

Attachment B10

**Operating expenditure
step changes 2014-19**

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1 Introduction

ActewAGL Distribution’s standard control operating expenditure forecast for the 2014-19 regulatory period includes nine proposed step changes above the 2012/13 base operating expenditure. A summary is provided in Table 1. These step changes are required for ActewAGL Distribution to continue to: manage electricity network demand, comply with regulatory obligations, and maintain the safety, quality, reliability and security of standard control services as required to achieve the operating expenditure objectives under clause 6.5.6(a) of the National Electricity Rules (the Rules). These costs have been or will be incurred as a result of changes to ActewAGL Distribution’s regulatory obligations or requirements, changes in ActewAGL Distribution’s policies and strategies,¹ or a combination of these drivers. Activities associated with these step changes are not provided for within the base operating expenditure, nor are they due to any changes in real prices, output growth, or productivity.

1.1 Summary of operating expenditure step changes

Escalation factors have not been applied to the costs provided in this document unless otherwise stated. Costs are provided under three categories for the purposes of cost escalation. These are ‘Engineers’, ‘General labour’ and ‘Other’.

Table 1 Standard control operating expenditure step changes

\$million, real 2013/14

	2014/15	2015/16	2016/17	2017/18	2018/19	Total
1 EHSQ	0.7	0.7	0.5	0.5	0.4	2.8
2 Regulatory Compliance and Strategy	2.2	1.1	1.0	2.1	2.1	8.6
3 Technical Standards	0.4	0.3	0.3	0.3	0.3	1.4
4 Safe Work Practices	0.7	0.7	0.7	0.7	0.7	3.5
5 Contractor Management	0.6	0.6	0.6	0.6	0.6	3.1
6 Network Operations and Call Centre	0.4	0.4	0.4	0.4	0.4	2.1
7 Network OT Support	1.3	1.9	0.8	0.8	0.0	4.8
8 Corporate Services charges	1.4	1.7	2.0	2.4	2.7	10.1
9 Capitalisation Corporate Services charges	1.0	0.1	-1.3	-0.8	-0.3	-1.2
Total step changes	8.8	7.4	5.1	7.0	6.9	35.3

¹ The Regulatory Information Notice issued to ActewAGL Distribution by the AER on 7 March 2014 requires explanation of ‘all step changes in forecast expenditure (including those due to changes in regulatory obligations or requirements and those due to changes in ActewAGL’s own policies and strategies)...’ (p.9)

1.2 Consumer benefits

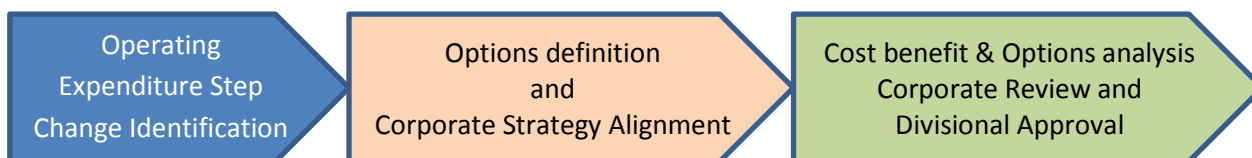
The operating expenses step changes proposed by ActewAGL Distribution as part of its operating expenditure proposal for the 2014-19 regulatory period will provide a number of long term benefits to consumers, including:

- Improving the safety of staff, contractors and the public through the delivery of better work health and safety programs and improved management of works practices and safety rules and guidelines;
- Ensuring ActewAGL Distribution meets its regulatory obligations and requirements in an efficient manner;
- Reducing the risk and consequence of bushfires in ActewAGL Distribution’s areas of operation by updating ActewAGL Distribution’s Bushfire Mitigation Strategy and Management Plan;
- Ensuring ActewAGL Distribution’s network is resilient to climate change;
- Improving the way ActewAGL Distribution engages with its consumers through the implementation of a formalised consumer engagement strategy; and
- Improving the accessibility and scope of information about ActewAGL Distribution’s system and business, including information available directly from ActewAGL Distribution as well as information in various reports made available by ActewAGL Distribution’s regulators.

1.3 Options analysis

ActewAGL has undertaken an Options Analysis for each of the identified operating expense step changes. This process is expressed in the following diagram:

Figure 1 Options Analysis Process



For each of the identified operating expense step changes the preferred option is explained in the following sections with the option analysis details included in Appendix A.

2 Environment, Health Safety and Quality (EHSQ)

2.1 Introduction

Safety is ActewAGL Distribution's number one priority and it is committed to providing a safe environment for employees, contractors and the wider community. ActewAGL Distribution aims to be an organisation with a proactive safety culture where safety is deeply embedded in all workplace operations.

There are a significant number of national and territory specific: safety acts, regulations, codes, guidelines and standards relevant to ActewAGL Distribution. ActewAGL Distribution is committed to providing all employees and contractors with a workplace that is safe, does not impact on the environments in which it operates or affect the health or wellbeing of workers or the public. ActewAGL's Environment, Health, Safety and Quality (EHSQ) Division was created during the 2009-14 regulatory period to ensure ActewAGL Distribution's compliance with environmental and work health and safety laws as well as guide the organisation's cultural shift toward a proactive safety culture. An integral responsibility of the EHSQ Division is to provide specialist support and advice to leaders ActewAGL personnel in the identification, assessment and management of safety and environmental issues..

A number of continuous improvement activities have been identified by the EHSQ Division. Such requirements include: new statutory obligations, the ActewAGL Strategic Plan EHSQ Objectives and the EHSQ Vision. These activities require additional operating expenditure during the 2014-19 regulatory period. Broadly these activities fall into four key activity categories:

- Injury prevention
- Bushfire mitigation
- Climate risk and resilience
- Unplanned safety events

2.2 Step change costs

The details of the options analysis can be found in Appendix A. The step change in operating expenditure consists of project related costs for the various program initiatives discussed in this section.

Table 2 Step change costs: EHSQ

(\$million, real 2013/14)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.67	0.67	0.54	0.54	0.41	2.84
Total	0.67	0.67	0.54	0.54	0.41	2.84

2.3 Description of key activities

2.3.1 Injury prevention

ActewAGL has initiated or plans to initiate a number of activities to reduce various health and safety risks identified by EHSQ. These activities include:

- Reducing the instance of personnel long term injury or illness through early identification and mitigation processes. A key related activity is providing the opportunity for employees to have their health monitored via:
 - Pre and post employment medical tests; and
 - An ongoing health monitoring process where appropriate.
- Reducing the number of vehicle incidents to be closer to or better than industry average incident rates. This is to be achieved through systemic review and changes, monitoring of key indicators and implementing employee awareness / training
- Educating employees about the impacts of psychological injuries and provide education regarding the early warning indicators to enable employees to seek support. This is a regulatory obligation arising from the *Fair Work Act 2009* anti-bullying amendments which comes into effect on 1 January 2014;
- Developing and presenting employee leadership and wellness training programs to increase the leadership skills and health of employees which is expected to commence in 2014; and
- Reducing muscular stress and strain injuries to employees. Over half the injuries across ActewAGL and notably within the Networks Services Division are muscular stresses and strains. ActewAGL's strategic vision is for staff to be aware of their body capacity to prevent muscular stress and strain injuries occurring; to be aware when a strain / stress is happening to prevent further damage, and to change behaviours to remove hazards that have led to the stress or strain occurring.

2.3.2 Bushfire mitigation

The Strategic Bushfire Management Plan 2009 (SBMP) was prepared by the ACT Emergency Services Agency to meet the requirements of S80 of the *Emergencies Act 2004* and addresses all bushfire management elements as required by S74 of the Act. An over-arching principle of bushfire management in the ACT is that of shared responsibility between the ACT Government and the community for mitigating bushfire risk. The SBMP is currently under review and will result in future changes in planning and operations for ActewAGL Distribution.

Changes to the SBMP will result in increased costs to ActewAGL Distribution associated with the updating of relevant policies and procedures for managing bushfire readiness, implementing the procedures for reducing the fire-risk of and to network assets, maintaining assets and managing the distribution of electricity on fire prone days. This will include a review and update of the ActewAGL Bushfire Mitigation Strategy and Management Plan to ensure it aligns with the current environmental requirements and the SBMP.

2.3.3 Climate risk and resilience

Existing climate vulnerabilities highlight the need for businesses, including utilities, to be able to respond to climatic variability that may affect their operations. This requires the capacity to make decisions that are informed by a sound understanding of projected climate change and its impacts. The Energy Networks Association (ENA) intends on producing a climate risk and resilience manual for the energy network sector which will aid in providing a consistent approach by all network service providers in managing climate risk and resilience across core network activities.

For ActewAGL Distribution, understanding how and when to adapt to the increased risk profile arising from climate change will incur additional costs as it will require a combination of technical knowledge of the physical impact on the network assets as well as analysis of the potential future impact of climatic conditions over the assets lifespan. ActewAGL Distribution will have regard to the ENA’s manual in developing its approach to managing climate change risk and resilience.

2.3.4 Unplanned safety events

As part of the Australian Capital Territory’s Urban Renewal mandate the “City Plan”², developed by the ACT Government, was finalised in December 2013. The “City Plan” will result in augmentation and development of the electricity distribution network in the 2014-19 regulatory period. These redevelopment activities will encroach upon old infrastructure that is a potential hazard and must be managed accordingly an example is old asbestos pipes where there is no records of the location or material used. Typical of the age of the previous developments where these pipes were used, if that the material is likely to be asbestos, requiring additional operating costs for ActewAGL staff and specialist services.

The unanticipated costs associated with asbestos discoveries when constructing electricity distribution infrastructure, in new land developments and older areas of Canberra during the current regulatory period have been as high as \$20,000 per incident. ActewAGL Distribution anticipates that the incidences of unexpected asbestos discoveries will continue to increase over the next regulatory period as the undergrounding of electrical assets continues in new development areas and areas nominated in the ACT Government’s “City Plan”. Currently unanticipated asbestos discoveries are occurring once every 2.5 months at an average cost of \$10,000.

ActewAGL Distribution must also maintain a database of non-residential asbestos sites as part of the asset register under section 327 of the *Dangerous Substances (General) Regulation*. This database was developed during the 2009-14 regulatory period and must continue to be maintained. In 2009 ActewAGL Distribution commissioned asbestos surveys on all ActewAGL Distribution buildings and zone substations. All sites are reassessed on an annual basis with the anticipated cost of each assessment of [REDACTED].

² Refer <http://www.cityplan.act.gov.au/>

The ACT Government Planning and Land Authority (ACTPLA) is developing the Molonglo Valley³ precinct which is Canberra's newest region, located approximately 10km from the city. The Molonglo Valley area was previously used as a military firing range. Unexploded ordnance management is a key concern for ActewAGL Distribution. The costs associated with assessing and decommissioning unexploded ordnance are currently unknown and as such have not been costed in ActewAGL Distribution's expenditure program. The Molonglo Valley precinct has also been identified as an area that may have contaminated soil containing asbestos.

