned to provide an optimal mix of fleet resources to our service providers, whilst maintaining the flexibility to change a service provider should circumstances warrant such action. Our fleet strategy is depicted in the figure below.

Figure 5-1: Overview of United Energy's Fleet Strategy



The primary strategy is underpinned with secondary strategies and considerations such as:

- whether, and under what circumstances purchasing (capex) or leasing the fleet (opex) minimises total life cycle costs;
- the extent to which a particular fleet procurement / management strategy affects our ability to quickly replace an incumbent service provider;
- creating competitive pressure between our service providers now and in the future; and
- the availability of fleet to our staff to carry out asset audits and inspections.

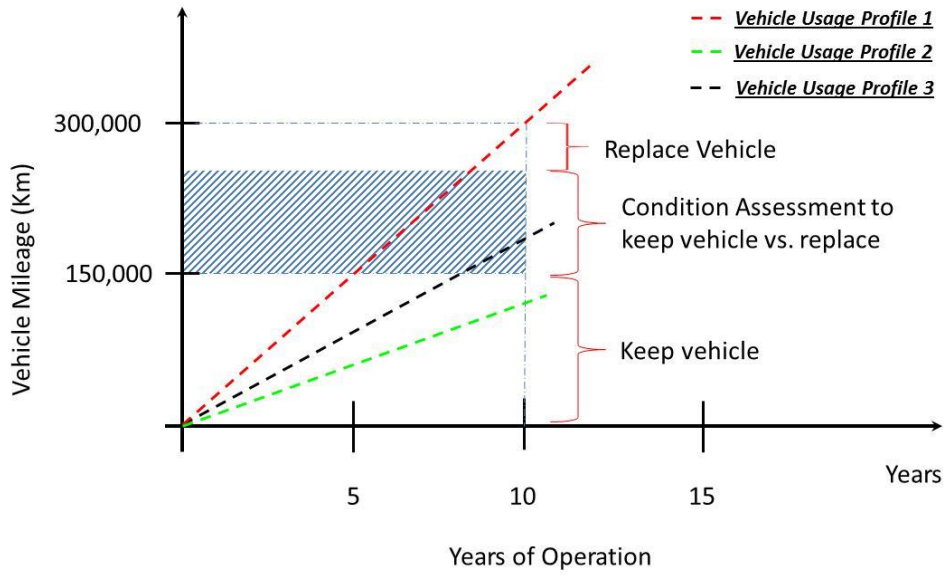
Our forecast capital expenditure is driven by the above strategy, together with the life cycle cost considerations that require a careful analysis of the maintain/replace decision.

In terms of the forthcoming regulatory period, fleet capital expenditure is driven primarily by the objective of minimising total life cycle costs. Our economic analysis considers the cost of maintaining each vehicle verses the cost of replacing the vehicle. In particular, the factors considered include:

- Costs of servicing over years of operation (which increases with age);
- Reliability of vehicle (which decreases with age);
- Utilisation rate (i.e. mileage/year);
- Costs of maintaining fixed equipment on vehicles (e.g. cranes and elevating platforms) to comply with Australian Standards.

The figure below provides a conceptual illustration of the replace - maintain decision for fleet.

Figure 5-2: Analysis of replace or maintain decision



Further detailed information on our capital expenditure forecasting methods and models for fleet is provided in the following two supporting documents:

- Document № UE PL 2303, Fleet Strategy 2014-15 – 2023-24; and
- Document № UE PL 2301 Fleet Life Cycle Management Plan.

Our forecasts of fleet capital expenditure for the forthcoming regulatory period are set out in Section 6.1.3 below.

5.1.4. Miscellaneous tools and equipment

Our forecast is based upon recent actual historical expenditure.

Our miscellaneous tools and equipment capital expenditure forecast for the forthcoming regulatory period is set out in Section 6.1.4 below.

