

## Networks NSW

# Delivering efficiencies for our Customers

May 2014



# About this report

In 2012, the NSW Government announced reform of the electricity distribution networks in NSW. Under the reform model the three NSW distribution network service providers – Ausgrid, Endeavour Energy and Essential Energy (the NSW DNSPs) – continue to operate as separate network businesses. To further the objective of customer affordability, the three companies operate now under a ‘Networks NSW’ umbrella agreement with a common Chairman, common members on each Board and a common Chief Executive Officer.

This report has been prepared by Networks NSW to explain how industry reform has led to significant efficiency improvements by NSW DNSPs. The wholesale changes we have made under the reforms have been focused on improving affordability of electricity for NSW customers. The report demonstrates how this has led us to achieve our objective of striving to contain average increases in our share of customers’ electricity bills at or below CPI for the 2014-19 regulatory period.

In doing so, we consider this is an important supporting document to each DNSP’s proposal. It provides evidence to show that the NSW DNSPs have put in place policies and strategies that are aimed at ensuring that proposed expenditures are efficient and prudent in our circumstances. Importantly it underscores that the proposed expenditure represents the maximum level of efficiency improvement that can be achieved in such a short timeframe without compromising on safety or reliability of the networks.

The document has been structured in a way that helps the AER and our customers understand the reforms that have taken place, and the benefits that have accrued.

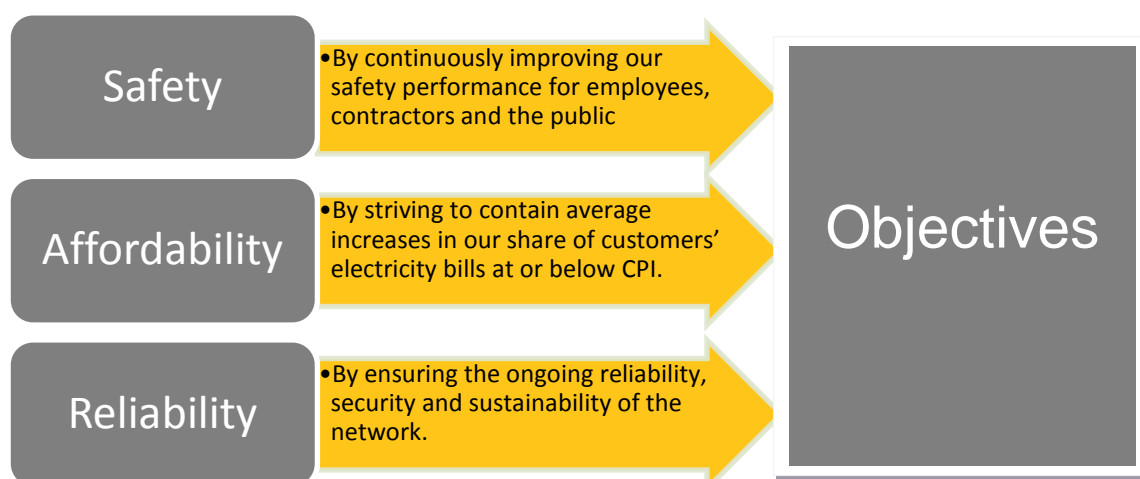
- Chapter 1 provides an understanding on the reasons for reform. We identify that reforms were put in place by the NSW Government to improve affordability and customer value through targeted efficiency initiatives.
- Chapter 2 identifies the objective and strategies of reform under the industry reform model.
- Chapter 3 provides a comprehensive summary of the reform initiatives. This includes details of the formal Network Reform Program, business led efficiencies through cultural changes, and a new governance framework which has enabled prudent prioritisation of the capex program.
- Chapter 4 sets out the achievements of reform, and how this has translated to lower prices for our customers.

We have also included more detailed attachments. Attachment A provides a list of each initiative of the NRP process. Attachment B provides case studies of business led efficiencies. Attachment C provides details on the new governance framework and the prioritisation process implemented.

# Executive Summary

Industry reform has delivered significant efficiencies across the 3 NSW DNSPs, reducing the costs of providing electricity services. These cost savings have allowed us to meet our objective of customer affordability while still maintaining the reliability and safety of the network.

Industry reform has been focused on achieving three core objectives of safety, affordability and reliability. In essence, the reform program has delivered substantial efficiencies across the 3 NSW DNSPs – Ausgrid, Endeavour Energy and Essential Energy – and passed these efficiencies through to customers to improve affordability.



The wholesale initiatives under the reform process have been far reaching and well considered. Our goal has been to maintain reliability and safety of the network, while identifying all opportunities to reasonably reduce our costs. In a practical sense, this has meant focussing on productive efficiencies in the activities we perform, and developing risk management approaches that enable the efficient avoidance or deferral of expenditure.

Our reform initiatives have been a key driver of the capex and opex forecasts of the NSW DNSP's 2014-19 regulatory proposals. This includes the following reforms:

- **Network Reform Program** – These are targeted efficiency initiatives that will have net benefits (relative to pre-reform levels) of \$761 million by 2016-17. Of this, \$475 million relates to capex, \$ 138 million to opex, and \$147 million from asset sales<sup>1</sup>. The initiatives relate to a more streamlined operating model, revision of strategies, and targeted capex and procurement efficiencies. Once implemented, these strategies will result in an enduring long term reduction in costs, and prices for our customers.
- **Business led efficiencies** - Industry reform has been more than a set of “top down” initiatives. The reform process has elicited significant cultural change within our

<sup>1</sup> These mostly relate to property sales which reduce the regulatory asset base and lead to a consequent reduction in regulated revenue sought from customers.

businesses. The strategy and expenditure decisions of the 3 NSW DNSPs have focused on identifying efficiencies. This has led to more refined strategies and policies, and effective cost control that have been incorporated into our forecasting processes for the 2014-19 regulatory period. We have made significant micro efficiency reforms at a business level in areas where there was room for cost savings such as travel, overtime and fleet support costs.

- **Prioritisation of capex programs** – As part of a new governance framework, we have prudently prioritised the capex programs of the 3 NSW DNSPs for the 2014-19 period.

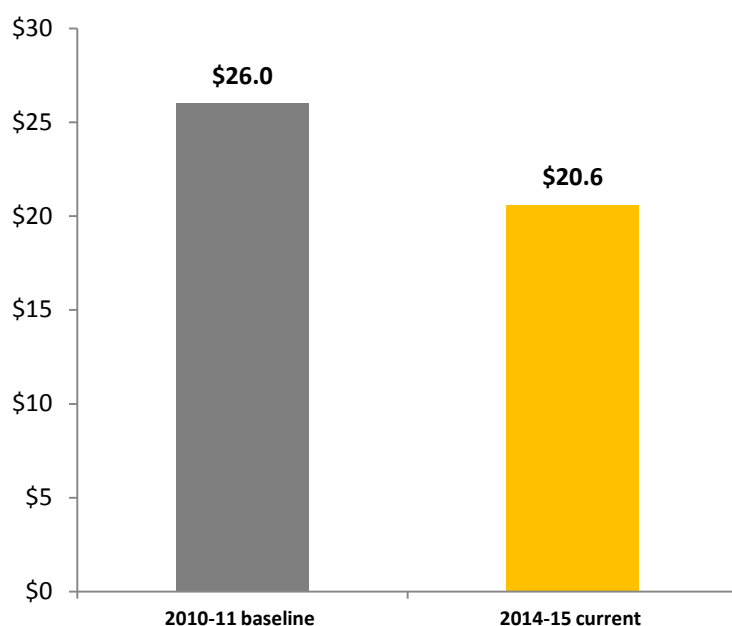
The fruits of reform can be demonstrated in the reduction in charges we are proposing next period, where we expect to contain average increases in our share of customers' electricity bills at or below CPI.

Table 1 – Bill impact: Average per annum percentage change over the 2014-19 period (nominal, includes metering)

	Ausgrid	Endeavour	Essential
<b>Residential (IBT customer)</b>	2.20%	1.34%	2.42%
<b>Small business (IBT customer)</b>	2.31%	1.34%	2.42%

Price movements have stabilised largely as a result of efficiencies that have reduced our capex and opex levels substantially. The diagram below shows that in FY2011 the NSW DNSPs projected that total expenditure<sup>2</sup> for the businesses over the 5 year period 2011-12 to 2015-16 period would be \$26.0 billion. Since that time, we have been implementing significant cost savings across the 3 NSW DNSPs to reduce actual expenditure. Taking into account actual expenditure, we are now projecting that total expenditure will only be \$20.6 billion over the 5 year period 2011-12 to 2015-16 period, which represents a saving of close to \$5.4 billion to what we had projected in FY11.

Figure 1 – Projected expenditure of 3 NSW DNSPs for the 2011-12 to 2015-16 period (\$, nominal)

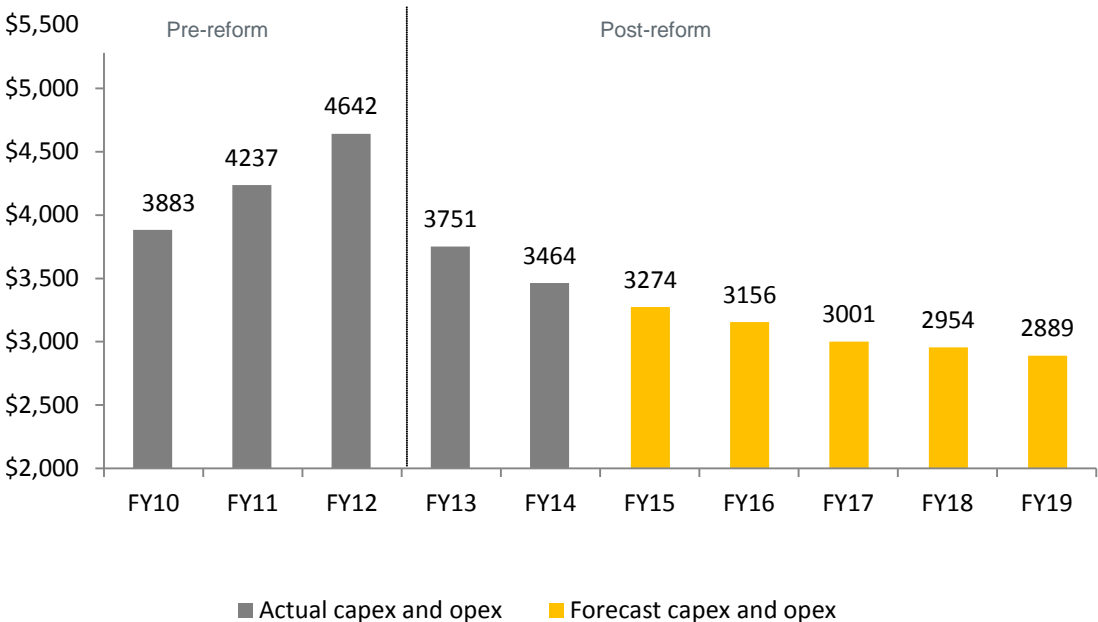


<sup>2</sup> This relates to whole of business expenditure including distribution services and unclassified services.

The significant reductions in our capex and opex have been the result of wholesale efficiency changes across the 3 DNSPs. We have examined all areas of the business to uncover cost efficiencies and prudently defer expenditure where reliability and safety is not adversely impacted. We have also re-examined our organisational structures leading to a more streamlined management that can leverage efficiencies across the 3 DNSPs. The new structure has enabled us to provide a reliable and safe network with less staff, and to pass on these efficiencies through lower capex and opex levels.

The savings have led to approximately a 25 per cent reduction in our proposed standard control expenditure for the 2014-19 period relative to our actual expenditure in the 2009-14 period. As seen in the diagram below, by 2018-19, expenditure will be close to 40 per cent lower than the level it was in 2011-12, the year in which industry reform was announced.

Figure 2 – Comparison of actual “totex” (capex and opex) to forecast totex for the 3 NSW DNSPs (\$ million, 2013-14)



We recognise that this is a long journey, and that a business cannot simply move to the efficiency frontier over night. Our detailed approach has focused on uncovering genuine efficiencies, rather than simply cutting costs in an unsustainable way. Our view is that such an exercise must be undertaken at a detailed level, taking into account inherent cost structure differences and the ability of a business to implement efficiency programs.

We consider that the forecast expenditure for the 2014-19 proposal is based on the maximum level of efficiency improvement that can be achieved in such a short timeframe without compromising on safety or reliability of the networks.

# 1. Reasons and model for reform

In 2012, the NSW Government announced that it was implementing industry reform of the NSW distributors. The purpose was to achieve substantial savings to improve customer affordability of electricity services. Under the reform model, a new umbrella agreement was formed between the 3 DNSPs to maximise the level of efficiencies that could be achieved.

In the 2009-14 period, NSW customers faced significant price increases for standard electricity services. In this chapter we show how industry reform was a response to the financial pressures being faced by customers as a result of these high price movements. Industry reform provided a catalyst for finding efficiencies that would enable the NSW DNSPs to transition quickly to stable prices movements.

## 1.1 ROLE OF INDUSTRY REFORM

While there were legitimate reasons for high price increases in the 2009-14 period, we recognise that increases of this magnitude place financial hardship on our customers. In recognition of customer hardship, the NSW Government Energy Minister announced a major restructure of the NSW electricity distribution businesses in 2012. The Minister noted:

“The NSW Government recognises the burden increasing power bills are placing on households... This is about implementing a common operating model that will deliver big savings... The new, more efficient structure will also provide opportunities to put downward pressure on network charges which contribute to around half the total cost of electricity bills.”<sup>3</sup>

Industry reform has focused the businesses on how to deliver sustainable efficiencies that drive down price pressures as quickly as possible. We also saw reform as a catalyst for promoting cultural transformation of the businesses, with a renewed focus on customer value and engagement, and delivering efficiencies in our role as an essential service provider.