2.4 Step change drivers

Key drivers of the step change in operating expenditure across the 2014-19 regulatory period for EHSQ activities are outlined below.

2.4.1 Change in regulatory obligations / external environment

Injury prevention: Legislative change has been a key driver of expenditure on safety across the organisation during the 2009-14 regulatory period. Specifically, the introduction of the *Work Health and Safety Act 2011* (WHS Act) and *Work Health and Safety Regulation 2011* which replaced the *Occupational Health and Safety Act 1989* required ActewAGL Distribution to update all safety policies and procedures. In addition the *Fair Work Act 2009* anti-bullying amendments which came into effect on 1 January 2014 require ActewAGL to educate employees on psychological health. The increase in work associated with documenting and delivering training in the new health and safety procedures is expected to increase in the 2014-19 regulatory period as further Codes of Practice are released under the WHS legislation. Currently there are 13 Codes of Practice listed by WorkSafe ACT that are likely to be introduced during the 2014-19 regulatory period. The updating of health and safety procedures and implementation of required changes to business practices will be a resource intensive task in the 2014-19 regulatory period.

Bushfire mitigation: Due to a number of recent bushfires including the 'Black Saturday' bushfires in Victoria in 2009 as well as the Blue Mountains bushfires in NSW in 2013, a greater focus on bushfire risk and bushfire mitigation has become a priority for Distribution Network Service Providers (DNSPs) around Australia. The Black Saturday bushfires resulted in the 2009 Victorian Bushfire Royal Commission and civil litigation against Victorian DNSPs SPAusNet and PowerCor and CitiPower Australia. This resulted in additional costs for these DNSPs which have been approved as pass through costs by the AER. Following the Blue Mountains bushfires, a class action against Endeavour Energy has been launched, based on allegations that an identified hazard (being a tree adjacent a power line) was not addressed.

This operating environment has placed additional onus on ActewAGL Distribution to revise its bushfire risk assessments and review its current bushfire mitigation strategies. The recent bushfires and subsequent inquiries and litigation have identified that existing industry bushfire mitigation standards, against which ActewAGL Distribution is compliant, require review. Bushfire mitigation standards for ActewAGL Distribution include the ACT SBMP and Technical Standards under the ACT *Utilities Act 2000*.

³ Refer <http://www.lida.act.gov.au/molonglo/>

ActewAGL Distribution will be working closely with ACT Government’s Technical Standards group to improve and ensure compliance with bushfire mitigation industry standards.

Climate Risk and Resilience: The ENA has stated⁴ that one of the biggest challenges facing infrastructure owners and operators today is managing the impacts of climate change on assets to ensure continuity and reliability of service to customers. In Australia, the energy network sector is vulnerable to climate change, particularly single event extreme weather related occurrences as demonstrated by recent floods, bushfires and heat waves. The ENA climate risk and resilience manual for the energy network sector will aid in providing a consistent approach by all network service providers in managing climate risk and resilience across core network activities.

For ActewAGL Distribution, understanding how and when to adapt to potential increased risks from climate change is crucial. It will require the development of methodologies to determine how and when assets and services will be impacted.

Unplanned safety events: The ACT Government Planning and Land Authority (ACTPLA) continues to release land for development throughout the ACT. These land releases have the potential to pose significant health and safety risks for ActewAGL Distribution employees, contractors and members of the public in relation to potential asbestos dumps and unexploded ordnance in the land release areas which must be appropriately managed.

2.4.2 Change in ActewAGL Distribution’s strategies and policies

The revised *WHS Act* requires the organisation to develop a risk based culture that is able to comply with the primary duty of care requirements of the legislation. Reviews of ActewAGL Distribution’s health and safety programs against industry best practice during the 2009-14 regulatory period have identified scope for improvement. In particular, improvements were needed in safety leadership and communication as well as consultation between management and field staff. Safety management systems, incident reporting and training needed to be better implemented. Risk management also needed to be enhanced with a particular focus on controlling high-risk working environments. As a result of these findings ActewAGL Distribution has initiated a number of activities as part of an overall strategy to reduce health and safety risks and embed a proactive safety culture throughout the organisation.

2.5 Compliance with the Rules

ActewAGL Distribution considers a step change in EHSQ costs necessary as efficient costs associated with planned EHSQ activities during the 2014-19 regulatory period. This step change in operating expenditure is required in response to changes in regulatory obligations and ActewAGL Distribution’s strategies and are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

⁴ ENA 2013, *Industry Guidance Manual Briefing Paper - Climate Risk & Resilience Project*, October

This step change in operating expenditure will enable ActewAGL Distribution to achieve the operating expenditure objective of complying with all applicable regulatory obligations or requirements associated with the provision of standard control services as required under clause 6.5.6(a)(2) of the Rules, and the operating expenditure objective of maintaining the quality, reliability and security of supply of standard control services and maintaining the reliability and security of the distribution system to the extent that no applicable regulatory obligation or requirement applies, as required under clause 6.5.6(a)(3), and the operating expenditure objective of maintain the safety of the distribution system through the supply of standard control services as required under clause 6.5.6(a)(4). ActewAGL Distribution considers base operating expenditure to be insufficient to enable achievement of these objectives.

ActewAGL Distribution considers the proposed costs of this step change to be the prudent and efficient costs required to deliver ActewAGL Distribution's regulatory obligations and strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

3 Regulatory Compliance and Distribution Strategy

3.1 Introduction

There are at present three federal authorities (Australian Energy Regulator (AER), Australian Energy Market Operator (AEMO) and Australian Energy Market Commission (AEMC)) and five jurisdictional authorities including ACT Independent Competition and Regulatory Commission (ICRC), ACT Environment and Sustainable Development Directorate (ESDD), NSW Independent Pricing and Regulatory Tribunal (IPART), NSW Department Trade and Investment (DTIS) plus a number of industry bodies (such as Energy Networks Association (ENA) and Electricity Supply Association (ESAA)) that ActewAGL Distribution reports to for various annual obligatory and non-obligatory reports.

The Regulatory Compliance and Distribution Strategy sections provide a range of services for ActewAGL Distribution including:

- Devising, supporting the implementation of, and reporting on strategies that address changes in the regulatory and business operating environment;
- Track business alignment with the regulatory submission;
- Conduct relevant analysis and research to ensure the current ActewAGL Distribution strategy addresses changes in the regulatory and business operating environment and ensures the value proposition remains relevant under evolving conditions;
- Drive the implementation of strategic initiatives, including the delivery of strategy projects and change management plans for the ActewAGL Distribution business;
- Completion of the annual, 5 year reset, benchmarking and category analysis Regulatory Information Notices (RINs);
- Various other regulatory projects including:
 - Formulation of an AER approved connection charge policy and an internal applications and charging manual;
 - Strategic review (10 years) of network tariffs;
 - Service target Performance Incentive Scheme (STPIS) project;
 - Legal Compliance Framework - ongoing project that will achieve majority completion during 2014/15 however further project work will continue into 2015/16 and beyond.
- Various other reporting obligations including the National Energy Customer Framework (NECF) reporting.

Resource levels require a step change in operating costs to manage the increasing demands of various regulatory obligations. During the 2009-14 regulatory period there has been a significant increase in regulatory compliance and reporting obligations such as NECF, extensive Regulatory Information Notices (RINs) reporting requirements, requirements of the National Planning and Expansion Framework (NPEF) including the management of the process governance for: regulatory investment tests for distribution (RIT-D), demand side engagement and the preparation of distribution annual planning reports.

In addition to the above responsibilities and following the release of the AER's consumer engagement guidelines, ActewAGL Distribution has formalised its consumer engagement activities through the development of a stage 1 consumer engagement strategy that is to be implemented over the 2014-19 regulatory period.

3.2 Step change costs

The details of the options analysis can be found in Appendix A.

The majority of step change costs are labour costs related to the employment of experienced, professional staff and the engagement of specialist consultants required to assist in meeting regulatory obligations. Increased operating expenditure is for additional FTEs compared to the base year attributable to additional ongoing staff positions required to address insufficient capacity and the AER's customer engagement guidelines released in 2013/14. Increases in other costs from the base year are primarily for specialist consultants assisting with various regulatory requirements.

Table 3 Step change costs: Regulatory Compliance and Distribution Strategy

(\$million, real 2013/14)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers ⁵	0.93	0.93	0.93	0.93	0.93	4.65
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	1.30	0.19	0.11	1.19	1.19	3.98
Total	2.23	1.12	1.04	2.12	2.12	8.63

⁵ Includes Professional Services staff

3.3 Step change drivers

3.3.1 Change in regulatory obligations

This step change is predominantly driven by an increase in regulatory obligations triggered by the changes to the Rules relating to economic regulation of network service providers. In 2013/14 as part of the Better Regulation Program the AER released consumer engagement guidelines outlining AER expectations for how electricity and gas distributors are to engage with consumers and multiple guidelines detailing information requirements for electricity distribution RINs and regulatory submissions. The AER's new guidelines and RINs require ActewAGL Distribution to provide significantly more information and detail to the AER in its regulatory proposals and RIN responses as well as on a recurrent basis, including auditing requirements.

Changes to the *ACT Utilities Act 2000* in 2013 obligated ActewAGL to revise its Asset Management Systems to be compliant and maintain compliancy with the PAS55 (and now ISO5500), Asset Management Standard. The *ACT Utilities Act 2000* is currently under review (May 2014) and is expected to give rise to additional regulatory obligations once the new ACT Utilities Act has been released.

Also under review are proposed amendments to the Rules currently being considered by the AEMC related to distribution network pricing arrangements. If made, this Rule change has the potential to add new obligations on DNSPs to consult and engage with consumers when developing and amending network tariffs. The proposals would also require the implementation of new models for identifying relevant costs and allocating them to tariff components. Final Rule changes are planned to be published in November 2014. ActewAGL Distribution proposes to provide additional expenditure information that will be required to meet new obligations arising from amendments to the pricing Rules once the final Rule is published and costs are understood.

3.3.2 Change in ActewAGL Distribution's policies and strategies

ActewAGL is taking a proactive approach to address its growing regulatory compliance obligations and as such, in 2012/13 ActewAGL Distribution initiated a restructure to benchmark an effective and efficient organisational structure. This was refined as part of the restructuring of the Asset Management and Network Services Divisions in 2013/14. The restructuring outcome relating to the step change in operating expenses for the regulatory compliance was the creation of the Distribution Strategy and Compliance branch, which includes three sections: Regulatory Compliance, Distribution Strategy and Technical Standards. Recruitment activity is underway with a plan to be fully resourced by July 2014. The core team is supported by the use of specialist consultants as required.

ActewAGL Distribution has also formalised its consumer engagement strategy to build on its commitment to customer service and recognising the AER's expectations as provided in its consumer engagement guideline. This strategy builds on an existing stakeholder engagement to give direction to consumer engagement and embed it in the business.