5.2. Key assumptions

The following key assumptions underpin our forecasts of Non-network General capital expenditure:

- Our two region / two service provider model will remain in place.
- Some additional human resources will be required to implement initiatives including our Effortless Customer Experience program, in order to deliver further improvements in efficiency and customer value.
- Asset lives for fleet are as set out in the Fleet Life Cycle Management Plan.
- We will comply with health and safety, environmental and all other compliance standards relating to property and fleet.
- Estimated floor space requirements per person will accord with industry benchmark standards.

5.3. Capex-opex substitution

Clause 6.5.7(e)(7) of the Rules provides that in deciding whether or not the AER is satisfied that our expenditure forecast reasonably reflects the capital expenditure criteria, the AER must have regard to various factors, including the substitution possibilities between operating and capital expenditure.

As explained in detail in this document and its supporting documents, our objective is to minimise the total life cycle costs of providing standard control services by optimising the mix of capital and operating expenditure. We focus strongly on this issue in:

- the analysis of replace (capital expenditure) versus maintain (operating expenditure) decisions under our fleet strategy and Fleet Life Cycle Management Plan; and
- the analysis of buy (capital expenditure) versus lease (operating expenditure) in meeting our office accommodation and operational property needs.

Our approach to forecasting our Non-network General capital expenditure is consistent with the principles underpinning our asset management framework, the aim of which is to minimise the total costs of service delivery.

6. Expenditure forecasts for forthcoming period

6.1. Capital Expenditure forecasts

Based on the description of the expenditure drivers and forecasting methodologies provided in Section 3 and 5, our forecasts of Non-network General capital expenditure are presented below.

Table 6-1: Forecast Non-network General capital expenditure ($M Real 2015)

	2016	2017	2018	2019	2020	Total
Operational property	2.54	0.33	0.33	0.33	1.46	4.99
Office accommodation and fit-out	4.91	0.11	0.08	0.04	0.11	5.25
Fleet	6.04	2.99	2.56	3.48	3.19	18.25
Miscellaneous tools and equipment	0.55	0.55	0.55	0.44	0.34	2.44
Total	**14.04**	**3.99**	**3.52**	**4.29**	**5.09**	**30.94**

The sections below set out the forecasts for each component of Non-network General capital expenditure.

6.1.1. Operational property

The table below presents our forecast capital expenditure for operational property.

Table 6-2: Operational property capital expenditure forecast ($'000 Real 2015)

Expenditure item	2016	2017	2018	2019	2020	Total
Burwood Depot	80	80	80	80	80	400
Keysborough Depot	80	80	80	80	80	400
Dandenong (relocation of Keysborough)	350	20	20	20	20	430
Mornington	80	80	80	80	80	400
Clayton	80	80	80	80	80	400
Substations	0	0	0	0	0	0
Sub-total, depots and substation land	**670**	**340**	**340**	**340**	**340**	**2,030**
Zone substation Land Acquisition - SKE	2,000					2,000
Zone substation Land Acquisition - SCY					1,000	1,000
Easements	0	0	0	0	0	0
Total forecast6	**2,537.8**	**332.1**	**332.1**	**333.2**	**1,458.5**	**4,993.8**

It is noted that 60% ($3 million) of the total operational property capital expenditure forecast ($5 million) relates to the acquisition of two zone substation sites. The remaining $2 million of forecast expenditure is associated with minor capital works at our four depots, and preparation of the Dandenong site to make it suitable for storage of inventory, as explained in section 5.1.1.

6.1.2. Office accommodation and fit out

The table below sets out the office accommodation and fit out capital expenditure forecast for the forthcoming

[6] Please note that the figures shown in this row differ slightly from the totals of the individual values shown in each column, due to minor rounding errors. The total rounding error over the five year regulatory period is $36,000. This is considered to be immaterial.

regulatory period.