## 1.2 IMPLEMENTATION MODEL FOR INDUSTRY REFORM

Industry reform required a degree of centralisation in decision making and strategy setting. To promote this objective, the three companies operate under a Networks NSW umbrella agreement with a common Chairman, common members on each Board and a common Chief Executive Officer.

Cultural change requires implementation at the operational level. As such, our operating model includes a group termed Networks NSW comprised of staff across the 3 businesses, whose role is to identify and drive efficiencies. Networks NSW provides a hub for strategic leadership and knowledge sharing, and has been pivotal to achieving the outcomes of

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<sup>3</sup> NSW Minister for Resources and Tourism, Media Release, 18 March 2012.

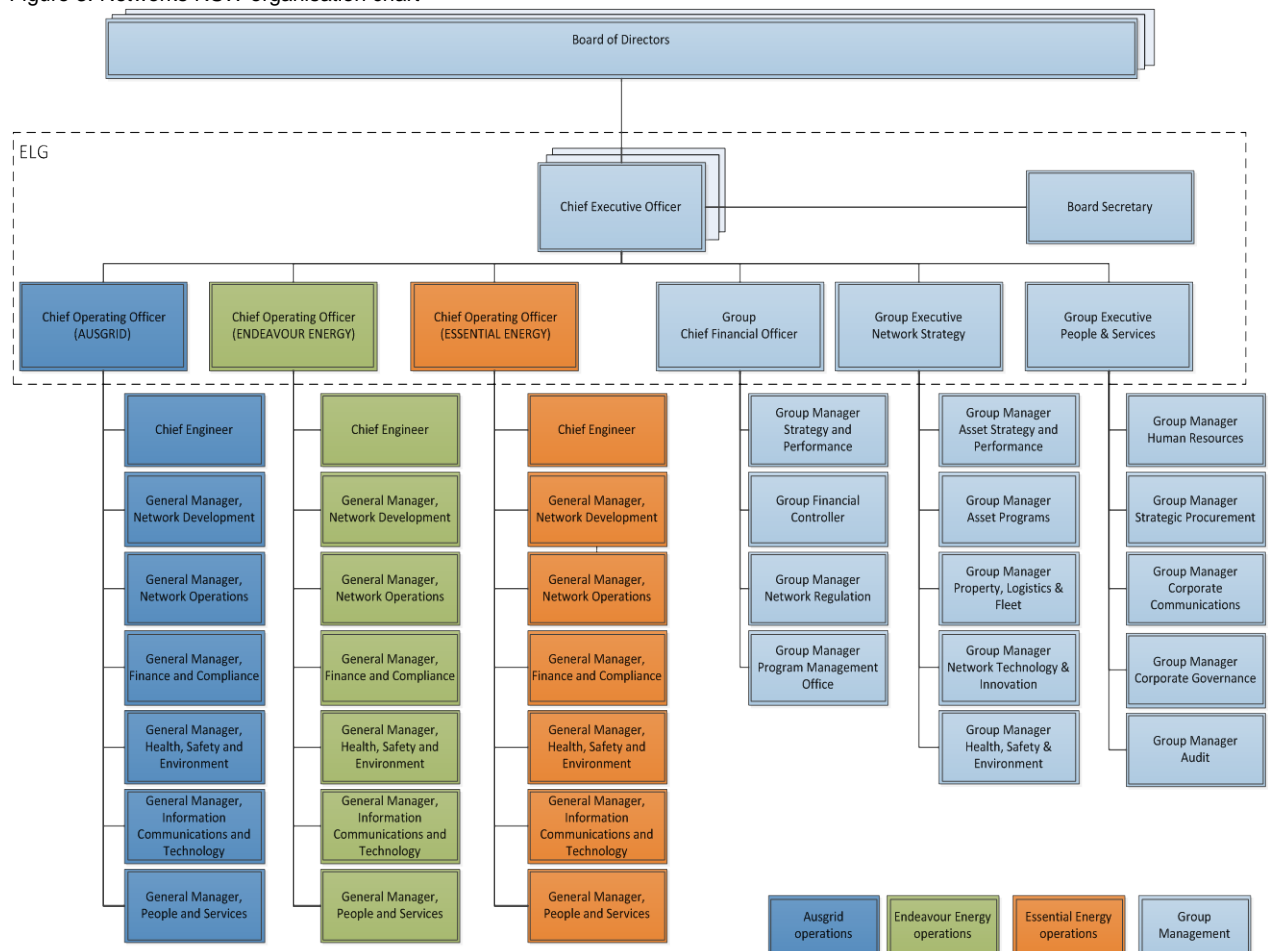
reform. The group does not contribute to the provision of services, but provides the leadership and direction to ensure that each DNSP can provide its services at a lower cost.

From a formal perspective, Networks NSW is a cooperative arrangement between three State Owned Corporations – Ausgrid, Endeavour Energy and Essential Energy under the Umbrella Cooperation Agreement. The NSW DNSPs are each required to comply with legislative and policy directions. These requirements include:

- Meeting the State Owned Corporations (SOC) Act and the Energy Services Corporations (ESC) Act legislative obligations; and
- Implementing the policy directions of our shareholders regarding the restructure of the publicly-owned electricity distribution businesses in NSW.

Each network business within Networks NSW continues to remain a separate SOC, and is governed by a Board that comprise the same directors for each business. A common Group management structure (known as the Executive Leadership Group (ELG)) has been established. The ELG includes the Chief Operating Officer from each of the three NSW distributors and three Group Executives, each of whom reports to a common Chief Executive Officer (CEO). Each network business has the same internal organisational structure. The Networks NSW organisational structure is shown in Figure X below.

Figure 3: Networks NSW organisation chart





## 2. Objectives and strategies

Industry reform has been informed by a methodical analysis of our customers, financial position and the health of our networks. We understood that unachievable cuts to our operations would not deliver sustainable reliability and safety outcomes. For this reason we have developed 7 broad strategies that allow us to achieve our objectives of customer affordability, safety and reliability.

The underlying objective of industry reform is to deliver a more efficient, lower cost electricity distribution service to customers that is financially sustainable, eliminates unnecessary waste, and maintains the reliability of the network in a way that is safe for employees and the public. We have reflected this in developing our proposal, which simplifies the objective to 3 principles – safety, affordability and reliability.

In this section, we show how we have considered our changing environment, including the financial and network challenges of the future when considering how best to meet our objectives. We then identify new strategies we have developed in response to our environment, and which practically provide direction on how to achieve our objectives in the shortest time possible.

### 2.1 STRATEGIC ENVIRONMENT

In developing our objectives we have been mindful of our operating and financial circumstances, and the challenges that lie ahead in the future. Reform has been more than short term price minimisation. It has provided the opportunities for thoughtful review our network and financial circumstances in light of material changes. We have considered our customers' needs, our financial position, and investment drivers for the future.

#### **Affordability for our customers**

Like any business, we understand that our ultimate success is based on building trust with the customers who use our services. This is particularly true in the modern age where customers have genuine alternatives to using our services, such as emerging solar generation technologies.

In recent years, significant price increases eroded the trust we had built up with customers over generations. In hindsight, we acknowledge that we did not do enough to explain the reasons for such a price increase. Nor did we sufficiently engage with customers on what they valued and wanted, for instance opportunities for price increases to transition over time.

Industry reform recognises that we needed to win back the trust of our customers. This requires a cultural re-alignment in the way we go about providing services. In particular, we recognise that the immediate need of our customers is relief from the high price increases that occurred in the 2009-14 period. More than that, customers wanted a say in how we go about making decisions that impact the price and services they receive.



## **Financial and commercial sustainability**

As a commercial entity, we also recognise that prices cannot be reduced without a consequent reduction in financing and operating costs. Similarly, we must look to the long term and see whether there are challenges ahead that inform our commercial decisions today.

With this in mind, we examined the factors that will influence our long term financial health. Our analysis showed that our financial position has changed markedly over the last 5 years. Increases in our debt holdings to fund necessary investments coincided with a period when energy volumes are falling, and where customers can more effectively use alternatives to bypass the services we provide. Each of these factors are discussed below.

### *Debt holdings*

A key driver of high prices in the 2014-19 period was the significant increase in financing costs to fund our renewal and capacity programs. The NSW networks will have invested approximately \$13 billion (real, \$2013-14) in the distribution network in the five year period to 2014. Most of this investment has been funded by debt. The significant increase in the amount of debt borne by three distribution businesses has significantly increased debt levels for the state of NSW.

The proposed capex for the 2014-19 period of \$8.7 billion (real, \$13-14) which represents approximately a 35 per cent reduction in capex excluding the impacts of inflation, compared to the AER's allowances in the 2009-14 period. Despite the lower levels of forecast capital expenditure, the investment will continue to add to the stock of industry and state debt.

### *Transitioning effectively to a lower cost structure*

The substantial increase in capital programs resulted in a need to implement efficient resourcing strategies over the 2009-14 period. We are now transitioning to a lower cost structure to meet our objective of affordability. In addition to lower costs, we are also seeking to implement delivery strategies that look more closely at opportunities to generate efficiencies, including outsourcing options.

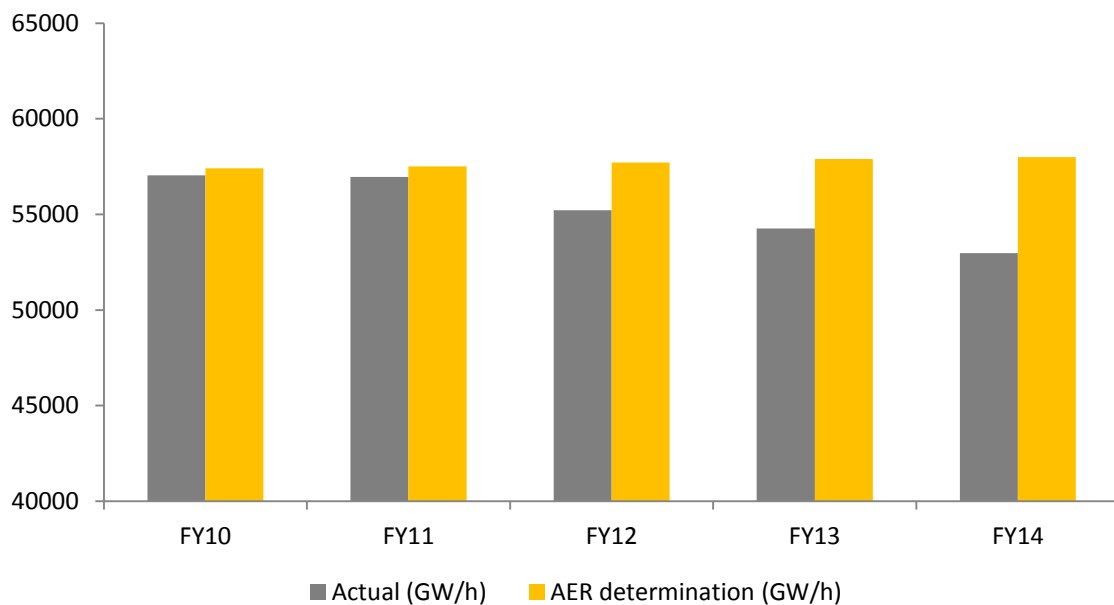
Taken together, this means there is a risk of stranded and under-utilised labour, which will place upwards pressures on operating costs. In particular, reductions in capital expenditure mean that labour will be reallocated to operating costs based on the AER approved cost allocation methodologies, as they are no longer performing work which is of a capital nature.

This suggests the need for a resourcing plan that can provide the most effective, and least cost transition to a low cost environment. We recognise that this will involve fair and consultative consultations with our workforce, and a need to work within the industrial relations frameworks of governments.

## Energy sales

Consumption patterns have changed markedly since 2009. There is evidence that consumption habits have changed as a result of higher prices for electricity, together with Government policy directed at energy efficiency. The following figure shows the difference in energy consumption across the three company's franchise areas compared to the forecast used by the AER in its 2009 determinations.

Figure 4: Energy consumption in 2009-14 (GWh) – Actual compared to AER determination



Lower energy sales places commercial pressures on the 3 NSW DNSPs. This is due to the high proportion of fixed costs in operating an electricity network, which provides limited opportunities to adjust variable costs to reflect lower consumption.

### *Growing substitutes for our services*

The incentives to move towards renewable sources of energy have sparked significant technological changes in the electricity sector. The traditional business model for providing electricity services is slowly changing. New micro technologies such as PV have been heavily incentivised by governments, meaning that there are now alternative substitutes for customers to receive electricity services without using our electricity network. In the medium to long term, this will continue to place downward pressure on energy sales on our network.

### **Investment drivers**

As part of the reform package we have contemplated the drivers of investment in the future. In the sections below, we identify changes in our capacity, replacement and support drivers.

#### *Capacity*

Investment in improving the capacity of the network enables us to meet increases in peak demand and to improve the security and reliability of services. The large capital programs of the 2009-14 period have delivered on our promise to improve the security and reliability

of the network. We have reduced the number of overloaded assets on the network, and put in place designs that enable improved redundancy when assets fail. As such we have largely met the step change required by the NSW Design Reliability and Performance licence conditions imposed on us in 2007.