Further review and revision to ActewAGL Distribution's policies and strategies is required to manage its legal compliance framework. Non-compliance with legal obligations represents a risk to ActewAGL Distribution from an operational perspective as well as reputational risk and business certification.

Following a non-conformance finding in a surveillance audit of the quality management system in 2012, ActewAGL Distribution has implemented a comprehensive and contemporary legal compliance framework and has a legal compliance procedure in place together with the obligations management system CMO (ActewAGL's legal obligations management system). Obligations for key operational processes have been identified and linked to business activities and responsible roles. It is estimated there is approximately 5,000 legal obligations pertaining to electricity and gas rules and other non-workplace health and safety and environmental obligations.

3.4 Compliance with the Rules

ActewAGL Distribution considers this step change necessary as efficient costs associated with changes in regulatory obligations and ActewAGL Distribution's strategy as detailed in this section are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

This step change in operating expenditure will enable ActewAGL Distribution to achieve the operating expenditure objective of complying with all applicable regulatory obligations or requirements associated with the provision of standard control services as required under clause 6.5.6(a)(2) of the Rules. ActewAGL Distribution considers base operating expenditure to be insufficient to enable achievement of this objective as it relates to the changes in regulatory obligations detailed in this section.

ActewAGL Distribution considers the proposed costs to be the prudent and efficient costs required to undertake activities to meet changes in regulatory obligations and requirements and ActewAGL Distribution's policies and strategies as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

4 Technical Standards

4.1 Introduction

ActewAGL Distribution has legal and regulatory responsibility to maintain an electricity distribution network that maintains minimum service, reliability and safety standards.

The Technical Standards section has responsibility for delivering the network construction standards for ActewAGL Distribution. Technical construction and material standards are required in order to facilitate a safe, technically and economically efficient electricity network for the public, employees and contractors. To deliver these responsibilities ActewAGL Distribution must develop and maintain a complete suite of construction standard drawings that are in line with Australian and industry standards that must meet all ongoing and one off projects. This includes standard drawings (conceptual), specifications for all purchases and requisition and materials specifications. Aligning these drawings to Australian and industry standards assists in reducing the likelihood and related consequences, of organisational, financial, legal and safety incidents.

The Technical Standards team also has responsibility for ensuring that ActewAGL Distribution keeps abreast of current and ongoing industry construction developments and standards. It must ensure that ActewAGL Distribution maintains a technical design, procurement and specification system that meets industry best practice.

Technical Standards has an annual and 5 year business plan to ensure that the technical aspects of ActewAGL Distribution's field operations and construction activities is covered by a comprehensive technical standard. At present there are a number of critical areas that are not covered by adequate internal standards exposing ActewAGL Distribution to potential risks. These areas are being addressed under the current business plan.

4.2 Step change costs

The details of the options analysis can be found in Appendix A.

The costs associated with this step change are labour related to an additional FTE, as well as costs associated with the engagement of specialist consultants to provide in-house Technical Standards service and support with the use of specialist consultants as required to provide a complete suite of technical standards, drawings and material specifications across the business that are compliant with applicable codes, standards and guidelines. This step change includes costs of approximately \$0.23 million in other costs in 2014/15 for expert consulting services for the initial implementation of the five year plan, with an additional \$0.06 million required in subsequent years.

Table 4 Step change costs: Technical Standards

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.20	0.20	0.20	0.20	0.20	0.98
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.23	0.06	0.06	0.06	0.06	0.47
Total	0.42	0.26	0.26	0.26	0.26	1.45

4.3 Step change drivers

4.3.1 Change in regulatory obligations

In August 2013 the ACT Technical Regulator updated the *Management of Electricity Networks Assets Code* under the *Utilities Act 2000*. Compliance with this and other codes and regulations are mandatory obligations set by the ACT regulatory authority to which ActewAGL Distribution is compelled to adhere to. A summary of the major requirements are listed below;

- *Utilities Act and Utility Networks (Public Safety) Regulations 2013*
- *Contestable Work Accreditation Code 2001*
- *Electricity Distribution (Supply Standards) Code 2013*
- *Electricity Metering Code 2003*
- *Electricity Service & Installation Code 2013*
- *Emergency Planning Code 2011*
- *Management of Electricity Networks Assets Code 2013*

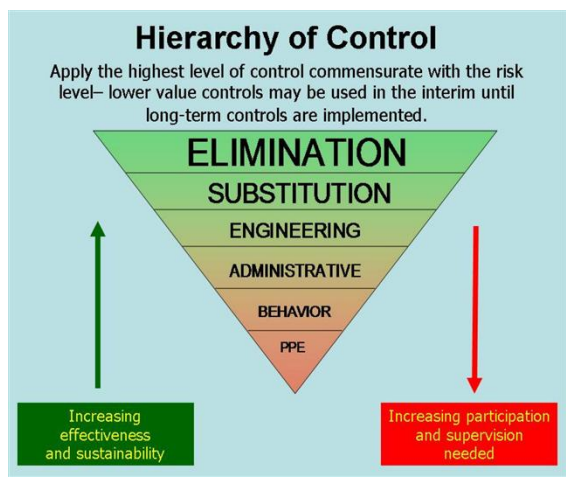
The *Management of Electricity Networks Assets Code* sets out the requirement to maintain an asset Management Plan that is consistent with PAS55 (and now ISO55000 – the international standard for establishing a Management System for Asset Management). It also details the minimum standards and guidelines that are to be consulted in the development of safety standards and guidelines for the design, construction, operation and maintenance of the electricity network.

Specifically the Code requires compliance with Standards, Codes and guidelines relating to the design and maintenance of;

- Overhead lines,
- Cables and Services
- Substations and
- Earthing, protection and testing systems

The Technical Standards section is currently updating a 5 year plan to accommodate changes to the Code and additional internal obligations being placed onto the section. The Technical Standards section is charged with the top three primary considerations of hierarchical risk control (elimination, substitution and engineering out):

Figure 2 Engineering Hierarchy of Control



Technical Standards develop compliance guidelines for: the design of the electricity network, specifications for the purchase of construction materials, standard construction drawings and unit assemblies (Bills of materials and Bills of labour and plant quantities). Technical Standards are the primary business section responsible for compliance with applicable standards, guidelines, codes, Acts and regulations for the technical design and maintenance of the electrical transmission and distribution network.

4.4 Compliance with the Rules

ActewAGL Distribution considers a step change for additional Technical Standards expenditure to be required as efficient costs for the additional requirements as detailed in this section are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

ActewAGL Distribution considers this step change will contribute significantly to the achievement of each of the operating expenditure objectives under clause 6.5.6(a) of the Rules.

ActewAGL Distribution considers the proposed costs of this step change to be the prudent and efficient costs required to delivery these changes in ActewAGL Distribution’s regulatory obligations and strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

5 Safe Work Practices

5.1 Introduction

The Safe Work Practices section is responsible for the electrical safety program of ActewAGL Distribution. At the highest level the electrical safety program is outlined in ActewAGL Distribution's "Blue Book" which contains ActewAGL Distribution's electrical safety rules. The "Blue Book" is supported by a host of further documentation, including works policies and works packages delivered to contractors or staff detailing how works are to be completed with reference to the electrical safety program.

ActewAGL Distribution's Licence to supply electricity is dependent upon maintenance of ISO9001 (Quality Management Systems) certification. An independent audit by UL DQS in February 2014 detailed an improvement initiative in relation to inadequate documentation management between corporate and divisional areas. This finding led ActewAGL Distribution to conduct a further detailed review of Safe Work Practices documentation. This review identified a need to improve the alignment of the information contained in the "Blue Book" with industry standards, the *Work Health and Safety Act 2011* and supporting Codes of Practices, as well as supporting electrical safety documentation such as policies and work packages. It was also identified that there was a need to ensure ongoing compliance with this documentation as well as consistency with standard industry practice through ongoing monitoring, updating, standardisation and communication across ActewAGL Distribution to ensure all relevant employees and contractors comply with electrical safety requirements.

ActewAGL Distribution does not have a dedicated team responsible for updating electrical safety documentation and communicating changes to other parts of the business. This is inconsistent with industry standards and other DNSPs. In the past, with no dedicated team, a number of policies and other documentation relating to electrical safety have not been updated to adequately reflect necessary changes. Over time this has led to discrepancies between the "Blue Book" and supporting information such as electrical safety policies and works packages. In practice this means that electrical safety information provided to operational staff and contractors may be out dated and inconsistent with current regulations.

As electrical safety documentation is used by field workers the information must be updated routinely to be consistent with the latest safety regulations to ensure that field workers are able to perform their duties in compliance to the latest safety regulations with the objective of reducing the risk and occurrence of safety incidents to field workers and the general public.

Implementing these improvement initiatives will address the findings of both DL UQS and ActewAGL Distribution in relation to safety documentation and support the maintenance of the ISO9001 certification. In the ACT it is a juridical requirement to a quality system in place (such as ISO9001) for ActewAGL Distribution to maintain its Licence to supply electricity.

5.2 Step change costs

The details of the options analysis can be found in Appendix A.

The step change costs are required to establish a team of 4 dedicated FTE responsible for monitoring, updating, communicating and standardising electrical safety documentation across ActewAGL Distribution.

Table 5 Step change costs: Safe Work Practices

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.64	0.64	0.64	0.64	0.64	3.21
other	0.06	0.06	0.06	0.06	0.06	0.29
Total	0.70	0.70	0.70	0.70	0.70	3.50

5.3 Step change drivers

5.3.1 Change in regulatory obligations

The Work Health and Safety Act 2011 came into effect from 1 January 2012 and the latest approved Code of Practice for Electrical Safety was released in 2012-13 by the ACT Parliamentary Counsel. This has prompted the need to update both the “Blue Book” and supporting electrical safety policies and works packages documentation across ActewAGL Distribution. To ensure ongoing compliance with these requirements as well as consistency with standard industry practice, ActewAGL Distribution requires additional expenditure to provide ongoing monitoring, updating, standardising and communicating of all electrical safety documentation across ActewAGL Distribution. This is necessary to ensure that employees and contractors comply with electrical safety requirements and the risk and occurrence of safety incidents to field workers and the general public is reduced. Change in ActewAGL Distribution policies and strategies.

To ensure the safety of employees and the public and maintain ISO9001 certification, ActewAGL Distribution considers it necessary to align the information contained in the “Blue Book” with industry standards, the *Work Health and Safety Act 2011* and supporting Codes of Practices as well as supporting electrical safety documentation such as policies and work packages.