Table 6-3: Office accommodation and fit out capital expenditure forecast ($'000 Real 2015)

Expenditure item	2016	2017	2018	2019	2020	Total
Pinewood office consolidation (2 additional floors)	4,875					4,875
Minor fit-out improvements and reconfigurations resulting from our innovation and continuous improvement programs	23	23	23	22	22	113
Upgrade of emergency generator unit at Pinewood		75				75
Upgrade of UPS battery sets at Pinewood			45		45	90
Air conditioning system improvements at Pinewood	7	8	8	8	8	39
Upgrade of emergency generator at Burwood					19	19
Internal and external signage upgrade at Pinewood	1	1	1	1	5	9
AV/Printing/Telco equipment replacements	5	7	4	8	8	32
Total	**4,911**	**114**	**81**	**39**	**107**	**5,252**

Further information on each expenditure item is set out in the table below.

Table 6-4: Details of Office accommodation and fit out capital expenditure forecast, by item

Expenditure item	Details
Pinewood office consolidation (2 additional floors)	The work involves the fit out of two floors of office space totalling approximately 3,612 sqm. @ $1,250 per sqm. plus 10% contingency. Total fit-out costs are split on a 75%-25% basis between United Energy and sister company Multinet Gas.
Minor fit-out improvements and reconfigurations resulting from our innovation and continuous improvement programs	A small allowance is required to modify and enhance the office fit-out, which includes moveable partitions and portable workstations.
Upgrade of emergency generator unit at Pinewood	A vital piece of emergency management equipment, the emergency generator provides our Network Control Centre with power should the mains supply be disrupted. The generator set requires periodical overhaul and/or upgrade every five to seven years.
Upgrade of UPS battery sets at Pinewood	A vital piece of emergency management equipment, the Uninterruptible Power Supply provides our Network Control Centre with power until the generator takes over. The UPS battery set requires upgrade every five to seven years.
Air conditioning system improvements at Pinewood	Following the fit-out of the two floors at Pinewood (expenditure item 1) and other minor fit-out reconfigurations, an allowance for air conditioning system changes is required.
Upgrade of emergency generator at Burwood	A vital piece of emergency management equipment, the emergency generator provides our back-up Network Control Centre with power should the mains supply be disrupted. The generator set requires periodical overhaul and/or upgrade every five to seven years.
Internal and external signage upgrade at Pinewood	A small allowance is required to upgrade the internal and external signage at the Pinewood office.
AV/Printing/Telco equipment replacements	A small allowance is included for replacement of existing audio-visual, printing and duplication, and office telecommunications equipment, which is nearing end of life.

6.1.3. Fleet

Our total fleet capital expenditure forecast ($18.25 million) is made up of:

- $6.6 million of additional investment required to implement our strategy of owning 85% of the required fleet. The rationale for this strategy is explained in section 5.1.3; plus
- $11.6 million of capital expenditure associated with economic replacement of existing fleet.

The table below sets out the fleet capital expenditure forecast for the forthcoming regulatory period.

Table 6-5: Fleet capital expenditure forecast ($M Real 2015)

Expenditure item	2016	2017	2018	2019	2020	Total
Increase fleet ownership to 85%	3.3	2.2	1.1	0	0	6.6
Economic replacement of existing fleet	$2.70	$0.80	$1.40	$3.50	$3.20	11.6
Total	6.0	3.0	2.5	3.5	3.2	18.2

Full details of our fleet capital expenditure forecast for the forthcoming regulatory period are set out in the following supporting documents:

- Document № UE PL 2303, Fleet Strategy 2014-15 – 2023-24; and
- Document № UE PL 2301 Fleet Life Cycle Management Plan.

6.1.4. Miscellaneous tools and equipment

The table below sets out the miscellaneous tools and equipment capital expenditure forecast for the forthcoming regulatory period.