Having put in place programs that improved security and reliability, we are now in a position to reflect on future drivers of capacity investment. In this respect, a number of factors are in play that are providing opportunities to reduce expenditure levels:

- System peak demand has moderated significantly from the late 1990s and early to mid 2000s when growth in air conditioning penetration was high. While growth still occurs on a localised, or spatial, basis this means that there no longer remains a system wide driver of capacity investment in response to organic growth in peak demand.
- Spot loads from large new customers, greenfield new suburbs, and urban infill will continue to drive capacity investment in localised areas of the network.
- There has been a change in our design criteria for investment under amended licence conditions which apply for the 2014-19 period. This provides opportunities to prudently consider where we can take on more risk in our investments.
- For a rural DNSP like Essential Energy, capacity investment will continue to be driven by voltage issues.

Taking these factors together, we have considered that there are opportunities for reducing capacity investment significantly in the 2014-19 period, whilst noting that capacity is still required in pockets of the network.

### *Replacement*

Despite significant replacement in the 2009-14 period, NSW DNSPs continue to have some of the oldest assets in Australia. As these assets age, they degrade in condition and can pose safety and reliability risks to the network.

In terms of addressing this risk, Networks NSW has considered the full extent of risk tolerance and risk mitigation strategies, such that we could continue to keep the aged assets in service.

### *Support investment*

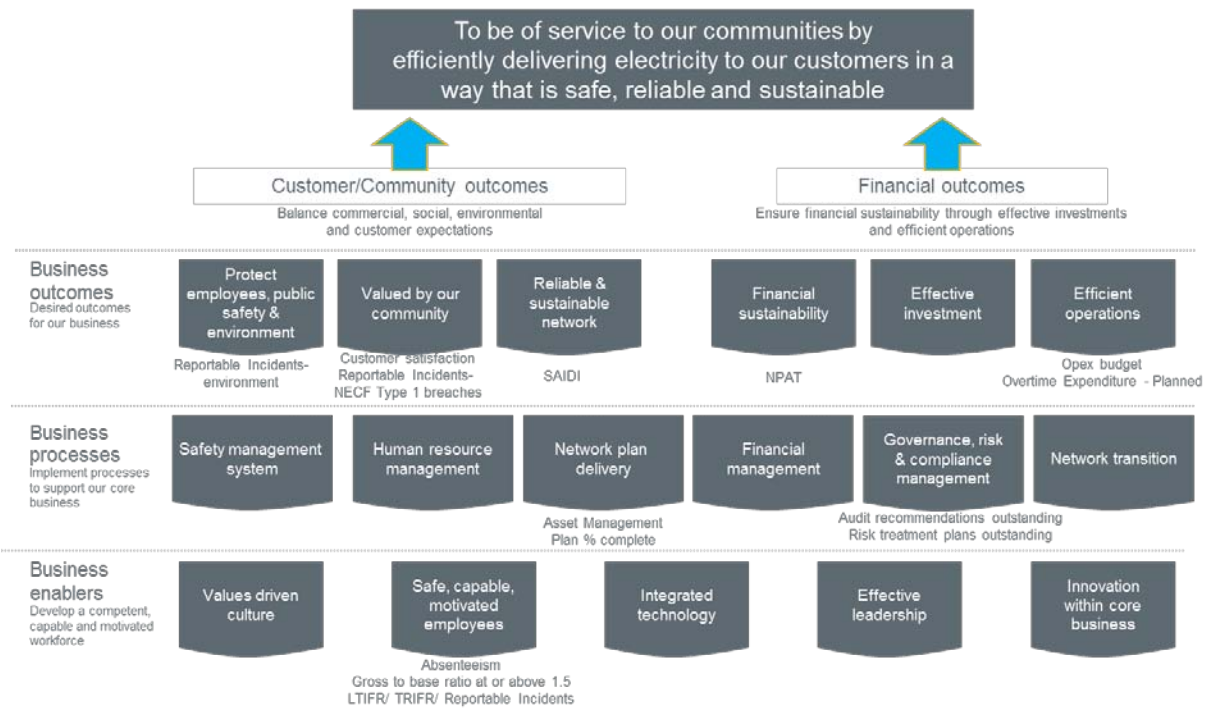
Continued expenditure in support activity such as IT, finance, corporate property and fleet is critical to enabling us to perform our functions as a DNSP and to meet our corporate obligations.

We consider however that there are opportunities to find efficiencies in these functions by focusing on core investment to maintain our functions, rather than additional and new capabilities. We also consider there are potential cost benefits arising from reviews of expenditure levels across the businesses, and leveraging capabilities.

## 2.2 STRATEGIES TO BRING ABOUT REFORM

Networks NSW has developed a strategy map that takes into account our strategic environment and which meets our objective of safety, reliability and affordability. This is seen below.

Figure 5: Strategy Map of Networks NSW



To give effect to these objectives we have developed 7 strategic plans that are integrated into the processes of the 3 NSW DNSPs including the customer value strategic plan, asset management strategic plan, safety strategic plan, finance strategic plan, risk management technology strategic plan, and the human resources strategic plan. These are discussed below.

### Customer value strategic plan

The Customer Value Group Strategic Plan sets the vision for our future engagement with customers to ensure they receive an efficient energy distribution service that provides value for money. Likewise we aim to develop relationships with our customers that are meaningful and cost effective for the customer.

The objective of the Customer Value Group Strategic Plan is to 'Deliver customer-focused services and network prices that represent the best value for money for our Customers and Communities'.

Research indicates that customers want the right outcome for the lowest price, not the lowest price overall. This is particularly true for reliability where research shows that customers are prepared to pay for a certain standard of reliability and do not want to trade off existing levels of reliability for lower price outcomes. The challenge for Networks NSW is to cost effectively identify the elements (or level) of service we provide that customers

value most through appropriate engagement and to deliver those expectations as efficiently as possible.

**Asset Management Strategic plan**

Effective asset management is the key to being able to safely and efficiently deliver a reliable and sustainable electricity network, while containing network tariff increases to CPI. Networks NSW’s Asset Management Strategic Plan provides a framework for asset management decision making that will deliver value from our assets through the appropriate balance of network costs, network risks and network benefits.

The objective of the Asset Management Strategic Plan is to ‘Apply best practice asset management principles to create value for Customers’.

The initiatives outlined in Networks NSW’s Asset Management Strategic Plan aims to deliver outcomes relating to improved safety performance, sustainable and reliable network performance and tariff movements in line with (or less than) CPI. The Asset Management Strategic Plan is also critical to the financial and underlying asset risk of Networks NSW’s network and underpins the capital and operating investment programs that support our next five year electricity price determination made by the AER.

**Safety Strategic plan**

At Networks NSW, safety is our number one priority and the responsibility of every employee. The purpose of the Strategic Plan - Health, Safety and Environment is to protect the safety of the public, our employees and contractors and to minimise the impact of our operations on the environment.

We encourage a culture where “no employee knowingly participates in an unsafe act or environmental breach” and we work towards this by undertaking Health, Safety and Environment improvement programs and initiatives.

Over the last decade, the NSW DNSPs have achieved substantial inroads into the health and safety of our workers. This can be seen in the diagrams below which show that lost time injury and total recordable injury have fallen significantly since 2005 for all 3 NSW DNSPs.

Figure 6: Lost time injuries

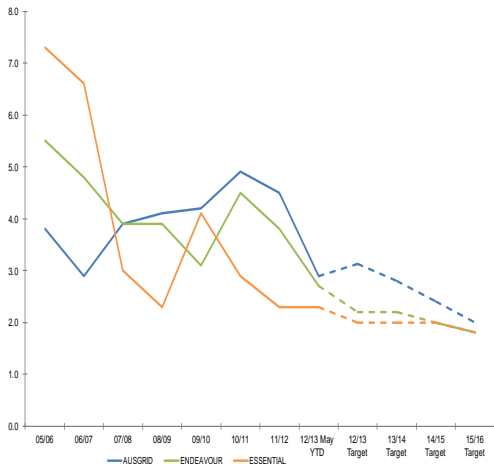
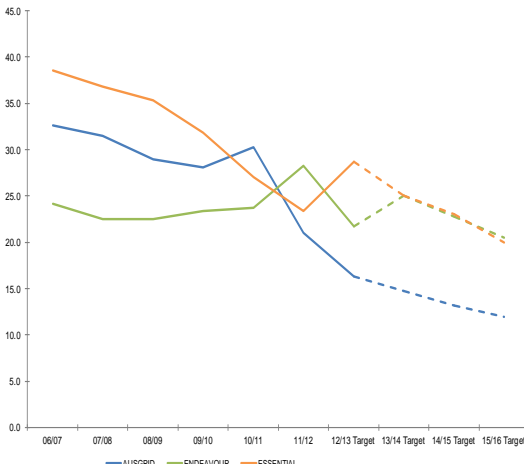


Figure 7: Total Recordable injury



The initiatives outlined in the Strategic Health, Safety and Environment Plan seek to:

- Establish a culture and behaviour where no employee knowingly participates in an unsafe act or environmental breach.
- Provide capable and effective leadership of health, safety and environmental functions by specialist, line management and supervision employees.
- Establish a Health & Safety Management System that is compliant with legislation, regulation and relevant codes of practice and enables effective management of safety risks.

Through the Safety Plan, Networks NSW is committed to the safety of the general public. Education initiatives are the key element to ensure the network businesses meet their public safety responsibilities. The Safety strategy also recognises our environmental responsibilities and seeks to minimise our impacts on the natural environment by taking steps to reduce emissions, discharges and waste, and to promote energy conservation and recycling.

### **Finance strategic plan**

Networks NSW's commercial obligations are to operate as efficiently as any comparable business and maximise the net worth of the State's investment. Success against these drivers demands prudent asset investment and efficient, day to day operational management in order to deliver improved value for money outcomes to our customers.

The objective of the Finance Strategic Plan is to 'protect financial value and deliver balanced outcomes for both customers and the shareholder'. Networks NSW's Finance Strategic Plan is designed to deliver these outcomes by focussing on four key areas:

- Manage the AER determination – deliver sound regulatory proposals that continue to deliver safe and reliable electricity while at the same time take into account community concerns about affordability.
- Financial sustainability – improve investment prioritisation and the debt management approach.
- Aligned performance outcomes – implement an aligned corporate planning architecture across Networks NSW.
- Achieve network reform program cost savings – achieve reform-related savings.

### **Risk management strategic plan**

Networks NSW's Risk Management Strategic Plan aims to embed a Risk Management Framework that is common across the three network businesses within NSW. The framework is based on promoting a positive risk culture using targeted initiatives to minimise the chance of loss or harm, maximise safe operations and support shareholder growth.

The objective of the Risk Management Strategic Plan is to 'Promote a positive risk culture through targeted initiatives to ensure delivery of key outcomes of safety, reliability and tariffs within CPI'.

We are committed to implementing a Risk Management Framework that facilitates the identification and control of risks that could affect our people, the community, the environment, our customers, our network assets, or financial and legal status. A benefit of a common Risk Management Framework across the three businesses is that it will allow risk profiles to be compared which can ensure a sound basis for management and Board decision-making.

Networks NSW applies a risk assessment methodology that assesses the probability and consequence of hazardous events affecting our network operations and our ability to deliver specific priority actions and/or programs.

### **Human Resources Plan**

The objective of this plan is to develop the leadership performance, workplace culture and organisational capability required to execute the NSW Government's reform agenda. The plan encompasses performance of our staff, employee relations, as well as learning and development.

The objective of the Human Resources Strategic Plan is to 'develop the leadership performance, workplace culture and organisational capability required to execute our strategy'. The strategies within the Human Resources Strategic Plan are based on an analysis of short, medium and long term industry, business and cultural issues and aims to deliver the following outcomes:

- Improved safety performance.
- Improved employee engagement and cooperation with productivity improvements.
- Implementation of reform initiatives in line with planned timeframes and identified cost savings.

### **Technology strategy plan**

Across the three network businesses in NSW, there are significant differences in levels of IT currency and overlapping trials of network operational technologies. The objective of the Technology Strategic Plan is to 'leverage technology and enable the transition to more efficient business models.' The measures of success for this plan will be reflected in both organisational performance and in the efficient delivery of key projects through reduced duplication of trials.



## 3. Efficiency initiatives

The reform process has elicited significant cultural changes across the 3 DNSPs, which have resulted in considerable efficiencies. The Network Reform Program has provided a centralised and rigorous approach to identifying common areas of efficiency across the business. This has been supplemented by business led efficiencies, and by a centralised method to prioritise capital investments.

In this chapter, we identify and describe the efficiencies that have been put into effect as a result of industry reform. We note that there has been a formal efficiency program introduced under industry reform, together with cultural efficiencies implemented by each business and a formal prioritisation method to rationalise each DNSP's capex forecasts.