5.4 Compliance with the Rules

ActewAGL Distribution considers a step change for the establishment of a dedicated Safe Work Practices team to develop, maintain, educate staff, and monitor compliance against ActewAGL Distribution’s electrical safety program necessary as efficient costs associated with changes in regulatory obligations and ActewAGL Distribution’s strategy are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

This step change in operating expenditure will enable ActewAGL Distribution to achieve the operating expenditure objective of complying with all applicable regulatory obligations or requirements associated with the provision of standard control services as required under clause 6.5.6(a)(2) of the Rules, and the operating expenditure objective of maintaining the safety of the distribution system through the supply of standard control services as required under clause 6.5.6(a)(4). ActewAGL Distribution considers base operating expenditure to be insufficient to enable achievement of these objectives as these objectives relate to Work Practices safety management as detailed in this section.

ActewAGL Distribution considers the proposed costs of this step change to be the prudent and efficient costs required to delivery ActewAGL Distribution’s regulatory obligations as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

6 Contractor Management

6.1 Introduction

ActewAGL Distribution’s Contractor Management team is responsible for contract negotiations as well as the review, monitoring and evaluation of contractor performance. In 2012-13 ActewAGL Distribution managed 143 contracts totalling \$100 million, of which the top eight contracts made up \$57 million or 58% in dollar terms.

ActewAGL Distribution’s focus on contractor management arises as a result of legislative changes to the *Work Health and Safety Act 2011* (WHS Act) and as part of its effort to continually improve its governance and process frameworks. ActewAGL Distribution has identified a need to update its existing contractor management framework, specifically around monitoring and evaluating contractor performance to ensure compliance with the *WHS Act* and to maintain OHSAS 18001:2007 certification. Changes to this framework will ensure adequate contractor performance management which in turn impacts ActewAGL Distribution’s safety and network performance.

The figure below provides a summary of the typical quantity and value of contracts that are in progress.

Figure 3 Contracts value and expiry summary as at April 2014

Contract value	End Date						No end date	Total
	<0 months	0-6 months	6-12 months	12-24 months	24-36 months	>36 months		
<\$750k	7	19	6	2	4	1	16	55
\$750k to \$2m	1	2		3			1	7
\$2m to <\$5m			3	2	2		1	8
>\$5m	1	1		2				4
Grand Total	9	22	9	9	6	1	18	74

6.2 Step change costs

The details of the options analysis can be found in Appendix A.

This option involves additional operating expenditure for the appointment of 4 dedicated FTE Contractor Managers to oversee contractor management arrangements, including review, monitoring and evaluation of existing and future contracts, particularly in regards to safety and compliance with the WHS ACT, OHSAS 18001:2007 and compliance management of defined contract deliverables. Failure to implement this option will result in increased risk to ActewAGL Distribution’s safety, network, legal and financial performance.

Table 6 Step changes costs Contractor Management

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.57	0.57	0.57	0.57	0.57	2.84
other	0.06	0.06	0.06	0.06	0.06	0.29
Total	0.63	0.63	0.63	0.63	0.63	3.13

6.3 Step change drivers

6.3.1 Change in ActewAGL Distribution’s policies and strategies

The *WHS Act* introduced additional health and safety responsibilities and obligations on employers in relation to contractors. Under these regulations, contractors are deemed to be ‘workers’ for the purposes of the Act and as such employers have the same obligations to contractors as they do to employees in respect to work safety and risk management. As a result of these changes, ActewAGL Distribution has identified a number of areas within the existing contractor management framework that require amendment, particularly around monitoring and evaluating contractor performance. If unaddressed these issues are likely to result in undesirable risks to ActewAGL Distribution in relation to the safety of its employees, contractors and the general public, which will require reactive management. ActewAGL plan to proactively manage the contractor management as a risk mitigation strategy by undertaking the initiatives described in this section. As part of changes to its governance and process frameworks, ActewAGL Distribution has further identified the following areas within contractor management that also require improvement:

- All contracts should be subject to legal review;
- Contractors need to be in compliance with contract clauses;
- A contractor performance evaluation should always be performed;
- New contracts should be subject to business cases and risk assessments;
- Contractor reporting should be formalised;
- All contractor payments need to be appropriately reviewed and approved;
- Key performance indicators should be established for all contracts;
- No services should be performed without a valid contract in place; and
- Monitoring of works completed should be undertaken in all instances.

Additionally, OHSAS 18001:2007 aims to assist organisations in managing and controlling their health and safety risks and improving their Occupation Health and Safety performance. Failure to adequately address safety concerns in respect of contractor management, particularly those issues relating to health and safety, may result in OHSAS 18001:2007 certification being removed. This would give rise to a number of safety and legal issues as certification with this standard ensures ActewAGL Distribution has a demonstrably sound occupational health and safety performance.

6.4 Compliance with the Rules

ActewAGL Distribution considers a step change in operating expenditure for the establishment of dedicated Contractor Managers to be necessary as efficient costs associated with a change in ActewAGL Distribution’s contract management strategy are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

This step change in operating expenditure will enable ActewAGL Distribution to achieve the operating expenditure objective of maintaining the reliability, safety and security of the distribution system through the supply of standard control services as required under clause 6.5.6(a)(4) of the Rules. ActewAGL Distribution considers base operating expenditure to be insufficient to enable achievement of this objective as it relates to necessary changes ActewAGL Distribution’s strategy as detailed in this section.

ActewAGL Distribution considers the proposed costs of this step change to be the prudent and efficient costs required to delivery ActewAGL Distribution’s strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

7 Network Operations and Call Centre

7.1 Introduction

The Network Operations & Call Centre Branch provides customer advisory service for power outages, dispatch of crews to respond as required and coordination of switching to facilitate safe network access. This business area consists of three related activities, System Control, Fault Call Centre and the Dispatch Centre.

Systems Control consists of 24 hour, 7 days a week, monitoring of the electricity network for failures. The systems control team monitors the electricity network through a distribution management system called SCADA (Supervising Control & Data Acquisition) which provides real-time information of the electricity network.

Fault Call Centre consists of receiving and recording calls regarding electrical faults. Operators of the Fault Call Centre receive calls, manually enter details into a case management system (current system is 'Call Taker') and refer calls to the Dispatch centre for action. Currently the Fault Call Centre deals with both water and electricity faults and is operated from 0630 hours to 2230 hours seven days a week. Outside of these hours the Dispatch Centre takes over the role of the Faults Call Centre. All voice calls are automatically recorded and stored.

Dispatch Call Centre operators receive and 'triage' notifications from the Fault Call Centre (during business hours) and fault notifications from System Control operators. Dispatch organise first response field resources to investigate and address faults as required. The dispatch call centre is operated on a 24 hour basis and uses a system called 'Trouble Call System' (TCS).

Operations are dependent on accurate information in its systems used for the steady state network operation as well as planned switching, reactive fault switching, crew dispatch and customer management.

In addition to operational customer management and operational management of network performance, the Branch is also a key collection point for real time and historical network performance information, including regulated business KPI measures SAIDI, SAIFI, CAIDI.

The systems used by Control, Dispatch and Call Centres are critical for monitoring and delivering electricity supply to customers. Quick response times and fault repairs are critical to maintaining customer service standards and ActewAGL Distribution’s reputation as a quality service provider. There are regulatory reporting requirements and emergency response coordination for a range of customer service issues, including:

- timely connection of services;
- timely repair of faulty street lights;
- call centre performance, and;
- customer complaints
- ACT Emergency Services Agency
- Jurisdictional Coordinator liaison.

The Operational System Replacement (OSR) program is scheduled to be delivered in 2015 and aims to provide integration of real-time operational and works management systems.

Visibility, control and performance monitoring of the Low Voltage (LV) Network will be an expanded role for Network Operations with additional workload in the form of preparation of LV switching instructions requirement for planned and unplanned access.

From July 2014 ActewAGL Distribution will be participating in the STPIS. The reporting requirements of this scheme will demand a greater range of data than collected and available in current operational systems. The impact of this will be in recording of this data, its assembly to present/support STIPS initiatives, measurement of performance improvement and subsequent investment in application development/reporting tools to make this reporting achievable and mitigate the analytical and reporting effort burden.

7.2 Step change costs

The details of the options analysis can be found in Appendix A.

The step change in operating expenditure is made up primarily of labour costs for an additional 0.9 FTE for the increase in planned switching preparation (centralising LV network management). There are also additional other costs related to training expenses for the implementation of the improved system.

Table 7 Step change costs: Network Operations and Call Centre

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.36	0.36	0.36	0.36	0.36	1.81
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.05	0.05	0.05	0.05	0.05	0.27
Total	0.42	0.42	0.42	0.42	0.42	2.08

If regulation is imposed requiring ActewAGL Distribution to record the details of all fault calls the additional time required, particularly out of hours, additional Fault Call Centre FTEs will be required. This is necessary to mitigate the risk of failing to meet regulatory requirements and associated financial penalties for non-compliance. This impact has not been costed above.

7.3 Step change drivers

Increased operating expenditure for network operations and call centre functions is driven by changes in regulatory obligations and changes in ActewAGL Distribution's strategies.

7.3.1 Change in regulatory obligations

Implementation of the National Energy Customer Framework (NECF) customer service standards and participation in STPIS from July 2014 has required an upgrade of capability in the Network Operations and Call Centre branch. In response to this, the business has committed to an upgrade of its systems to manage performance and capture information required for NECF and STPIS. Additionally the business is committed to the development of personnel capacity and capability to operate them.

7.3.2 Change in ActewAGL Distribution's policies and strategies

ActewAGL Distribution has developed and is implementing strategies to integrate the above requirements of the recent and impending regulatory obligations indicated above.

Currently the Fault Call Centre, Dispatch Centre and Control Room operators all use separate operational management systems which are not integrated with other management systems such as asset management. This situation results in duplicate work being performed. All respective operational systems are based on Windows XP and will no longer be supported by IT upgrades. Fault Call Centre operations currently operate for both water and electricity for economies of scale.

The Advanced Distribution Management System (ADMS) is part of the OSR Program. The ADMS Primary Control System (PCS) and Backup Control System (BCS) will be delivered by three separately funded projects which need to be supported. These are:

- ADMS SCADA and HV network project;
- ADMS integrated HV and LV network project;
- Disaster Recovery Facility (DRF) Project – will deliver the BCS.

These projects will be utilised by the Network Operations and Call Centre branch, together with other business areas to support the requirements of NECF & STPIS.

Currently Fault Call Centre staff do not record all calls in the “Call Centre” management information system (examples include during out of hours operations or where multiple calls relate to the same fault). If a new regulation is imposed requiring ActewAGL Distribution to record details of all fault calls received the additional time required, particularly out of hours, is expected to require additional Fault Call Centre FTEs. These FTEs have not been included in this case summary though will be necessary to mitigate the risk of failing to meet regulatory requirements and the associated financial penalties for non-compliance if all calls are required to be entered into the Call Centre case management system.