Table 6-6: Miscellaneous tools and equipment capital expenditure forecast ($'000 Real 2015)

Expenditure item	2016	2017	2018	2019	2020	Total
Total	0.55	0.55	0.55	0.44	0.34	2.44

6.2. Significant variations between forecast and historical expenditure

Clause S6.1.1(7) of the Rules and clause 5.1(e) of the RIN require us to explain significant variations between our forecast and historic capital expenditure. The table below shows our actual / estimated expenditure for the current regulatory period and our forecast for the forthcoming period.

Table 6-7: Current and forecast Non-network General capital expenditure ($M Real 2015)

	2011	2012	2013	2014	2015	Total 2011-15	2016	2017	2018	2019	2020	Total 2016-20
Operational property	1.30	2.32	1.86	0.32	0.33	6.12	2.54	0.33	0.33	0.33	1.46	4.99
Office accomm. and fit-out	4.23	1.68	4.50	2.19	0.20	12.80	4.91	0.11	0.08	0.04	0.11	5.25
Fleet	4.09	7.59	1.41	1.34	2.57	17.00	6.04	2.99	2.56	3.48	3.19	18.25
Tools and equipment	0.05	1.06	0.10	0.04	0.48	1.75	0.55	0.55	0.55	0.44	0.34	2.44
Other[7]	0.65	0.55	0.41	0.23	0	1.85	0	0	0	0	0	0
Total	10.32	13.20	8.29	4.13	3.59	39.52	14.04	3.99	3.52	4.29	5.09	30.94

The table above shows that in the forthcoming period, we expect our total Non-network General capital expenditure to be $8.6 million lower than our actual expenditure in the current period. An explanation of the main reasons for the variations between our forecast and historic capital expenditure is provided below.

6.2.1. Operational property

Our operational property capital expenditure forecast for the forthcoming regulatory period is approximately 18% (or $1.1 million) lower than actual expenditure for the current period. As noted in section 6.1.1, a total of 60% ($3 million) of our forecast expenditure relates to the acquisition of two zone substation sites, with the remaining 40% ($2 million) being required to undertake minor capital works at our depots.

The reduction in our forecast capital expenditure compared to the current period's actual reflects our reduced expenditure requirements following implementation of our two region / two service provider model.

6.2.2. Office accommodation and fit out

Total expenditure in this category is expected to fall from $12.8 million in the current period to a total of $5.25 million in the forthcoming period. This significant reduction reflects our transition to a position of relative "steady state" following the implementation of our new business model during the current period.

As explained in section 3.4.2 our office accommodation and fit out capital expenditure in the current period was needed to provide accommodation for 440 personnel. Providing the additional office space to accommodate the significant increase in internal staff and contractors is a once-off cost associated with the implementation of our new business model. With the new business model and organisation structure now bedded-down, our forecast accommodation and fit out requirements will reduce considerably. This reduction is reflected in our capital expenditure forecast for the forthcoming regulatory period.

6.2.3. Fleet

Our forecast expenditure for the forthcoming regulatory period ($18.2 million) is 7% higher than our actual expenditure in the current period ($17 million). The modest increase reflects the additional capital investment we intend to make in order to increase our fleet ownership to 85% of the total fleet needed to undertake all operating expenditure and non contestable capital works on our network.

[7] The "Other" category is shown as United Energy reported a small amount of expenditure in the current period in this category. The expenditure included capital investment on our records management system, corporate IT hardware, and miscellaneous minor non-network assets. In the forthcoming regulatory period, we will be allocating all such costs to specific categories.

6.2.4. Miscellaneous tools and equipment

Forecast capital expenditure for the forthcoming regulatory period is consistent with actual expenditure in the current period, after allowing for the planned increase in our fleet ownership.

7. Meeting National Electricity Rules requirements

This document has explained that the main underlying drivers of our Non-network General capital expenditure are:

- the office accommodation needs of our business following its re-structuring, and the in-sourcing of a range of key corporate and support functions, during the current period;
- the operational property requirements associated with the provision of safe and reliable standard control services; and
- the efficient fleet, and miscellaneous tools and equipment resources that our business requires to continue to provide standard controls services safely and reliably.