### 3.1 NETWORK REFORM PROGRAM

The Network Reform Program (NRP) has already delivered and will continue to deliver significant savings over a 5 year period commencing July 2011. These savings have been incorporated into the capex and opex forecasts proposed for the 2014-19 regulatory period. The reform program includes four structured initiatives, namely:

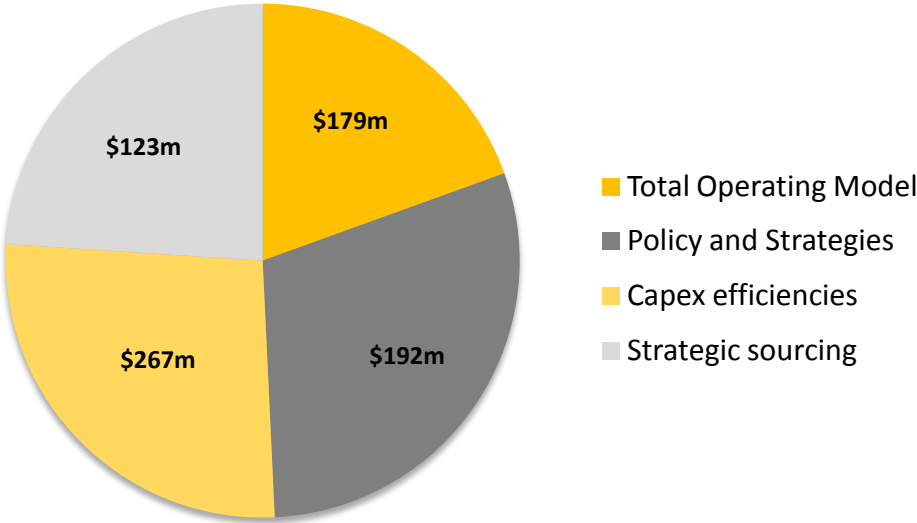
1. Functional reviews of organisational structure and resources (also termed the "Total Operating Model").
2. Strategy and Policy Initiatives
3. Capex Efficiency Initiatives
4. Strategic Sourcing Initiatives.

Each of the reforms are discussed below with more information on individual elements at Attachment 1. Overall the net benefits are \$761 million, of which \$475 million relate to capex, \$138 million to opex and \$147 relate to asset sales.<sup>4</sup> The relative value of each initiative is depicted in the diagram below. Attachment A provides further detail on the initiatives.

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<sup>4</sup> Revenue reductions relate to the savings from a reduced regulatory asset base for the sale of surplus real estate. We also note that these identified savings relate to total business.

Figure 8: Savings by NRP efficiency (\$m, nominal)



### Total Operating Model

The total operating model is focussed on deriving efficiencies from aligning the functional structure of the 3 businesses. These initiatives relate to streamlining both corporate and support services, removing functional duplication, sharing better practices, implementing more efficient structures, as well as leveraging opportunities for standardising reporting.

The reform process provided a valuable opportunity to:

- Assess the level of efficiencies that can be achieved in processes or practices, including assessing resources required to provide services.
- Identify opportunities for synergies from having 3 businesses, including having a single business as the lead (Centre of Excellence) in providing services, thereby eliminating the need for duplication of services.
- Identifying optimal management structures to provide services, including opportunities to streamline management resources.

The key areas of focus for corporate services included finance, property and human resources. For example, we found opportunities to streamline the provision of finance services provided by each of the 3 businesses by centralising parts of the finance function, which removed duplication of resourcing. We also streamlined the external internal reporting processes, and made cost savings for advisory services through tighter oversight of use of consultants and jointly obtaining advice.

In terms of the corporate functions related to property, the NRP reforms targeted a reduction in service costs by rationalising property locations. This in turn reduces functional duplication by creating virtual teams within each business that play a lead role in a core property activity. We will also be considering ways to outsource activities such as facilities management and security to further reduce the costs involved in providing the services.

The total operating model also extends into support services crucial for delivering our asset management activities. For example, the asset management reforms will garner significant benefits from a common operating model led by Networks NSW which will apply better practice asset management across all three network businesses. The model will consolidate functions, ensure better practices are actively adopted and identify efficiencies in carrying out asset management and planning activities.

### **Policy and strategy initiatives**

These initiatives relate to policy changes for consistent 'better practice' across the three distributors, particularly in network areas, such as reliability planning, maintenance and renewal policies, as well as fleet strategy and property portfolio management. In each case, significant operational business change will be required to achieve benefits (which include both opex and capex benefits).

The review of policies has been comprehensive with cuts across all facets of the business. A key area of focus has been on maintenance and renewal policies. We will be utilising best practice asset management strategies across the 3 businesses, with an emphasis on understanding failure rates, failure modes and their impact on overall network performance. This will provide a key platform for optimising expenditure in these areas.

The NRP reforms also capture expected cost savings related to a review of planning standards. Processes to establish Network Asset Ratings, Maximum Demand Forecast and Supply Security License Conditions are primary inputs into investment planning, driving capital expenditure budget forecasts up to 10 years into the future. There have been historic variations between the companies in approaches to the above areas and therefore potential savings by adopting better practice across all three businesses.

The reforms have also considered the potential savings related to operational technology strategies. All network businesses are considering or have significant investment programs underway in Operational Technology including Smart Grid, DMS, telecommunications and related contracts. Consideration of these activities at a consolidated level offers opportunities to leverage existing investments, remove duplication in trials and determine the most appropriate strategy, which will ultimately result in associated cost reductions.

Policy reviews have also extended to corporate support areas. We have reviewed our financial policies, corporate property landholding reviews, and IT policies to pursue available efficiencies.

### **Capex efficiency initiatives**

These initiatives improve capital management across the three distributors. A key focus has been on providing the necessary tools to enable prudent capital rationing of network investments, corporate property deferrals and IT capex savings. As noted in section 4.2, this has allowed us to be in a position to undertake a formalised prioritisation process prior to finalising our capex forecasts for the 2014-19 regulatory period.

Capex program management has also been a focus of these initiatives. We will be looking to better streamline our governance and project reporting methodologies as part of our investment governance framework. The capex efficiencies have also looked at target areas for capex reductions. In particular we have looked at efficiencies in:

- Fleet - This includes extending the replacement cycle for trucks and other equipment such as electronic work platforms. We have also sought to gain efficiencies through standarding vehicles across each major asset class, which allows us to get better value by negotiating with a single manufacturer.
- Corporate property – We have sought to defer a number of impending property investments by retaining existing facilities, delaying upgrade proposals and maintaining the status quo. In addition a number of surplus properties have been identified for sale. Some properties will be sold.

### **Strategic sourcing initiatives**

The reform of procurement programs will deliver synergies by leveraging volume purchases of goods and services across the three network businesses to ensure repeatable, auditable, controlled and swift sourcing processes, to drive significant procurement savings across each wave of activity.

To achieve this, we have created a “sourcing factory” to ensure repeatable, auditable, controlled and swift sourcing processes, to drive significant procurement savings across each wave of activity. A key focus will be in on information technology which will result in significant opex and capex savings.

## **3.2 BUSINESS LED EFFICIENCIES**

Industry reform has been more than a set of initiatives. The reform process has elicited significant cultural change within our businesses. We have put in place better planning and strategy decisions, more effective cost controls, and targeted micro reforms in areas where we could reduce our costs through cultural change such as travel and overtime.

Our change in approach has been reflected in our expenditure forecasts for the 2014-19 proposal. Our bottom up planning has sought to prudently defer capex where risk could be tolerated or mitigated, and our cost estimate and budgeting processes have identified cost savings.

To a degree these costs are hard to quantify as they represent a series of actions performed over time. What is vital however is that they are key contributors to bringing down the total expenditure levels by 40 per cent between 2011-12 and 2018-19.

### **Strategy and planning approaches**

The reform process has influenced the direction of businesses in terms of approaches to planning and cost delivery. In particular there has been a focus on:

- Core investment –The businesses are investing less in innovative technology such as smart grids. Further, the focus of non-system investment is on maintaining the core rather than projects that have medium term efficiency paybacks. Where opportunities are identified, the businesses will leverage off each other to put in place effective trials of new technology prior to investment.
- Risk management frameworks - Assessing all opportunities to prudently defer investment through risk mitigation or tolerating an acceptable level of risk.

This has fed back into the business planning and approval processes, with effectively a higher threshold to justify the need of a capital project in developing our capex proposals for the 2014-19 period. As noted in Section 4.3, prioritisation under a common investment governance framework supplemented the process that businesses had been undertaking since the reform process to reduce capex costs.

### **Effective cost controls**

We have also been looking at ways to put in place effective cost controls, as part of our capital and operating budgets and forecasts. This has been achieved through:

- More detailed analysis of the basis of opex budgets – Our opex forecasting process has not only incorporated the NRP reforms, but has also sought to identify whether there are any other areas where we can contain our costs through efficiencies.
- More rigorous assessments of capital projects through the approval process – Since industry reform there has been a renewed focus on cost controls and checks on the need of the project. This has been fed back into the planning process when developing our capex forecasts for the 2014-19 proposal.

### **Micro efficiencies through cultural changes**

Industry reform has provided the opportunity to pursue cultural changes in the way we approach the activities we perform. Each business has put in a place a ‘whole of business’ approach to identifying areas where we can improve productive efficiency, or in other words where we can continue to perform our activities at a lower cost.

These micro efficiencies have led to lower costs of performing our functions as a DNSP, and have been incorporated into our capex and opex forecasts for the 2014-19 period. Below we provide key examples of where we have elicited significant cultural change across the 3 DNSPs. We have provided more information in the case studies at Attachment B of this document.

#### *Overtime*

Industry reform provided an opportunity to review work practices and address historical institutional rigidities within each of our businesses. An identified area of potential saving was reducing the number of overtime hours, which in turn reduces the average labour cost of undertake capital and operating activities.

Overtime is part and parcel of operating an electricity network, as many activities cannot be performed during normal business hours, such as emergency repairs in response to an outage. Further, overtime can be more efficient where there are higher costs from operating during normal hours such as when performing repairs near major roads, where traffic control costs are very expensive and inconvenient for the general public.

Our efficiency savings for overtime were therefore focused on opportunities where completing the task in normal business hours was possible, and cost efficient. Total overtime spend fell by \$57m in between 2012 and 2013 reflecting a shift in workload, workforce numbers and work scheduling.

## *Travel*

Travel is a necessary expense of operating a network in an efficient way. Despite this, the businesses recognised opportunities to make cost savings to travel expenses through a review of practices and procedures.

In undertaking such reviews, we were conscious of the underlying differences between the businesses. For instance, Essential operates over a large geographical region, and its staff are therefore dispersed in a number of locations. Accordingly, travel would be expected to be relatively higher than Endeavour and Ausgrid who distribute energy across a more urban geographic area.

For this reason, each business focused on its own circumstances when seeking to identify efficiencies:

- Essential has dramatically reduced accommodation, air travel and other expenses. Substitution of teleconferencing for face to face meetings has delivered major cost saving while maintaining the necessary physical regional presence essential for effective management and both staff and customer engagement. Rises in teleconferencing costs have been modest compared to travel expense savings, however are reported monthly to individuals for review, approval and to seek operational savings.
- In addition to air travel, Endeavour and Ausgrid also has made inroads by reviewing its processes for travel, for example, taxi usage.

The key to improvements in discretionary expenditure has been policy changes supported by a focus on specific operational opportunities. For instance, we have reduced the cost of Ausgrid flights by close to 50% between 2012 and 2013 and reduced the cost of Essential flights and accommodation by approximately 60% between 2012 and 2013.

## *Fleet policy*

Industry reform also provided an opportunity to find efficiencies in the fleet costs of each business through:

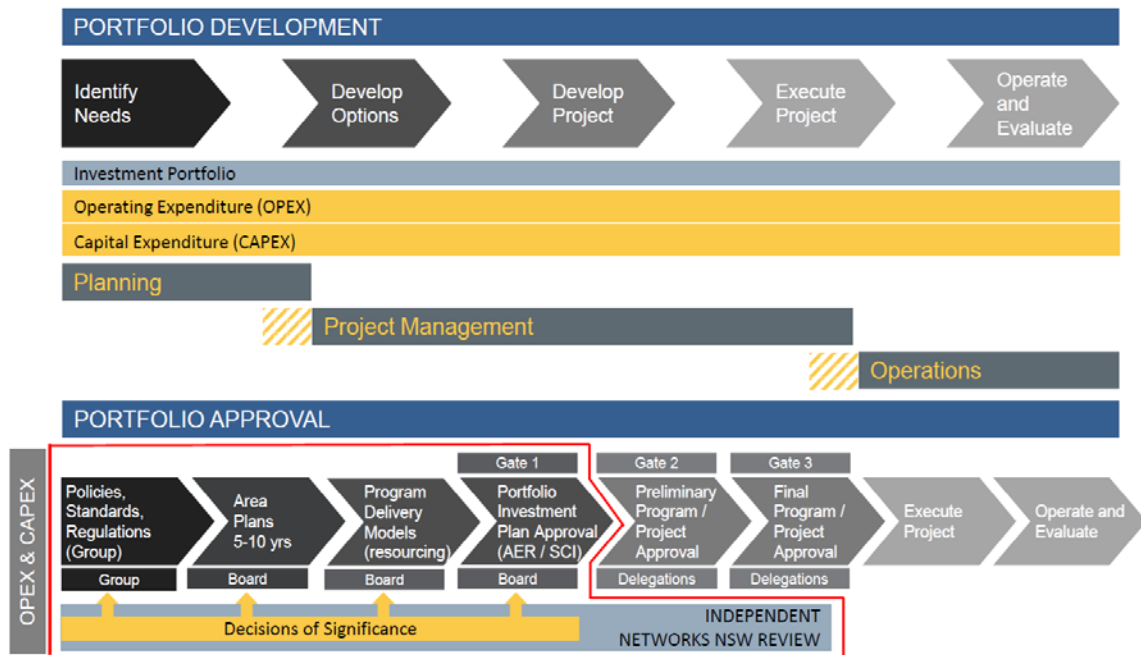
- Focus on reducing the number of passenger vehicles which were being utilised by our field staff.
- Reviewing policies on travel to and from depots, or direct to jobs.
- Specification of standard vehicle models.