7.4 Compliance with the Rules

ActewAGL Distribution considers a step change for Network Operations and Call Centre expenditure to be required as efficient costs for the additional requirements as detailed in this section are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

ActewAGL Distribution considers the proposed costs of this step change to be the prudent and efficient costs required to delivery these changes in ActewAGL Distribution’s regulatory obligations and strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

8 Network OT Support

8.1 Introduction

ActewAGL Distribution's objective is to transform its operational technology (OT) platforms so that they better support the organisation's operational capability, service delivery to customers, and agility as well as realise the benefits of IT transformation to support new and emerging service capabilities.

Network OT Support includes all operational expenditure relating to system support staff and maintenance costs for network OT systems. This expenditure includes:

- System maintenance and servicing
- System licencing and hardware leasing
- Trouble shooting and remediation
- Data management and updates
- Data remediation and integrity (migration from obsolete systems)

ActewAGL Distribution has a legal and regulatory responsibility to maintain an electricity distribution network that maintains minimum service, reliability and safety standards. Key to delivering this are operational support systems to operate, manage and maintain the distribution network. ActewAGL Distribution's existing operational infrastructure was aging and insufficient to meet future needs. To address this, ActewAGL Distribution implemented the following OT programs as part of the Operation Systems Replacement Program (OSRP) during the 2009-14 regulatory period:

- Schneider-Electric Advanced Distribution Management System (ADMS): GIS-centric, the ADMS is a consolidated network modelling system that combines network operations functionalities with network analysis and simulation capabilities for the primary distribution network.
- Azteca Cityworks and Riva: GIS-centric Works and Asset Management System including Strategic Planning.
- Schneider-Electric ArcFM: An extension to the existing ESRI ArcGIS system that provides a suite of configurable data models critical to effective asset management specific for electricity utilities.
- Gentrack Velocity: Customer Information and Relationship Management System that support billing and enhances customer engagement requirements (e.g. National Energy Customer Framework (NECF), AER Stakeholder Engagement Guidelines).

The completion of these Network OT works will enable further necessary OT works planned for the 2014–2019 regulatory control period to meet the needs of ActewAGL Distribution’s network. The Network OT capital work program for the 2014-19 regulatory period builds on these essential foundational projects by transitioning from legacy systems, integrating and automating workflow processes, enhancing the capability and capacity of the projects, and expanding to other asset classes. It focuses on further improvements to safety, network reliability, quality, and customer service. Projects to be completed during the 2014-19 regulatory control period include:

- Schneider-Electric ArcFM Designer: GIS-centric tool for CAD-based design activities to be completed directly in the GIS.
- ADMS Integrated High Voltage and Low Voltage Network Primary Control System: extension of the ADMS to model the low-voltage distribution network.
- Cityworks Stage 2: Extension of Cityworks to enable integrated and consolidated work flows between multiple systems.
- Mobility Solution: The delivery of core corporate mobility systems to field staff.
- ADMS Enhancements: Additional modules for the ADMS to support greater functionality.
- Engagement and Information Portal: Tools for ActewAGL Distribution to more effectively engage with customers and stakeholders.

As a result of these network OT investments, greater operational support is required to operate and support these systems as well as to support the transition into future needs. The main component of this work includes:

1. Data remediation (Office-based and field inspections).
2. System licencing and upkeep.
3. Local maintenance and support for systems
 - a. ADMS: Maintenance and support for the Primary Control System, the Back Control System, the Model Staging and Quality Assurance environment and Network Management Trusted Zone. This also includes workflow, network model management (exports from GIS/ArcFM) and SCADA support when updating the ADMS to reflect new assets in the field.
 - b. Cityworks: Maintenance and support for the production environment, enhancement and development of workflow processes, and reporting.
 - c. GIS/ArcFM: Maintenance and support for the production environment and enforcing quality assurance/control on all system inputs (which have flow on effects to all other operational systems)
 - d. Riva: Maintenance and support of the production environment as well as enhancement of asset models and forecasting outputs.
 - e. Gentrack Velocity: Maintenance and support of the production environment.

Of the three main items listed above, Item 1 is a non-recurrent expenditure item aimed at improving the performance of systems and quality of outputs. Item 1 requires an uplift of 2 FTEs for Years 1 and 2. Items 2 and 3 are recurrent (from the start of the 2014-19 regulatory period) and required to support and leverage the core systems implemented. Item 2 will incur operating expenditure uplift due to the increased number of systems being utilised. It is anticipated that Item 3 will require an additional 4 FTEs.

8.2 Step change costs

The details of the options analysis can be found in Appendix A.

The increased Network OT Support requirement is met with internal resources. This will ensure that systems knowledge is maintained within the organisation and the efficiency of support services is improved to ensure standard control services and regulatory compliance is maintained. The costs of this step change are labour costs associated with an additional 6 FTEs in 2014/15 and 2015/16 (included 4 ongoing and 2 non-ongoing FTEs) and the continuation of the additional 4 ongoing FTEs relative to base year levels in the subsequent three years.

It is a more cost effective option to directly employ additional FTEs at a reduced rate when compared to the overheads incurred from engaging vendor support on-site, while also allowing ActewAGL Distribution to retain any intellectual property developed in-house.

Table 8 Step change costs: Network OT Support

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.57	0.81	0.33	0.34	0.00	2.06
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.76	1.07	0.44	0.45	0.00	2.73
Total	1.33	1.89	0.78	0.79	0.01	4.79

8.3 Step change drivers

8.3.1 Change in regulatory obligations

The STPIS sets performance targets for network reliability. The implementation of operational systems detailed above will support network operations and management to better respond to network events, while also providing a means for forecasting network performance and assisting investment decisions accordingly. These OT systems are progressively being implemented and supported on the basis of working from a 'single source of truth' which is a best practice Asset Management principle required to achieve the required performance targets. Network OT Support for these systems will enable effective operations of the operational technology infrastructure and better assist operations staff to remedy network events. The OT systems fulfil the RIN requirement requested by the AER for the categorisation of Assets.

Support of these systems and maintenance of data integrity will enable ActewAGL Distribution to meet regulatory obligations and reporting requirements underpin, the NECF and enhance its customer engagement capabilities as it responds to the consumer engagement guidelines.

8.3.2 Change in ActewAGL Distribution’s policies and strategies

In addition to the ActewAGL’s 10-year Strategic Outlook, ActewAGL Distribution has developed a Distribution Strategy that outlines six key streams that flow into the Networks Information and Communications Technology Operational Environment Strategy. The strategic streams are outlined below:

Figure 4 ActewAGL Distribution strategic ICT streams

ActewAGL Distribution Strategy					
Operational Technology	Asset Information & Data Quality	Demand Management & Customer Engagement	Embedded Generation	Power Quality	Network Automation

This strategic direction places emphasis on operational technology platforms to leverage capability into key development areas such as Asset Information and Data Quality, Demand Management and Customer Engagement, Embedded Generation, Power Quality Management and Network Automation. The strategy applies a consolidated systems approach to utilising as many common systems as possible to deliver key functional areas.

Additional support is required for systems such that they can be effectively leveraged to support these functional streams and deliver enhanced consumer and network benefits.

More business functions are integrated and captured by these systems, which now become 24-hour, 7 day a week, system critical functions. This is an extension to the existing support function to include: ArcFM/GIS, ADMS, SCADA This places greater reliability and performance risk on network OT infrastructure and therefore increased risk mitigation requirements. This has increased the requirements of the Network OT Support team in order to provide a satisfactory level of security to operations and prompt issues resolution.

8.4 Compliance with the Rules

ActewAGL Distribution considers a step change in Network OT Support expenditure is required as efficient costs for the changes in regulatory obligations and ActewAGL Distribution’s strategy as detailed in this section are not provided by base operating expenditure, nor output growth, productivity growth or real price changes.

ActewAGL Distribution considers this step change is necessary for the achievement of the operating expenditure objectives under clause 6.5.6(a) of the Rules, specifically maintaining the quality, reliability and security of supply of standard control services.

The proposed costs of this step change are considered to be the prudent and efficient costs required to delivery these changes in ActewAGL Distribution’s regulatory obligations and strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

9 Corporate Services charges

9.1 Introduction

The Corporate Services division of ActewAGL Distribution provides corporate services support to Electricity Networks, Gas Networks, ActewAGL Retail, and ACTEW Corporation. These corporate services include;

- Human Resources (People & Performance);
- Property & Security;
- Environment, Health, Safety & Quality (EHSQ) Management;
- Contracts & Procurement;
- Legal & Secretariat;
- Corporate Finance;
- Regulatory Affairs;
- Accounts Payable; and
- Business Systems (BSD).

The operating expenses for all Corporate Services have been forecast for the period 1 July 2014 to 30 June 2019, and Electricity Networks' share has been calculated based on the Cost Allocation Methodology (CAM) approved by the AER. All opex step changes in this section only represent Electricity Networks' allocation of total Corporate Services costs. This section details the environment in which Corporate Services is operating (which is inherently linked to the Corporate Strategy), and identifies the drivers of additional expenditure for the 2014-19 regulatory period. The recommendation is based on assessing the incremental spend as being prudent in managing the risks identified in the current environment.

In support of the ActewAGL strategic outlook the following corporate strategic initiatives have been set:

Safety: Transform to a proactive safety environment where safety is deeply embedded in all workplace operations. Consolidate and maintain a proactive safety environment and effective safety management.

Processes: Partner with operational areas to transform corporate processes to enable continued support of current and emerging operational needs. Consolidate and maintain cost effective corporate processes, managed in pursuit of continual improvement.

People: Transform the culture and capability of our people to position them to effectively deliver against current and emerging business requirements. Realise the benefits of our resilient and capable workforce to support the business.

Technology: Transform ActewAGL's Information Technology (IT) so that it better supports operational capability, service delivery to customers, and organisational agility. Realise the benefits of IT transformation to support ActewAGL's new and emerging service capabilities.

ICT operating expenditure

ICT operating expenditure accounts for approximately one third of total Corporate Services operating expenditure. Services provided through Corporate Services Business Systems Division (BSD) include, but are not limited to;

- Applications support & development
- Establishment and maintenance of ICT infrastructure
- Provision & management of user peripherals
- Maintenance and management of the communications network
- Provision of service desk and desktop support
- Project management office
- ICT purchasing and contract management

The operation of BSD is aligned to ActewAGL's ICT Strategy. ActewAGL's ICT Strategy 2015-2019 has identified 4 key ICT priorities for ActewAGL to deliver against;

1. **Realising Systems Replacement Program (SRP)** - To realise the benefits of the investment in SRP and develop capabilities needed to support, maintain and enhance the solution.
2. **Maintain our competitive advantage** - To provide a contemporary online and digital presence by utilising and leveraging the existing and current Retail solutions without major new investment.
3. **Manage and maintain the ICT asset base** - Ongoing maintenance of the ICT asset base in accordance with regulatory standards will require commitment to ongoing investment to extend core systems, introduce new business capabilities, and continue the replacement of out-dated or obsolete assets.
4. **Support the business via common solutions** - ActewAGL's ICT must support reliable, safe, efficient and cost effective operations. Common solutions and services will be adopted across the entire business to achieve consistency, provide economies of scale and avoid duplication.