We determine our Non-network General capital resource requirements in accordance with the principles underpinning our asset management framework. That framework provides an integrated and structured approach to guide the development, coordination and execution of all or our investment and operating activities so as to optimise the total lifecycle costs, risk and performance of our business. The framework is aimed at ensuring that we undertake only prudent and efficient investment.

In accordance with the requirements of clause 6.5.7(a) of the Rules, our proposed Non-network General capital expenditure program for the forthcoming regulatory period is aimed at ensuring we have the necessary support resources and inputs available to achieve the following objectives:

- to meet or manage the expected demand for standard control services over that period;
- to comply with all applicable regulatory obligations or requirements associated with the provision of standard control services; and
- to maintain the quality, reliability, security and safety of standard control services and our distribution network.

In accordance with the criteria set out in clause 6.5.7(c) of the Rules, our forecasts of capital expenditure reflect:

- the efficient costs of achieving the objectives listed above;
- the costs that a prudent operator would require to achieve those objectives; and
- a realistic expectation of the demand forecast and cost inputs required to achieve the objectives.

To ensure that our expenditure proposal accords with these criteria, our forecasts of the costs of delivering our proposed Non-network General capital expenditure are based on:

- projections of total employee and contractor head-count, reflecting the efficient human resources required to provide essential corporate, planning and operational support functions to enable the business to continue to deliver standard control services efficiently, safely and in accordance with all compliance requirements;
- detailed analysis of the total costs of replace versus maintain decisions, and lease versus buy decisions, aimed at identifying the economically optimal mix of capital expenditure and operating resources.

We also note that the Rules set out the capital expenditure factors to which the AER must have regard in considering United Energy's capital expenditure forecast for the forthcoming regulatory control period. The analysis presented in this report demonstrates that United Energy has considered:

- the relative prices of operating and capital inputs (clause 6.5.7(e)(6)); and
- the substitution possibilities between operating and capital expenditure (clause 6.5.7(e)(7)).

A further relevant factor, in accordance with clause 6.5.7(e)(5) of the Rules, in relation to Non-network General capital expenditure is that our forecast capital expenditure is lower than the expenditure incurred in the current regulatory period. In particular, we forecast capital expenditure averaging $6.2 million per annum compared to $7.9 million in the current period.

The information presented in this document and the relevant supporting documents demonstrates that our forecast of Non-network General capital expenditure satisfies the capital expenditure objectives and criteria specified in the National Electricity Rules. We also demonstrate compliance with these provisions for each of the remaining capital expenditure categories, as explained in the relevant sub-category documents. The AER must therefore accept our total capital expenditure forecast in accordance with clause 6.5.7(c) of the Rules.

8. Glossary

Term	Description
Act	Electricity Safety Act 1998
ALARP	As Low As Reasonably Practicable
Capex	Capital expenditure
CESS	Capital Expenditure Sharing Scheme
EPA	Environment Protection Authority
EPV	Elevating Platform Vehicles
ESMS	Electricity Safety Management Scheme
ESV	Energy Safe Victoria
FRK	Forklifts
HCV	Heavy Construction Vehicles
LCV	Light Construction Vehicles
Opex	Operating expenditure
PV	Passenger Vehicles
STPIS	Service Target Performance Incentive Scheme
TRL	Trailers
Act	Electricity Safety Act 1998

9. Supporting documentation

The following documents support United Energy's Non-network General capital expenditure forecast for the 2016-2020 regulatory period:

United Energy Fleet Life Cycle Management Plan, Document № UE PL 2301

United Energy Fleet Strategy 2014-15 – 2023-24, Document № UE PL 2303

United Energy Operational Property Strategy and Plan, Document № UE PL 2302

Land Acquisition for New Zone Substations Strategic Direction Analysis Plan, Document № UE PL 2211