We are projected to reduce fleet numbers in financial year 2014 by 20% compared to 2012, a reduction of more than 1,500 vehicles. In total, this will result in combined capex and opex savings since financial year 2012 of \$43.3 million.

## **3.3 INVESTMENT GOVERNANCE AND PRIORITISATION**

The review of the three network business governance processes has been an important element of the reform activity across Networks NSW. It has provided an opportunity to apply a standard set of governance rules to the businesses and streamline the investment approval process. This can be seen in the overarching framework set out below.

Figure 9: Investment Governance Framework



Decisions of significance are reviewed by Networks NSW and formulated in conjunction with relevant regulations into policies and standards across the 3 businesses.

In the section below we focus on the formalised prioritisation process that was enabled as part of the Investment Governance Framework, and was a key input in finalising the capex proposals of the 3 DNSPs. Further information on the new governance framework is contained in Attachment C.

### Prioritisation

An important element of the new governance framework is a formalised process for prioritising investments, which has assisted us to develop a capital program that represents a prudent risk level.

As noted in Chapter 3, there are a number of factors still driving network and support investment. In particular, the age and condition of network assets means that we cannot maintain reliability and safety in the absence of investment. Similarly, we need to invest in support assets to maintain our existing systems and assets, which are vital for meeting our network and corporate responsibilities.

At the same time, we are conscious of the need to reduce capex levels to meet our objective of affordability for our customers, and to reduce our financial risks from carrying high levels of debt. As such, our investment governance framework sought to apply a prioritisation method that helps us to balance these objectives when finalising the capex proposals for the 2014-19 period. The key components of the prioritisation process were:

- At several points in the development of the expenditure plans, each DNSP identified a full suite of projects and programs that would comprise the proposed expenditure portfolio.



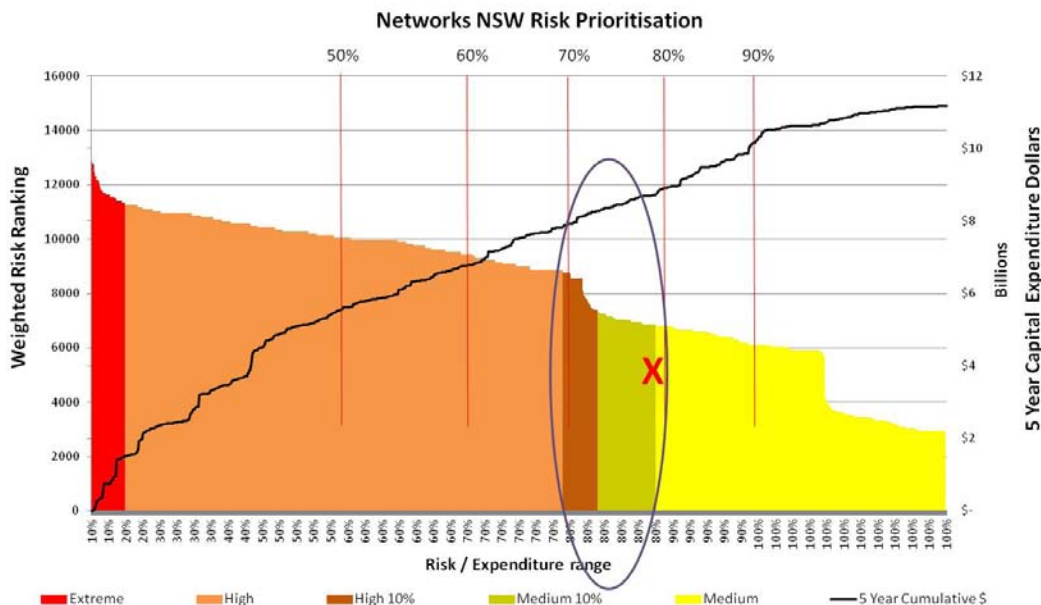
- Each project or program was assigned a risk ranking, based on a consistent methodology for assessing risk. The consistent application of a single approach allowed us to objectively rank projects within each business in a consistent way.
- A process of feedback and iteration refined the plans and risk assessments as the expenditure forecasts were refined with multiple passes through the risk prioritisation tool.
- A board level review of the overall risk profile under different expenditure scenarios identified the prudent level of capital investment which forms the basis of our expenditure forecast.

Importantly, the process provided an adequate risk level to meet the circumstances of that DNSP, rather than a pooling of risks across the 3 DNSPs, which further demonstrates that the resultant outcome was prudent in each DNSP's circumstances.

### Outcomes of prioritisation

The diagram below shows the basis for deciding on the final prioritised capital program. It shows that a range of scenarios were considered, before finalising on the level of risk that we considered a prudent DNSP would take in our circumstances. In this case, we considered that approximately 80 per cent of the initial capital expenditure program developed by the DNSP was reasonable in our circumstances.

Figure 10: Outcomes of prioritisation



We consider that the outcome of prioritisation was reasonable, in that it reflected a prudent assessment of risks to achieve our objective of customer affordability. In this respect, the reasonableness can be demonstrated by the consistent method used to rank relative risks of the program. This enabled us to prudently select programs that could be efficiently deferred without deteriorating reliability.

## 4. Benefits from industry reform

The reforms have resulted in substantial reductions to our capital and operating expenditures. In turn, this has allowed us to meet our objective of striving to contain average increases in our share of customers' electricity bills at or below CPI. NSW DNSPs are showing considerable efficiency improvements relative to our peers.

Our reform progress has targeted efficiencies that are within the control of management, rather than setting unachievable and unsubstantiated cost cuts. This recognises that unsustainably reducing costs can place pressure on prices in the long term leading to an overall inefficiency.

The forecast expenditure programs represent the maximum level of efficiency that we believe is achievable to deliver our 3 objectives of safety, affordability and reliability to meet the long term interests of our customers.

The purpose of this chapter is to demonstrate that the reforms have been successful at ensuring we can contain average increases in our share of customers' electricity bills at or below CPI. In the chapter we provide details on the forecast price path for a typical customer in each of the 3 NSW networks, reductions in forecast expenditure for standard control services in the 2014-19 period, changes to our employee numbers and comparison of our performance relative to our peers.

### 4.1 MEETING OUR GOAL OF AFFORDABILITY

A primary objective of the reform process was to improve affordability by striving to contain average increases in our share of customers' electricity bills at or below CPI. The table below shows that our regulatory proposal for 2014-19 has achieved this objective. The indicative bill impact (including metering) is expected to be less than forecast CPI for residential and small business customers for each of the 3 NSW businesses.

Table 2 – Bill impact: Average annum percentage change over the 2014-19 period (nominal, includes metering)

	Ausgrid	Endeavour	Essential
<b>Residential (IBT customer)</b>	2.20%	1.34%	2.42%
<b>Small business (IBT customer)</b>	2.31%	1.34%	2.42%

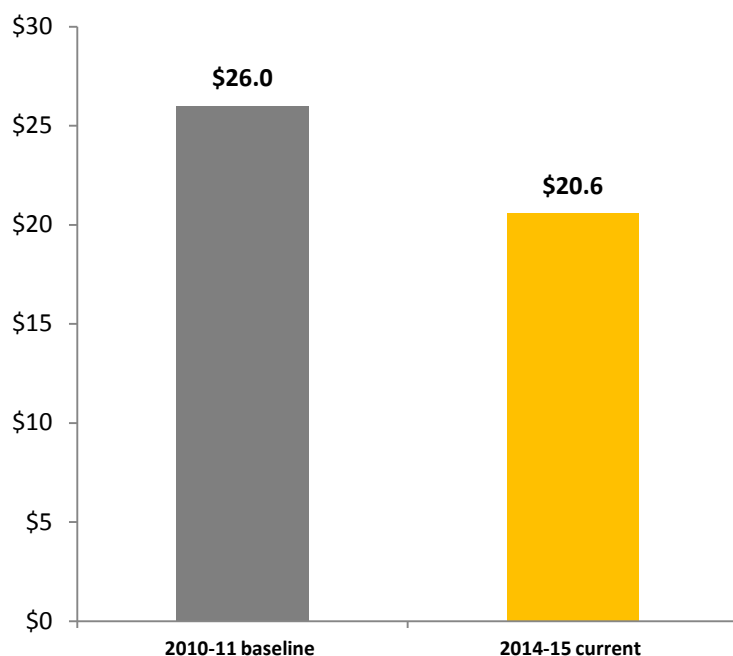
The real reduction in prices reflects lower revenue requirements over the 2014-19. The reduction in prices would have been higher had we not been forecasting a fall in energy consumption, which places upward pressure on the average price a customer pays for electricity.

## 4.2 REDUCTIONS IN EXPENDITURE

We have achieved our goal of affordability by focusing on efficiencies in our expenditure programs. Since industry reform commenced, we have been forecasting progressively lower levels of expenditure as we cement our efficiency programs.

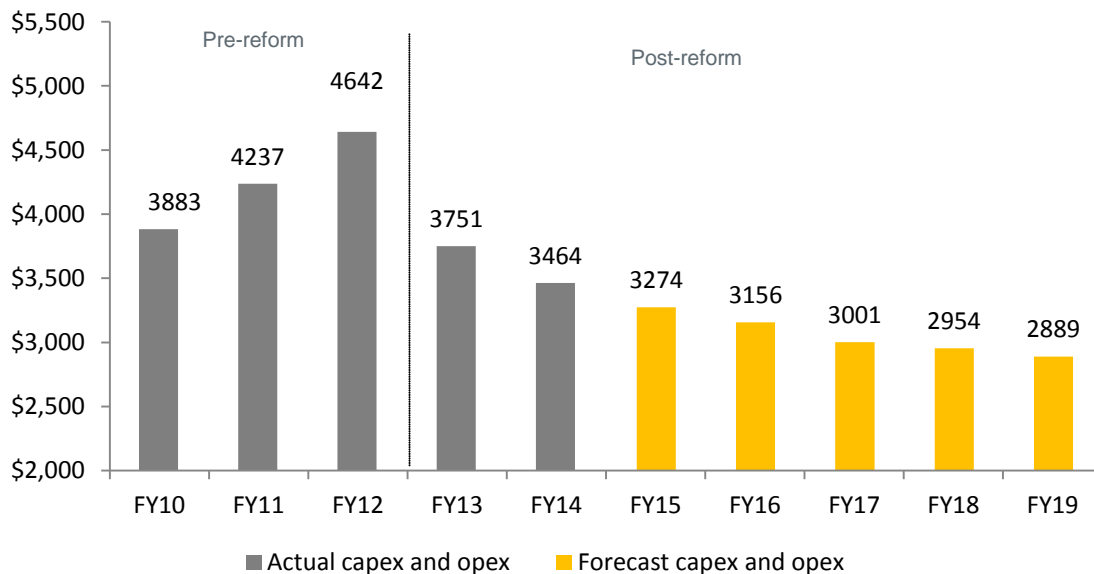
A good point of comparison is the difference in our 5 year outlook of expenditure in the year prior to reform (2010-11) relative to our most recent estimate of expenditure over that period. The diagram below shows that in 2010-11, our forward looking 5 year expenditure projections forecast that we would be incurring a combined expenditure of \$26 billion. Our current projection (taking into account actual expenditure) is only \$20.6 billion, representing close to \$5.4 billion in savings in the costs of providing services. The revisions in our expenditure forecasts for each year reflect the ongoing efficiencies we have found as part of the reform package. It should be noted that this comparison is on whole of business.

Figure 11 – NSW DNSPs' projected total expenditure for the 2011-12 to 2015-16 period (\$, nominal)



The following diagram shows the difference in the combined expenditure levels for standard control services of the 3 DNSPs between the 2009-14 period and that forecast for the 2014-19 period. Compared to our expenditure levels in the 2011-12, we will be spending close to 40 per cent less by 2018-19.

Figure 12: Aggregate total expenditure actual vs forecast for 3 DNSPs – (\$ million, real 2013-14)

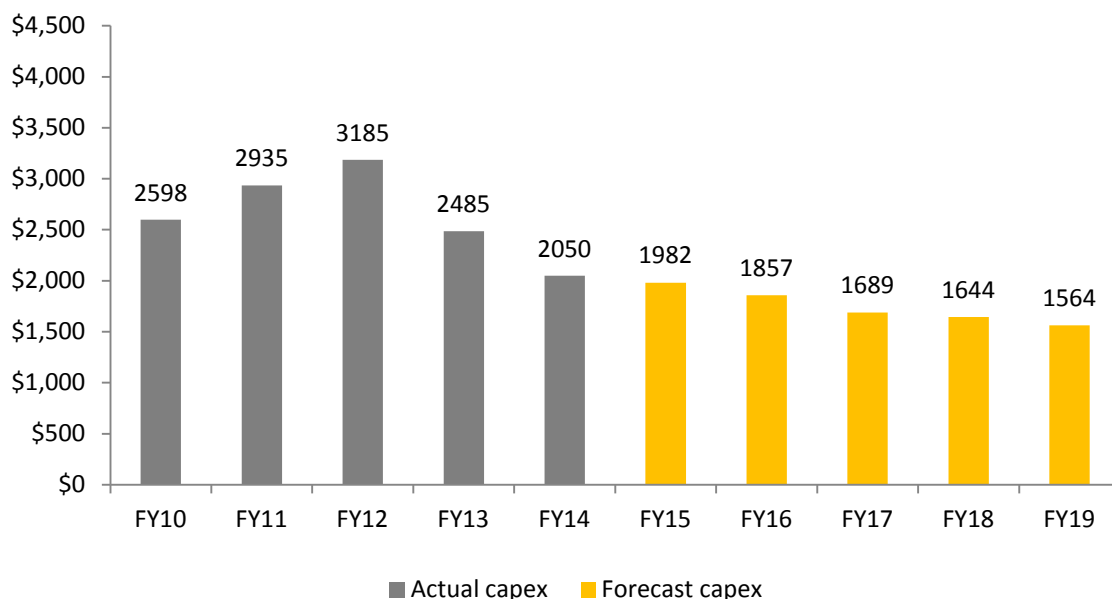


A key focus of the expenditure cuts has been on capex. Savings in capex have very long term implications for customer affordability. An asset bought today will be paid off by our customers for the lifetime of the asset, which for the majority of electricity equipment can exceed 40 years.