The above priorities will enable ActewAGL Distribution to meet the operating expenditure objectives under clause 6.5.6(a) of the Rules to comply with regulations, develop the infrastructure required to meet & manage expected demand, and maintain the security and reliability of the distribution system.

In order to ensure ActewAGL operates efficiently and in the manner of a prudent operator, ActewAGL commissioned an independent benchmarking survey of its ICT expenditure relative to other distribution network service providers. ActewAGL performed well relative to industry peers in a number of key benchmarks. The benchmarking results indicated that current and forecast ICT operating expenditure is being managed efficiently to deliver on the key objectives.

9.2 Step change costs

The details of the options analysis can be found in Appendix A.

The step change in operating expenditure is required to ensure the stability and reliability of the core systems, and the potential higher costs associated with the risks related to employee health and compliance management. These costs are relative to the 2012/13 base year and include escalation factors.

Table 9 Step change costs: Corporate Services charge

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	1.37	1.66	2.02	2.38	2.67	10.10
Total	1.37	1.66	2.02	2.38	2.67	10.10

9.3 Step change drivers

9.3.1 Changes in regulatory obligations

The step changes in Corporate Service are driven by:

Compliance Management

Legislative and regulatory obligations have increased significantly during the current regulatory period, in part due to the introduction of NECF in 2012. To facilitate compliance with an increasing number of legislative and regulatory obligations ActewAGL upgraded its legal compliance framework during the current regulatory period.

CMO is ActewAGL's legal obligations management system. It enables ActewAGL to store, update and monitor legal obligations that relate to ActewAGL's day-to-day operations. It also allows ActewAGL to identify and link an obligation to the relevant business controls that are in place to ensure compliance with the obligation.

CMO is updated each quarter with new and amended obligations. Each obligation will be assigned to the relevant division and the appropriate process owner within that division. CMO also notifies process owners of changes to obligations that are assigned to them. By linking obligations to the relevant controls, and notifying process owners of changes to obligations, ActewAGL is able to demonstrate that it has a process in place to ensure that divisional staff are complying with legislative and regulatory obligations in their day-to-day activities.

Implementation of the CMO database has improved end to end capability, ensuring the capture and implementation of new and amended obligations relevant to ActewAGL's operations, and monitoring of compliance against these obligations. The implementation included training and support activity for both CMO and for NECF compliance in general. This included training across the whole business on how to use CMO, and also includes fact sheets, intranet content and other services (e.g. legal advice etc.) to optimise compliance with the NECF.

WHS legislation

ActewAGL Distribution's corporate strategy includes a dedicated Health Strategy. This strategy is borne from the legislative requirements under the *Work Health and Safety Act 2011*, *Safety Rehabilitation Compensation Act 1988* and the *Workers Compensation Act 1951* to protect the health and safety of all employees.

The new engagement framework between the Corporate Services team (including EHSQ and Employee Health) and the business teams has been important in assisting ActewAGL to meet business needs and provide tailored outcomes for injured employees. In addition, revised policies/procedures/reporting tools have been applied to suit business requirements leading to enhanced return to work outcomes/costs.

The revised Corporate Health Strategy continues to provide employees with a workplace committed to improving and maintaining staff wellbeing, health and safety. It is designed to promote leadership and commitment at all levels, aligning with Environment Health, Safety and Quality's Strategy 2012-2015 of transitioning to a more proactive safety culture by the end of 2015. It is a significant step beyond our legislative obligation where the accountability of staff welfare is part of everyday business.

This strategy aligns with the People and Performance Strategy 2013/14-2018/19 in which the value of our workplace health is critical to attracting, recruiting and retaining skilled, capable staff and maintaining our reputation within the ACT community.

9.3.2 Change in ActewAGL Distribution's policies and strategies

Core Systems Replacement Program (CSRP)

ActewAGL is close to the final implementation of the ICT systems replacement program it committed to in 2013. This was required because ActewAGL's ICT investment over the last decade has been modest. Systems had been "optimised" within budgetary constraints, leading to an overly complex patchwork of disparate, internally built, heavily customised, unsupported and ageing systems.

This systems profile had created uncertainty at multiple layers throughout the business and led to incomplete data, both of which had modified behaviour across the organisation, with a tendency to reinforce "siloed" performance.

The future utility environment will be characterised by rapid industry advancement and changing regulatory obligations. These identified risks and emerging threats provided the impetus for ActewAGL's need for change, given that operational performance and business continuity are critical to ongoing overall performance.

ActewAGL's ability to respond to these internal and external influences will be critical to its ongoing success, with investment in the core systems replacement program a key enabler to fulfilling ActewAGL's Ten Year Strategic Outlook. This program was necessary to enable ActewAGL Distribution to:

- mitigate major risks throughout the business;
- maintain compliance with increasing regulatory and statutory requirements;
- accurately report consumption data to retailers;
- upgrade or implement new solutions without being impeded by out-dated systems; and
- manage the stability of the ICT environment.

The design and implementation of the systems replacements will be largely completed before the 2014-19 regulatory period. There will be ongoing operating expenditure related to these replacements such as licences and maintenance costs. These are highlighted in Table 3.

Following the completion of the implementation of CSRP, direct project FTEs will not be continued, resulting in a reduction in FTEs within Corporate Services relative to the base year.

The expenditure on systems replacement is critical to the maintenance of systems which allow for compliance with regulatory obligations, and support for the quality and reliability of the distribution system.

Software licences

Software licence maintenance is an expenditure item which historically has increased at a rate well above CPI year on year primarily due to the market power of large suppliers such as Microsoft & Oracle. To a lesser extent an increase in licence numbers has also contributed to the increased costs. Efforts are being made to manage licence numbers in the business and as such ActewAGL Distribution has assumed an escalation of 7 per cent per annum from 2012/13 to 2014/15 which then remains flat for the following years. This is considered an absolute base case, which places the onus on the business to manage licence numbers.

Changes in FTE costs

The number of FTEs for Corporate Services has been forecasted slightly lower than the 2012/13 base year. This reflects the business consolidating the IT investments (post implementation of CSRP).

The remaining increases in Corporate Services employee costs are related to cost escalation and assume no further FTE increases. ActewAGL will soon be finalising the Enterprise Bargaining Agreement (EBA) which will apply for the period 1 July 2014 to 30 June 2017.

9.4 Compliance with the Rules

ActewAGL Distribution considers a step change in corporate services charges operating expenditure is required as efficient costs for the changes in regulatory obligations and ActewAGL Distribution’s strategy as detailed in this section are not provided by base operating expenditure, nor output growth, productivity growth or real price changes applied by Electricity Networks.

This step change in operating expenditure will enable ActewAGL Distribution to achieve the operating expenditure objective of complying with all applicable regulatory obligations or requirements associated with the provision of standard control services as required under clause 6.5.6(a)(2) of the Rules, and the operating expenditure objective of maintaining the reliability, safety and security of the distribution system through the supply of standard control services as required under clause 6.5.6(a)(4). ActewAGL Distribution considers base operating expenditure to be insufficient to enable achievement of these objectives as these objectives relate to the changes in regulatory obligations and strategy as detailed in this section.

The proposed costs of this step change are considered to be the prudent and efficient costs required to delivery these changes in ActewAGL Distribution’s regulatory obligations and strategy changes as detailed in this section in order to achieve the operating expenditure objectives and as such reasonably reflect the operating expenditure criteria under clause 6.5.6(c) of the Rules.

10 Capitalisation of Corporate Services charges

This step change is due to annual variations in the amount of corporate services charges to be capitalised under the approved CAM. In years that result in positive step changes, this is due to lower expenditure on capital projects subject to an allocation of corporate services charges under accounting rules compared to the base year. In years that result in a negative step change, this is due to a higher allocation to capital expenditure relative to the base year. Depending on the capital expenditure to be incurred year on year, this allocation will fluctuate. This step change expenditure has a neutral impact on total expenditure as the total corporate services charge incurred by the electricity network business of ActewAGL Distribution is driven by the step change described in section 9.

Table 10 Step change costs: Capitalisation of Corporate Services charges

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	1.02	0.11	-1.28	-0.79	-0.28	-1.23
Total	1.02	0.11	-1.28	-0.79	-0.28	-1.23

10.1 Compliance with the Rules

ActewAGL Distribution considers this step change is required to ensure costs are appropriately allocated between operating and capital expenditure under the CAM approved by the AER as being in accordance with the requirements of the Rules.

Appendix A – Step change options analysis

1. Environment, Health Safety and Quality (EHSQ)

a. Option 1 (Preferred): Deliver improved EHSQ programs

This option involves improving existing environment, quality, health and safety programs and implementing new programs in key areas including:

- Improve the health and wellbeing of ActewAGL Distribution employees and reduce the incidence of long term injury through ‘Project Substance’, providing ongoing health monitoring commencing in 2015/16;
- Training to empower employees to take ownership of incident investigation and additional budget for expert consultants to investigate more serious incidents such as total and permanent disability and death. ActewAGL Distribution recognises that serious incidents not only affect the individual but can affect the broader community through major distribution network impacts and disruption to business activity.
- Increase annual awareness training on muscular sprains/strains and injuries to minimise injury to employees in the course of their work;
- Increase the annual leadership development program to identify core areas for improvement of leaders. This will improve leadership and WHS management throughout the organisation.
- Increase vehicle incident training and management to minimise injuries as a result of vehicular incidents, reduce damage to the ActewAGL fleet, third party damage and potentially reduce fleet insurance premiums.
- Delivery of education to employees on the early warning signs of psychological injury enabling them to seek timely support and reduce future incidents;
- Increase the budget in 2015/16, 2016/17 and 2018/19 to increase audit frequency to maintain certification of: ISO 9001 (Quality Assurance), ISO14001 (Environmental), AS4801 (Occupational Health and Safety), ISO55000 (Asset Management System – previously PAS55);
- Develop appropriate methodologies which will determine how and when assets and services are likely to be impacted by ongoing climate change and In doing so have regard to the industry wide approach;
- Update ActewAGL Distribution’s Bushfire Mitigation Strategy and Management Plan in 2015/16 to ensure its relevance in the current environment arising from recent bushfires and the findings of the 2009 Victorian Royal Commission and compliance with the ACT Government’s Strategic Bushfire Management Plan. This will improve ActewAGL Distribution’s bushfire mitigation activities to further reduce the likelihood and consequences of bushfires in the ACT and reduce risk to the safety of the community, ActewAGL Distribution employees and contractors and the reliability, and security of ActewAGL Distribution’s network; and

- Address unplanned safety events relating to the discovery of asbestos dumps / contaminated soli and unexploded ordnance in new land release areas in the ACT and existing urban renewal projects such as the ACT Governments “City Plan – Dec 2013”, to reduce risks to the public and ActewAGL Distribution employees and contractors during the 2009-14 regulatory period.

i) Step change costs

The step change in operating expenditure relating to this option consists of project related costs for various programs.

Table 11 Step change costs: EHSQ

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.67	0.67	0.54	0.54	0.41	2.84
Total	0.67	0.67	0.54	0.54	0.41	2.84

ii) Benefits

It is not feasible to accurately quantify benefits resulting from implementing this option as these predominantly relate to risk mitigation. ActewAGL Distribution anticipated the following benefits from increasing EHSQ operating expenditure:

- Reduced incidence of long term injury to ActewAGL Distribution employees and contractors and related injury management expenditure;
- Improved incident investigation and management;
- Improved leadership capabilities and safety culture across the organisation will reduce safety incidents in the long term;
- Reduced number of motor vehicle incidents, resulting in reduced costs associated with injury to employees, damage to fleet vehicles and potential reductions in fleet insurance premiums;
- Reduced incidence and severity of psychological injury;
- Enable ongoing compliance with existing and new regulatory obligations;
- Strengthening networks so that they can better cope with climatic extremes and shifts in demand
- Reduced likelihood and consequences of bushfires in the ACT and reduced risk to the safety of the public, ActewAGL Distribution employees and contractors, as well as to the reliability, safety and security of ActewAGL Distribution’s network;
- Improved ability to address unplanned safety events from asbestos and unexploded ordnance discoveries and consequent reduction in safety risks to the public and ActewAGL staff; and
- Avoided cost of potential non-compliance action against ActewAGL Distribution.

b. Option 2: Maintain base year resourcing levels and programs for EHSQ

This option involves maintaining base year levels of programs and resourcing for EHSQ and not commencing new programs in identified areas for improvement. This option would most likely result in ActewAGL Distribution not meeting legislative requirements. Impacts on specific programs are summarised below:

- Without an increase in funding to psychological injury prevention program, support health monitoring services and sprains/strains awareness for employees ActewAGL employees will not have the necessary tools and information to take the necessary steps towards early intervention of physical and psychological injuries, resulting in more frequent lost time injuries and costs.
- Without additional leadership training, ActewAGL will be unable to improve safety leadership and embed a proactive safety culture throughout the organisation.
- Incident investigation would continue to be conducted completely by external service providers.
- A failure to consider the impact of climate change on network assets may result in a less efficient response to continuity and reliability of supply to consumers in the future.
- Not updating ActewAGL Distribution's Bushfire Mitigation Strategy and Management Plan may result in the plan no longer being suitable in the current environment or in line with the ACT Strategic Bushfire Management Plan. This would increase the risk of ActewAGL Distribution assets initiating a bushfire, which has potentially significant negative consequences for the community. This also puts at risk ActewAGL Distribution's ability to maintain the reliability, safety and security of its distribution system.

i) Step change costs

Costs associated with this option are consistent with base year efficient operating expenditure. There are potentially additional costs associated with this option that cannot be feasibly quantified. These include:

- Costs of non-compliance action against ActewAGL Distribution;
- Costs associated with potential increase in incident rate and injury management;
- Costs associated with increased safety incidents relating to asbestos and unexploded ordnance discoveries; and
- Risk of additional cost in the event of a bushfire.

ii) Benefits

This option would result in EHSQ operating costs continuing to be in line with base year levels across the 2014-19 regulatory period. There are considered to be no additional benefits associated with this option.

2. Regulatory Compliance and Distribution Strategy

ActewAGL Distribution has considered three options including 'do nothing', increasing internal resources, and outsourcing regulatory compliance and distribution strategy functions.

a. *Option 1: Do nothing*

This option would involve maintaining base year operating expenditure for regulatory compliance and strategy functions. However, if there is no increase in dedicated resources, ActewAGL Distribution runs the organisational risk of not appropriately responding to its external obligatory requirements. This will also limit ActewAGL Distribution's capacity to deliver its consumer engagement strategy over the 2014-19 regulatory period.

b. *Option 2 (Preferred): Perform in house with additional resourcing*

This option involves ActewAGL Distribution continuing to operate an internal core team of regulatory specialists to meet the legal and regulatory obligations of the organisation. ActewAGL Distribution considers the most efficient method to deliver these functions is to increase the resourcing of existing in-house expertise by an additional 4 FTE on base year levels to a total of 6 FTE. This will include:

- 4 regulatory specialist FTEs (compared to 2 FTEs in the base year) to meet ActewAGL Distribution's increased regulatory reporting and legal compliance requirements and activities
- 1 consumer engagement specialist FTE, and
- 1 distribution strategy specialist FTE.

The external regulatory obligations have increased in complexity, volume and frequency over recent years. This is particularly so with the AER RINs where there are now two standard annual RINs required, as well as the reset RIN which has increased in size and complexity. At present the Regulatory Compliance section has to provide approximately 38 external reports annually to various organisations and regulators as well as conduct the other duties. There are also increased expectations in the area of consumer engagement as set out in the AER's consumer engagement guidelines. ActewAGL Distribution has formalised its consumer engagement activities through the development of a stage 1 consumer engagement strategy that is to be implemented over the 2014-19 regulatory period and require an additional FTE from 2014/15 onwards.

ActewAGL is taking a proactive approach to address its growing regulatory compliance obligations and as such, in 2012/13 ActewAGL Distribution initiated a restructure to benchmark an effective and efficient organisational structure.. The core team is supported by the use of specialist consultants as required.

With the new Branch structure commencing in July 2014 and the additional responsibility for strategic planning, this will require the employment of a Distribution Strategy Officer from 2014/15 onwards. The establishment of a dedicated strategic planning section recognises the criticality of strategic planning and the future organisational benefits that will be generated. It will allow the Division to centrally facilitate the development of strategic initiatives and co-ordinate their implementation.

i) Step change costs

The majority of costs associated with this option are labour costs related to the employment of experienced, professional staff and the engagement of specialist consultants as required to assist in meeting regulatory obligations. Increased operating expenditure is for additional FTEs compared to the base year attributable to additional ongoing staff positions required to address historically insufficient capacity and the AER's customer engagement guidelines released in 2013/14. Increases in other costs from the base year are primarily for specialist consultants assisting with various regulatory requirements.

Table 12 Step Change: Regulatory Compliance and Distribution Strategy

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.93	0.93	0.93	0.93	0.93	4.65
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	1.30	0.19	0.11	1.19	1.19	3.98
Total	2.23	1.12	1.04	2.12	2.12	8.63

ii) Benefits

This preferred option allows the Regulatory Compliance and Distribution Strategy sections to meet workload demands and meet all regulatory reporting obligations. This option also minimises the risk of noncompliance with ActewAGL Distribution's regulatory obligations which would likely result in financial penalties and reputational business damage.

Further benefits will be gained through the delivery of a formalised and focussed consumer engagement strategy. For consumers, this will:

- Result in more comprehensive, relevant and timely information on the work of ActewAGL Distribution and its potential impacts;
- Mean increased and more regular opportunities to provide input in relation to issues that they are most interested in; and
- Lead to a better understanding of what impacts on energy bills and therefore more transparency around our decision-making and the impacts of regulatory activities and processes.

For ActewAGL Distribution, strong consumer engagement will:

- Deliver more informed decision-making to better balance the need for operations to be technically feasible and financially viable while also being acceptable to the community and the local environment;
- Ensure the delivery of services is matched to the needs and expectations of customers;
- Result in efficiencies in service delivery by reducing delays and re-work through better, earlier, liaison with those directly impacted by works and a greater understanding of their needs and expectations; and

- Capture early and direct input from consumers to better inform ActewAGL Distribution’s long-term planning and associated reporting to the regulator and other authorities.

c. Option 3: Outsource functions

This option involves outsourcing regulatory compliance and distribution strategy functions to a third party. The outsourcing of this function is considered unviable because of the complexities of the National Electricity and Gas Markets regulatory environments and the loss of corporate knowledge that would occur should this option be adopted. The maintenance of ongoing internal expertise to advise and lead the business is considered critical for ActewAGL Distribution to respond effectively to the national, ACT and NSW regulatory environments and support its business interests.

3. Technical Standards

a. Option 1: Do nothing

Reliance on adequate drawings and specifications to Australian and industry standards is important in ensuring that major problems are avoided. Should ActewAGL Distribution not maintain a complete up to date suite of Technical Standards, drawings and material specifications there is an increased risk the integrity of the network is compromised which may expose ActewAGL Distribution to adverse legal, regulatory, safety and financial consequences.

b. Option 2 (Preferred): Perform Technical Standards in house

ActewAGL Distribution operates an internal core team of technical engineers and specialists to meet the technical construction standards and legal obligations for the organisation. Prior to 2013/14 there had been insufficient capacity to adequately meet the ongoing demands of the technical standards requirements. A restructure was undertaken to address the capacity shortfall and subsequent recruitment activity with a plan to be completely resourced with one additional FTE by the end of 2013/14. ActewAGL Distribution considers this additional expenditure necessary to meet regulatory obligations and reduce organisational risk associated with inadequate technical standards.

i) Step change costs

The costs associated with this step change are labour related to an additional FTE, as well as costs associated with the engagement of specialist consultants to meet the Technical Standards requirements described in this section. Specialist consultants are engaged as necessary to provide a complete suite of technical standards requirements across the business and reduce risks to the business. This step change includes costs of approximately \$0.23 million in other costs in 2014/15 for expert consulting services for the initial implementation of the five year plan, with an additional \$0.06 million required in subsequent years.

Table 13 Step change costs: Technical Standards

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.20	0.20	0.20	0.20	0.20	0.98
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.23	0.06	0.06	0.06	0.06	0.47
Total	0.42	0.26	0.26	0.26	0.26	1.45

ii) Benefits

This option will contribute to ActewAGL Distribution's achievement of each of the operating expenditure objectives under clause 6.5.6(a) of the Rules to some degree, but in particular it will enable compliance with applicable regulatory obligations or requirements and maintain the reliability and safety of the distribution system.

A major benefit of the proposed additional expenditure is that this will enable adequate technical standards to be maintained which will allow for standardisation and rationalisation of design and construction estimations, materials and Works as Executed (WAE) documentation. Beneficial design and construction standards outcomes are derived from accurate drawings, correct bills of material, accurate material specifications and design guidelines. The benefit of accurate standards is that they provide the business with the ability to control construction in the field. This ensures designs are constructed to ActewAGL Distribution approved standards that meet the primary drivers (which becomes increasingly important with the possible advent of construction contestability in the ACT).

Correct standards will encourage confidence from the field staff that the standard design works (is fit for purpose), and will allow the auditing and correction of non-standard design, construction and WAE (data) to occur, resulting in a more reliable, cost effective and regulatory compliant network, with an easy to maintain range of assets.

Moreover, the standardisation of materials allows 'spare parts' inventory holdings to be minimised and removes complications associated with maintaining a wide variety of configurations.