While lower peak demand and changes in our licence conditions have assisted us to move to such dramatic reductions in capex, it is quite clear from the profile that the efficiencies we have achieved from industry reform have been the key driver of reductions. The diagram below shows that industry reform had an immediate and dramatic effect on capex levels. Between 2011-12 and 2013-14 (the last year of the current regulatory period), capex fell by more than 30 per cent. Together with business led efficiencies, the prioritisation of capex for the 2014-19 period has been pivotal in progressively driving further reductions in capex over the period.

This reduced level of standard control capex spend has been incorporated into our capex forecasts for the 2014-19 period, with further progressive reductions forecast throughout the regulatory period. Between 2014-15 and 2018-19 we are forecasting a further 25 per cent reduction in the level of capex. In total, capex is approximately 50 per cent lower by the end of the 2014-19 period compared to the peak of 2011-12.

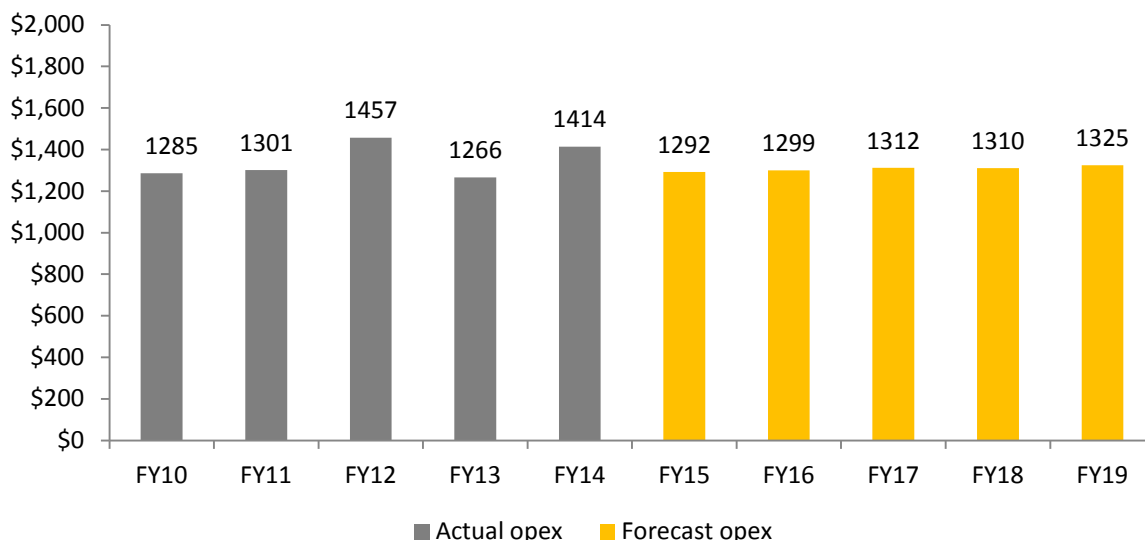
Figure 13: Aggregate actual vs forecast capex for 3 NSW DNSPs (\$ million, real 2013-14)



In addition to the drastic reductions in capex, we have managed to make significant savings to our standard control opex over the 2014-19 period. By the end of the 2009-14 period, we achieved close to a 3 per cent efficiency across the 3 NSW DNSPs relative to the AER allowance. This incorporates the significant savings under industry reform.

Despite the upward pressure on our costs as a result of stranded labour from the reduced capex program, our regulatory proposal forecasts that by the end of the 2014-19 period, our opex will be flat over the 2009-14 period.

Figure 14: Aggregate actual vs forecast opex for 3 NSW DNSPs (\$ million, real 2013-14)

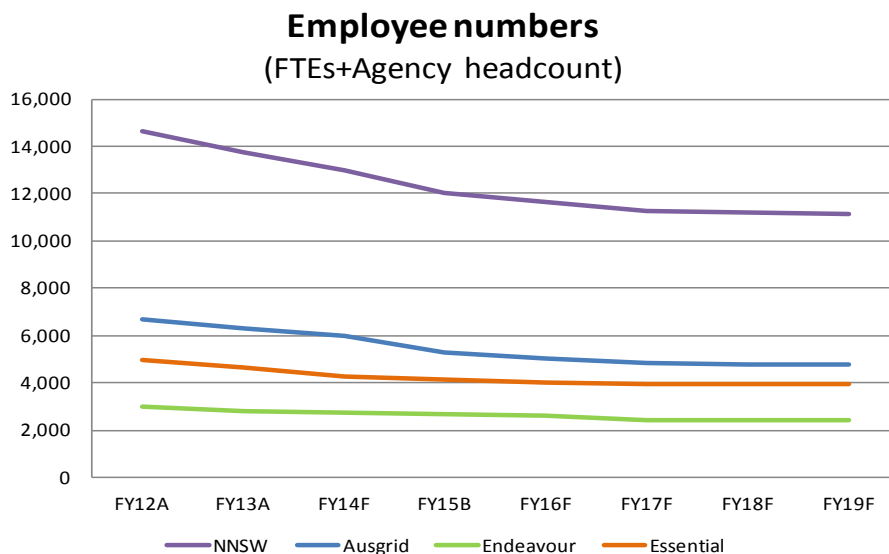


### 4.3 REDUCTIONS IN EMPLOYEE NUMBERS

The efficiency gains and reduced capex and opex activity has meant that the NSW DNSPs have been in a position to reduce staff levels significantly. The diagram on the

next page shows that employee numbers have fallen from over 14, 000 to approximately 11, 000. <sup>5</sup>

Figure 15 – Reduction in FTE's and employee numbers (including TSA)



#### 4.4 RATE OF IMPROVEMENT COMPARED TO OUR PEERS

The key to our reform process is targeting areas which are within the control of management, and do not lead to unsustainable cuts that lead to price shocks in the future.

Comparative data between the 3 DNSPs and our industry peers have played a role in identifying areas of efficiency, although this has been limited by the inherent issues with undertaking benchmarking. Our experience is that granular data can often paint a misleading picture on the relative efficiency in an area.

Even when assessing data amongst the 3 NSW DNSPs, we noted that variances were impacted by definition and cost accounting issues. For example, even simple metrics such as travel costs which form a component of overheads, could not be normalised given that the underlying drivers across the 3 DNSPs are so different. For instance, a rural DNSP such as Essential is likely to have higher relative transport costs per employee than Ausgrid.

For this reason, the reform process and our review of our forecasts have used comparative data with a high degree of caution. Where data has been assessed, we have not taken a simplistic view of assuming that the variance relates to efficiency. Rather we have undertaken a 'bottom up' assessment of underlying policies, forecast methods and cost controls of the DNSPs, in combination with available data and the ground experience of our staff. In this way, we were able to precisely identify the actions within the control of management to deliver efficiencies, whilst continuing to deliver services to our customers.

We note that despite the inherent limitations of benchmarking, that each of the NSW DNSP's commissioned Huegin Consulting to provide an understanding of how our costs compare to other DNSPs. Huegin's analysis was framed around understanding

<sup>5</sup> To be clear, this number includes employees under the Transitional Services Agreement to TruEnergy.

potential cost drivers and definitional issues underlying variances in costs between DNSPs.

While we used caution in applying industry data to target our productivity programs, we nevertheless consider it a tool to gauge our improvement over time relative to our peers. This type of analysis provides a rough 'rule of thumb' analysis to ascertain the relative trend in the costs of DNSPs in an industry, but has severe limitations in drawing firm conclusions.

On the next 2 page, we have attached the data provided by Huegin on the trends of capex and opex in the current regulatory period, and includes forecasts of the NSW DNSPs for the 2014-19 period.<sup>6</sup> Figure 16 and 18 provides actual and forecast capex and opex for the 3 NSW DNSPs. Figure 17 and 19 compare these trends to the other 4 Australian DNSPs in the study.

It should be noted that this data used the capex and opex provided at the time of our transitional proposal, and therefore there will be minor variations to that proposed in our 2015-19 substantive regulatory proposal. This was necessary in order for Huegin to provide us with a view prior to submitting our substantive regulatory proposal.

In our view, the analysis provides some support to our contention that the NSW DNSPs are showing considerable efficiency improvements relative to our peers. We note that such analysis is being undertaken at times when the industry itself is also undertaking similar reforms, and provides further validation that the businesses are achieving efficiencies at the quickest speed available in our circumstances, without jeopardising the reliability and safety of the network. Further information can be found in the benchmarking reports of each DNSP.

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<sup>6</sup> Please see Huegin, Distribution Benchmarking Study for Ausgrid Essential and Endeavour, 2014. The respective reports have been provided in the Attachments to each DNSP's 2014-19 regulatory proposal under the title "Benchmarking Report".

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Figure 16 - Capex trends for Ausgrid, Endeavour and Essential (extract of Huegin report based on the transitional regulatory proposal)

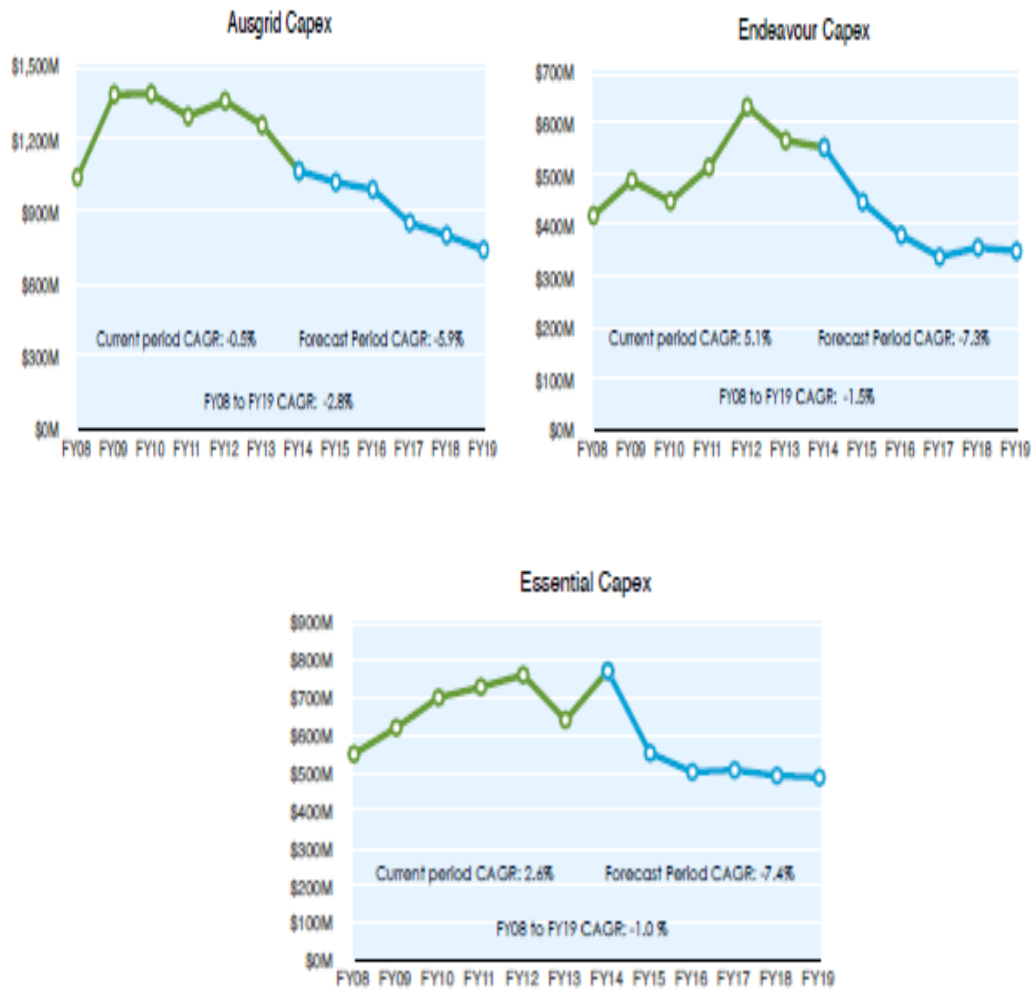


Figure 17– Capex trends for other DNSPs in benchmarking study

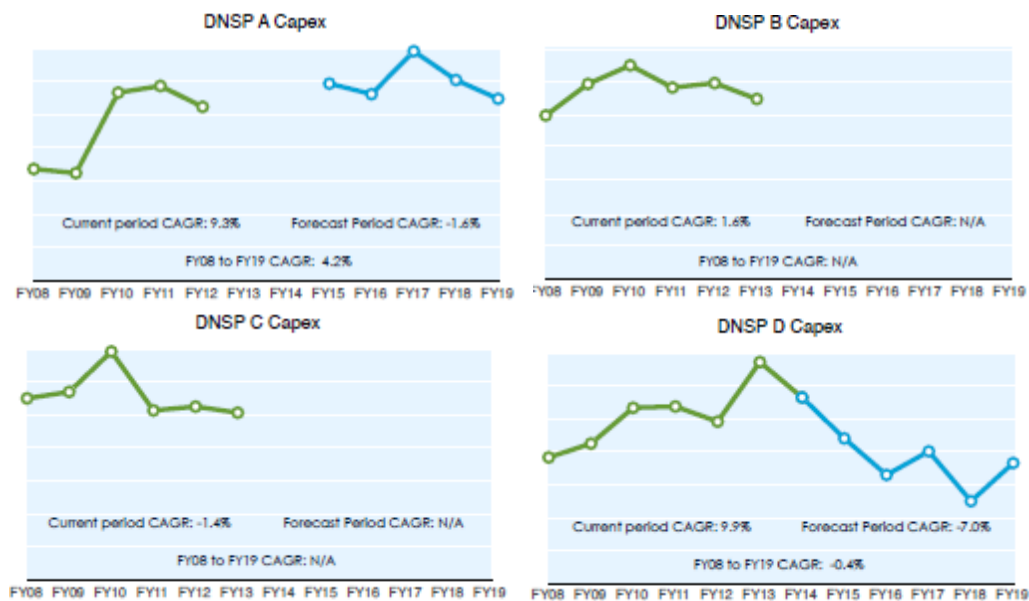


Figure 18 – Opex trends for Ausgrid, Endeavour and Essential (extract of Huegin report based on the transitional regulatory proposal)

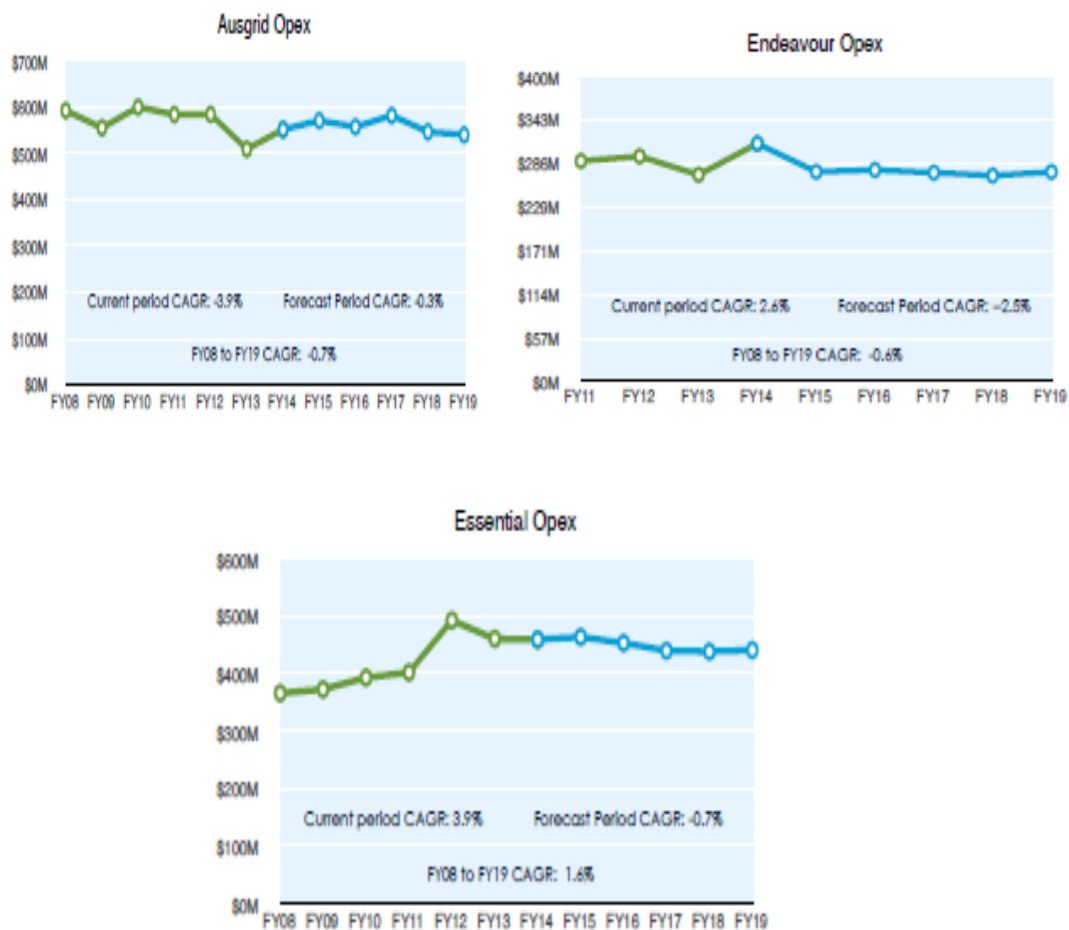
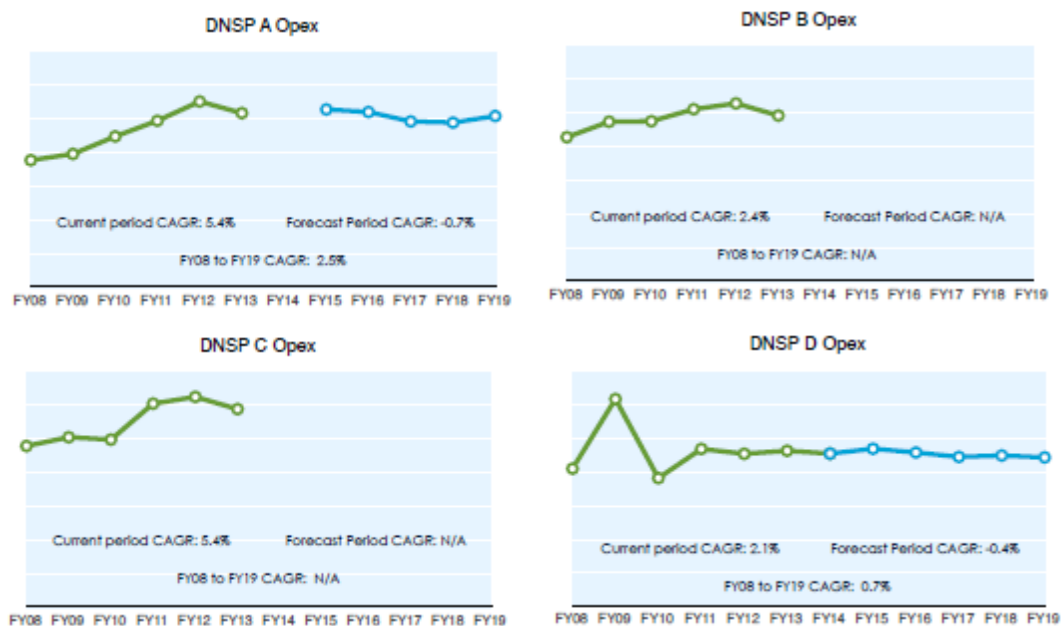


Figure 19 – Opex trends for other DNSPs in benchmarking study



# Attachment A - Network Reform Process

This attachment identifies the 4 streams of NRP efficiencies identified in Section 4.2 of the document.

## Stream 1 - Operating model efficiencies

### Finance

- The target operating model for Finance includes both building the new group functions and streamlining the Network business functions, in particular, the need to reduce duplication by centralising Ausgrid's finance function; implementing Centres of Excellence and group policy and strategy functions; and streamlining and standardising internal and external reporting processes.
- Identification of differences between existing policies, and developing the ongoing Networks NSW accounting, tax, treasury, finance and regulatory policies. Advisory savings can also be made through tighter oversight of use of consultants and jointly obtaining advice.
- There is an opportunity to streamline reporting processes.

### Asset Management

- A common operating model led by Group and applying better practice asset management across all three network businesses, to consolidate duplicate functions, ensure better practices are actively adopted and identify efficiencies in carrying out asset management and planning activities.
- Network customer and contact centres - This initiative develops the preferred operating model for network contact centres including full service profile, KPIs, performance benchmarking, transitioning to one network contact centre per network company. Note this initiative assumes the application of the 'Avalanche' system across Endeavour and Essential.

### Inventory and Supply Chain

- Reduce excess & potentially obsolete stock through re-use, vendor return or scrapping.
- Reduce future obsolescence through improving processes for managing technical specification change, ensuring old items are used or returned.
- Set central policies and procedures for inventory management, including min/max settings based on lead time, service level requirements & supply & demand variation.
- Keep materials on-stock as close as possible to the time of use, and set up each depot as an inventory location/s in the system & control inventory through min/max settings.

## **Human resources**

- The transition to the future state HR operating model is expected to deliver a significant overall reduction in HR FTEs across Networks NSW.
- The transition to new operating models for technical training is expected to deliver a significant overall reduction in FTE numbers by integrating curriculum and program design for Apprentice and other training; integrating the administration and maintenance of RTO accreditation, migrating the Ausgrid Apprentice Program to a low cost model, vacating training facilities and divesting the property, and integrating the management and governance of technical training.

## **Fleet Management**

- Place an interim freeze on vehicle purchases across NNSW & re-allocate or remove under-utilised vehicles
- Rotate any over-utilised vehicles (above average kms p.a.) amongst network companies to avoid particular vehicles incurring excessive maintenance costs;
- Introduce a new policy to remove the practice of “to & from use” of heavy vehicles (fuel saving)
- Recover FBT from employees driving vehicles that are not FBT exempt.
- Transition internal fleet transactional activities to an external service provider

## **Metering**

- Common Business Model for off cycle reading – This provides for a common approach for undertaking off cycle readings.

## **Property**

- Optimise efficiencies through identification of best practice processes and improved governance and
- Reduce costs in service delivery for property services by locally centralising the property & FM service delivery, reducing functional duplication, creating virtual teams by giving each business a lead role in a core property competency.
- Outsourcing activities from the three businesses – eg Facilities Management and security

## **Other Corporate Target Operating Models**

Target Operating Model for Corporate communications, Legal services and Audit

## Stream 2 - Policy and strategy initiatives

### Finance Policies

- Advisory savings through tighter oversight of use of consultants and jointly obtaining advice.

### Planning standards

- The three companies follow similar processes to assess compliance with the NSW Design Reliability and Performance license conditions and commit significant capex in this area, however Endeavour and Essential invest at a level above that required by licence conditions - thus spend should be reviewed.
- Asset maintenance and renewal strategies are intrinsically linked as maintenance may be seen as the activity required to maintain serviceability over an asset's lifetime, while renewal becomes appropriate once maintenance is no longer the most effective solution due to cost, functionality or condition. Therefore a strong understanding of failure rates, failure modes and their impact on overall network performance (e.g. via FMECA) provides a key platform for optimising expenditure in these areas. There are differing levels sophistication across the businesses in maintenance and renewal standards, data and planning, resulting in varying expenditure programs. Adopting better practice will drive these benefits.
- Processes to establish Network Asset Ratings, Maximum Demand Forecast and Supply Security License Conditions are primary inputs into investment planning, driving capital expenditure budget forecasts up to 10 years into the future. There have been historic variations between the companies in approaches to the above areas and therefore potential savings by adopting better practice across all three businesses. While savings are expected they may be limited if majority of expenditure in this area is already committed

### Operational Technology

- All network businesses are considering or have significant investment programs underway in Operational Technology including Smart Grid, DMS, telecommunications and related contracts. Consideration of these activities at a consolidated level offers opportunities to leverage existing investments, remove duplication in trials and determine the most appropriate OT strategy for Networks NSW, with associated cost reductions.

### Property Portfolio Rationalisation

- Sell surplus real estate holdings

### IT strategy

- The new IT Strategy set by Networks NSW will drive both opex and capex savings through a variety of initiatives.

## Stream 3 - Capex efficiency initiatives

### Fleet

- Extend replacement cycle for trucks, EWPs, crane borers, VLCs, passenger vehicles etc
- Standardise vehicles across each of the major asset classes via a joint standards committee and conduct a light fleet tender, possibly culminating in a single manufacturer arrangement to realise best value.

### Property Capex Deferral

- Projects from all three network businesses could be deferred by retaining existing facilities, delaying upgrade proposals and maintaining the status quo.
- Deferral of projects at this time will enable a more holistic property strategy to be developed. Significant operational changes to supply chain operations, fleet and administrative functions could provide further opportunity for portfolio rationalisation.

### Information Technology

- The new IT Strategy set by Networks NSW will drive both opex and capex savings through a variety of initiatives.

### Capital Program Management

- To be able to manage and compare network companies capital programs, existing prioritisation, capital governance and project reporting methodologies will need to be converted to a standard convention. This will minimise the risk of budget over-runs and enable prioritisation for capital rationing.

## Stream 4 - Policy and Strategy initiatives

### Procurement

- The Procurement reform program will create a “sourcing factory” to ensure repeatable, auditable, controlled and swift sourcing processes, to drive significant Procurement savings across each wave of activity.

### Information technology

- The new IT Strategy set by Networks NSW will drive both opex and capex savings through a variety of initiatives.

# Attachment B - Case Studies

The purpose of these case studies is to highlight the cultural changes occurring at a micro level in the 3 NSW businesses, with a key focus on eliciting micro-efficiencies in all the functions we perform. The 3 case studies relate to overtime, travel and fleet.

## Case Study 1 - Reductions in overtime expenditure

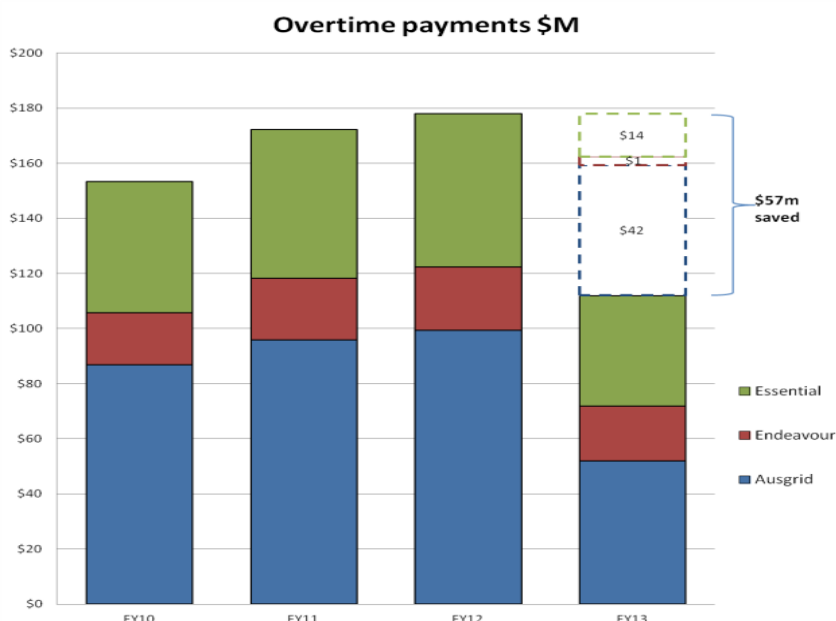
Overtime measures show significant improved efficiencies in workforce management across NNSW. NERP initiatives provided an opportunity to review work practices and address historical institutional rigidities within the businesses. Efficiencies are evident in:

- Total overtime spend has fallen by \$57m in financial year 2013 as show in figure X.X below - reflecting a shift in workload, workforce numbers and work scheduling. The savings in overtime is more significant than the reduction in the overall capex program, indicating significant cost efficiencies that extend beyond the volume reductions.
- Numbers of staff with high GBR (Gross to Base Ratio over 1.5) across the businesses has fallen from over 2,500 in June 2012 to less than 400 March 2014 in response to management initiatives to improve work allocation and scheduling efficient.

Initial overtime savings represent “quick wins” which have been assisted by slower growth and lower capex requirements. Endeavour reviewed overtime earlier and saw improvements sooner than Ausgrid and Essential. Ongoing improvement will need to be made as part of whole-of-business changes involving more detailed analysis of specific practices, opportunities and tradeoffs.

In line with similar sectors and occupations overtime levels in electricity distribution are expected to remain higher than for industry as a whole (shown by Australian Bureau of Statistics cash earnings to ordinary time earnings). Overtime remains an important a tool for managing workflow and staffing in businesses, like utilities, which require specialised staff to work at all hours and facing volatile and unpredictable workloads. Access issues can also drive overtime through the need to work weekends and outside peak hours.

Figure 20 – Reductions in overtime payments





## Case Study 2: Reductions in travel expenditure

NNSW's focus on "quick wins" from discretionary expenditure highlighted major opportunities for saving across the three businesses in travel expenditure. Although comparison between businesses is difficult, the size of Essential's expenses warranted review even after considering its rural territory and dispersed customer base.

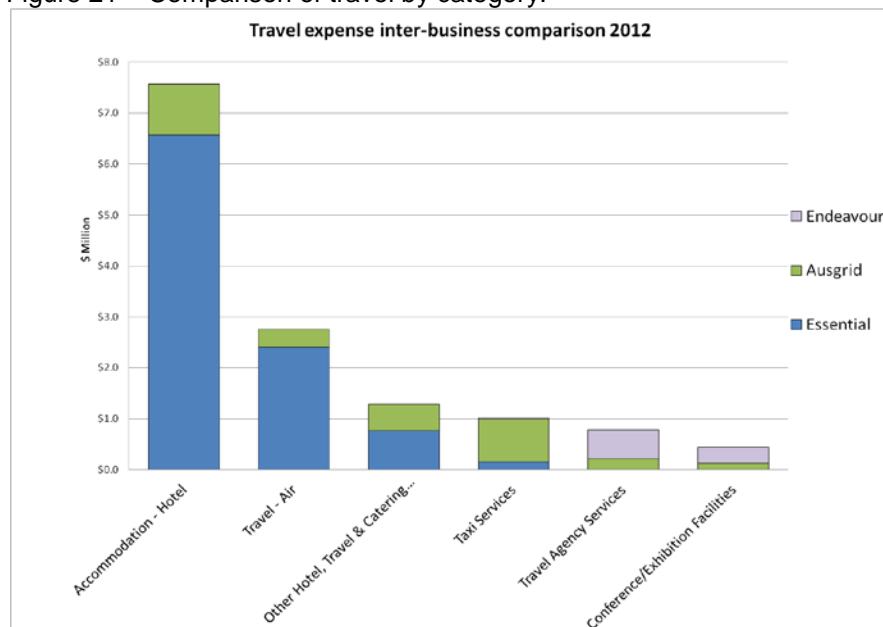
The key to improvements in discretionary expenditure has been policy changes supported by a focus on specific operational opportunities:

- Reducing the cost of Ausgrid flights by close to 50% between 2012 and 2013.
- Reducing the cost of Essential flights and accommodation by approximately 60 per cent between 2012 and 2013.

Importantly, an internal cultural change that questioned established practises and examined specific requirements has established a basis for continuous improvement. For example restrictions on the use of taxis, although not a major expense item, reinforced a philosophy of prudence and has reduced this expenditure to the point where it is no longer material.

Because Essential's customer base and network configuration is so different benchmarking of travel expenditures was not appropriate. However, by challenging historical business practices and questioning the efficiency of all travel, Essential has dramatically reduce accommodation, air travel and other expenses. Substitution of teleconferencing for face-to-face meetings has delivered major cost saving while maintaining the necessary physical regional presence essential for effective management and both staff and customer engagement. Rises in teleconferencing costs have been modest compared to travel expense savings, however are reported monthly to individuals for review, approval and to seek operational savings.

Figure 21 – Comparison of travel by category.



Over time travel expenditure has reduced across the three businesses and is expected to be maintained close to these levels through the next regulatory period - thereby representing a permanent efficiency improvement and ongoing savings to customer.

### Case Study 3 – Reductions in fleet expenditure

The restructuring at NNSW created an opportunity to address historical rigidities and anomalies in fleet policies, numbers, utilisation and costs. Ausgrid, Essential Energy and Endeavour Energy fleets comprise a mix of heavy, light commercial and passenger vehicles which have been operated in a mix of leasing, ownership and fleet management approaches. However, “quick win” efficiency improvements were found across the businesses which:

- Are projected to reduce fleet numbers in financial year 2014 by 18% compared to 2012, a reduction of up to 1,500 vehicles.
- Have produced combined capex and opex savings since financial year 2012 to the end to FY 2013 of \$43 million.

Table 3 – Fleet savings from reform between FY2012 and FY2013 (\$ million, nominal)

	Ausgrid	Endeavour	Essential	Combined
<b>Capex</b>	6.7	7.9	26.0	40.7
<b>Opex</b>	0.9	0.2	1.5	2.6
<b>Total</b>	7.6	8.1	27.5	43.3

Falls in fleet numbers have been concentrated in passenger vehicles but overall vehicle numbers are projected to continue falling in 2014 and probably beyond. In the medium to longer-term adjusting fleet numbers will continue but is likely to be slower, particularly for non-passenger vehicles, as changes are more closely linked to broader structural and operational efficiencies across the businesses. Fleet improvements have included reviewing policies on travel to and from depots or direct to jobs and specification of standard vehicle models, such as the Hyundai i series, chosen for cost and environmental reasons.

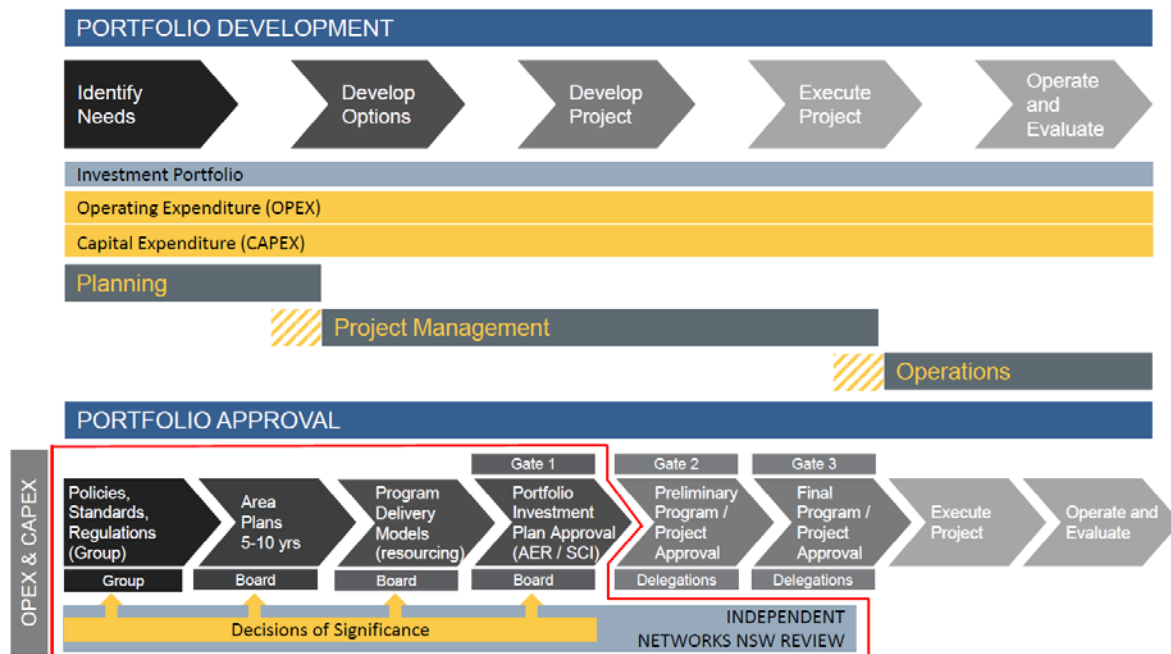
# Attachment C – Investment Governance

In Section 4.3 of this document, we provided a summary of the changes to the investment governance framework across the 3 NSW DNSPs and how this has enabled a coordinated and consistent approach to prioritising capital investments. The purpose of this attachment is to provide further detail on the governance framework and the prioritisation process that was taken.

## Improvements to Investment Governance

An important initiative brought about by the recent reform activities across New South Wales in the electricity supply industry has been the review of the three network business governance processes. With the introduction of common Board members governing investment activities across the state there was a need to apply a standard set of governance rules to the businesses and streamline the investment approval process. The overarching framework is shown in the diagram below.

Figure 22– Investment Governance Framework



Decisions of significance would be reviewed by Networks NSW and formulated in conjunction with relevant regulations into policies and standards across the 3 businesses. NNSW will facilitate the presentation to the Board and approval as necessary. In addition, Asset and Area Plans set the long term strategies for capital driven programs and load area development with consideration of delivery models to resource these activities. The Key Benefits of this common approach are:

- Governance applied to early investment stages with endorsement of policies and standards driving key triggers for investment.
- Enables effective input from the Board early in the process with endorsement of long term portfolio and area plan decisions of significance.
- Program delivery model considering insourcing / outsourcing to match the workforce plan demand.

- Provides a consistent framework / process across Network NSW enabling prioritising of investments across the three businesses.
- Independent and peer review by Group and cross business membership on the Network and Investment Steering Committees

## **Risk Prioritisation**

Networks NSW has applied a common risk prioritisation approach to all projects and programs to enable the 5 year capital program of work to be reviewed on a risk basis. This has provided the businesses with a common methodology to focus limited resources on more short and medium term investments which provide higher returns to the business than in previous times.

The ability to provide a common prioritised master list of work across the state means the Board has been able to enact the reform objectives of keeping Network Prices at or below CPI for the forecast regulatory period by deferring low risk projects and programs.

The intention is not to cancel projects or programs but to reassess their risk profiles and manage the short to medium term risks with remedial activities so normal maintenance can manage and monitor the performance of these assets until the time comes when replacement becomes the most cost effective outcome.

A common model was used across Networks NSW as an efficient, consistent, and transparent process for assessing and prioritising risk in the network programs / projects. This was the first time a common risk based prioritisation approach has been used across Networks NSW so there was a lack of maturity in the available data in addition to inconsistencies across businesses both in understanding and prioritising risk.

A number of peer review workshops were conducted where the risk assessment for similar activities across the three businesses were reviewed, and where appropriate, aligned. Due to this work, the accuracy and consistency of the data in the prioritisation model improved markedly.

Consistency, alignment of standards, policies and delivery costs across Networks NSW is a longer term project. As a result, there are areas within the current prioritisation model where the projects and programs of individual businesses are based on different standards, policies and delivery costs which results in different cost and risk outcomes.

It is important to note that the data used in the risk model and the resulting investment prioritisation is at a point in time. The factors driving these investments and the risks may change over time, for example changes in demand, failure modes, asset deterioration, delivery costs, standards and policies. Further, as the maturity of both the data and the use of a formal prioritisation process improves, the resulting risk assessment will improve. A formal change control process is in place that provides governance around any changes made to the Board approved investment plan.

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