Additionally, ensuring adequate and compliant technical standards has flow-on benefits to asset maintenance planning and reactive works activities. The productivity benefits offered to Design Officers also apply to maintenance planners and schedulers as complete and accurate standard designs and assemblies contribute to improve productivity.

ActewAGL has a significant proportion of its assets located underground, this adds the complexity of not being able to readily inspect the asset, which emphasises the importance of implementing appropriate standards to ensure the integrity of the installed underground assets.

This will benefit consumers by ensuring the safety and reliability of supply is maintained.

c. Option 3: Outsource Technical Standards

This option would involve outsourcing the Technical Standards function to a third party through contractual arrangements. The outsourcing of this function is considered unviable or limited because the complexities of the Technical Standards which are efficiently achieved through the maintenance of a minimum standard and resourcing level of in-house expertise. To efficiently and cost effectively deliver short, medium and long term technical standards services, the Technical Standards team must have an excellent understanding of the organisational technical requirements and operating environment. It needs to establish and maintain working relationships with all relevant ActewAGL Distribution field operations to ensure effective technical standards service and support. ActewAGL Distribution considers that outsourcing Technical Standards will lead to significant delays in response, a loss of corporate knowledge and may adversely impact the quality of ActewAGL Distribution field operations support services from an inadequate understanding of technical standards.

4. Safe Work Practices

a. Option 1: Do Nothing

This option involves maintaining current resource levels and not implementing dedicated FTEs to update electrical safety rules and supporting documentation. This option carries significant safety risks for ActewAGL Distribution and consumers, which may arise from poor or inadequate safety documentation held by field workers. This option is inconsistent with industry standards and other DNSPs. This option exposes ActewAGL Distribution to an increase in the risk of safety incidents to staff, contractors and the general public, as well as and non-compliance with Codes of Practice and the *Works Health and Safety Act 2011*.

b. Option 2 (Preferred): Establish dedicated team of 4 FTEs

This option involves establishing 4 dedicated FTE responsible for updating, communicating and standardising extensive electrical safety documentation across ActewAGL Distribution. These officers will be responsible for ensuring all primary and supporting electrical safety documentation is consistent with current Codes of Practice, the *Work Health and Safety Act 2011*, and understood and complied with by all relevant ActewAGL Distribution employees and contractors. This approach is consistent with standard industry practice.

i) Step change costs

The costs of this step change are employee related costs and associated FTE overheads for 4 additional FTEs.

Table 14 Step change costs: Safe Work Practices

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.64	0.64	0.64	0.64	0.64	3.21
other	0.06	0.06	0.06	0.06	0.06	0.29
Total	0.70	0.70	0.70	0.70	0.70	3.50

i) Benefits

It is not feasible to quantify the potential benefits associated with implementation of this option. Benefits include consistency between ActewAGL Distribution's electrical safety documentation, a decrease in future electrical safety incidents and reduced safety risks to staff, contractors and the general public in the ACT. This option is also consistent with standard industry practice and will ensure electrical safety documentation is current and consistent with Codes of Practice and regulatory requirements, as well as ensuring ActewAGL Distribution can maintain ISO9001 Certification upon which ActewAGL Distribution's operating licence is dependent.

5. Contractor Management

a. Option 1: Do Nothing

This option involves maintaining current resource levels and not implementing dedicated Contractor Managers who will oversee contractor management arrangements. This option carries safety, quality and financial risks for ActewAGL Distribution which may arise from poor or inadequate contractor works and may place ActewAGL Distribution at risk of non-conformance with OHSAS 18001:2007 and the *WHS Act*.

b. Option 2 (Preferred): Establish 4 FTE dedicated Contractor Managers

This option involves additional operating expenditure for the appointment of 4 dedicated FTE Contractor Managers to oversee contractor management arrangements, including review, monitoring and evaluation of existing and future contracts, particularly in regards to: safety and compliance with the *WHS ACT*, OHSAS 18001:2007 and compliance management of defined contract deliverables. Failure to implement this option will result in increased risk to ActewAGL Distribution’s safety, network, legal and financial performance.

i) Step change costs

Costs of this step change relative to the base year primarily consist of employee related costs for 4 additional FTE.

Table 15 Step change costs: Contractor Management

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.57	0.57	0.57	0.57	0.57	2.84
other	0.06	0.06	0.06	0.06	0.06	0.29
Total	0.63	0.63	0.63	0.63	0.63	3.13

ii) Benefits

It is not feasible to accurately quantify the potential benefits of this option. Implementation of this option will contribute to ActewAGL Distribution’s achievement of the operating expenditure objectives under clause 6.5.6(a) of the Rules, including meeting regulatory obligations and requirements, maintaining the quality, reliability and security of the standard control services and the safety of the distribution system. The benefits of this option include expected reductions to safety, network and financial performance risks and improved network maintenance practices.

The majority of ActewAGL assets are located on public land, roads and in some cases on private property. Contractors are in routine contact with the assets in these locations.

Part of the employer's general duty of care is to provide systems of work that are, so far as is reasonably practicable, safe and without risks to health. Components of a system include:

- the organisation and co-ordination of the work of those involved;
- training, instruction and supervision;
- layout of plant and appliances;
- methods to be used, and;
- general conditions of work.

These inherent 'Safe System' components are included in the contract obligations and dedicated contract managers hold the responsibility for monitoring and managing these requirements.

This option will ensure value for money, and enable monitoring and evaluation of performance to improve the quality of services delivered by contractors. This will provide safety benefits to consumers and the general public.

6. Network Operations and Call Centre

a. Option 1: Do not implement system augmentation projects

This option would involve not implementing necessary system augmentation projects. This option would result in single customer outages being excluded from network and business performance measurement. In turn this would preclude full involvement with STPIS. Additionally an increase of FTEs would be required to process the more detailed information required for STPIS. This option does not offer the integrated information system, requiring additional investment to develop systems and system integrations to deliver NCEF and STPIS information. It also has additional risks of poor performance which may impact negatively on ActewAGL’s reputation, result in penalties from the regulator.

b. Option 2 (Preferred): Implement integrated information systems

This option involves implementing the ADMS to replace the existing SCADA system and replacing existing call centre systems as required. The upgrade will streamline and centralise the development of HV and LV Network Switching Plans into one system improving work planning processes, quality and safety. It will also provide the Control Room visibility of the entire ActewAGL Distribution electrical Network (adding LV network management) providing improved fault response, network performance and safety for employees and the public. The ADMS will also improve network Outage Management and fault location prediction capabilities.

Operating costs to implement the ADMS include an additional 0.9 FTE for the increase in planned switching preparation (centralising LV network management) and training expenses for the more sophisticated system. In recent years training has not been a focus for this area as there has been little investment in the current operational systems which were last upgraded in 2007. This training will be essential in to ensure the benefits of this option are realised.

i) Step change costs

Operating costs associated with option 2 represent a step change in operating expenditure. This is made up mainly of labour costs for an additional 0.9 FTE above base year levels for the increase in planned switching preparation (centralising LV network management). There are also additional other costs related to training expenses for the implementation of the improved system.

Table 16 Step change costs: Network Operations and Call Centre

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.36	0.36	0.36	0.36	0.36	1.81
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.05	0.05	0.05	0.05	0.05	0.27
Total	0.42	0.42	0.42	0.42	0.42	2.08

If regulation is imposed requiring ActewAGL Distribution to record the details of all fault calls the additional time required, particularly out of hours, additional Fault Call Centre FTEs will be required. This is necessary to mitigate the risk of failing to meet regulatory requirements and associated financial penalties for non-compliance. This impact has not been costed above.

ii) Benefits

Implementation of this option provides a range of benefits to ActewAGL Distribution and consumers and contributes to the achievement of operating expenditure objectives 2, 3 and 4 under clause 6.5.6(a) of the Rules. The implementation of the ADMS will provide required capabilities for NECF and STPIS requirements by integrating fault and fault repair information with other management systems, such as the asset management system, facilitating improvement in operational performance and mitigating the effort required to deliver and monitor performance. The risk of incorrectly identifying customers to be de-energised will be mitigated through systems automation which will provide workforce efficiencies and reduce disruption to customers.

7. Network OT Support

a. Option 1: Do nothing

The 'Do nothing' option provides a position consistent with the base year expenditure position. However, this position contains insufficient capability and is consistent with historical under-investment in operational technology systems that have led to an operational environment where many systems were unsupported by the respective vendor and required out dated hardware which was no longer commercially available. Furthermore, there was limited expertise as the base year expenditure item employed a strategy where only one resource supported each system, which led to significant succession issues and intermittent support (for example, when key resources took leave).

i) **Step change costs**

The costs associated with this option are consistent with base year operating expenditure, but carry the greatest risk to the capital investment made into new operational technology infrastructure and risk to ActewAGL Distribution's compliance with new obligations. This option inherently carries the potential for repetition of support issues already experienced within the previous operational technology environment. This option is likely to result in a less efficient outcome as it may require increased capital expenditure in the future to address the risks ActewAGL Distribution's network would be exposed to within a further deteriorated operational technology environment. Furthermore, a failure to deliver standard control services or similar compliance requirements will likely attract penalties.

i) **Benefits**

This option would result in Network OT Support operating costs continuing to be in line with base year levels across the 2014-19 regulatory period. There are not considered to be any additional benefits associated with this option.

b. Option 2 (Preferred): Full in-house team

This option involves meeting the increased Network OT Support needs with internal resources. This will ensure that systems knowledge is maintained within the organisation and the efficiency of support services is improved to ensure standard control services and regulatory compliance is maintained.

On the balance of compliance, risk, cost-benefit and value for customers/stakeholders, Option 2 is superior as it is likely to result in the most prudent and efficient outcome. It provides the greatest mitigation of risks associated with the provision of standard control services as well as the most responsive capability to remedy mission critical system issues. It is a more cost effective option to directly employ additional FTEs at a reduced rate when compared to the overheads incurred from engaging vendor support on-site, while also allowing ActewAGL Distribution to retain any intellectual property developed in-house.

i) Step change costs

The costs of this option are related to the labour costs associated with additional FTEs required to provide support and maintenance services for the operational technology environment.

ii) Benefits

A full in-house support team will provide a more readily responsive team that is familiar with the system implementation and can leverage this intimate knowledge. Furthermore, an in-house support team will enable compliance and risk mitigation as well as diversification of skills across multiple resources (an issue currently experienced where the absence of key resources halts issues resolution or business-as-usual activities).

This option will enable ActewAGL Distribution to continue to achieve the expenditure objectives under clause 6.5.6(a) of the Rules relating to the provision of standard control services. The implementation of the operational systems detailed above enable the provision of standard control services and support of these systems is key to meeting regulatory obligations and requirements and maintaining quality, reliability and security of supply of standard control services.

i) Step change costs

The costs of this step change are labour costs associate with the uplift of an additional 6 FTEs relative to 2012/13 base year levels in 2014/15 and 2015/16 (included 4 ongoing and 2 non-ongoing FTEs) and the continuation of the additional 4 ongoing FTEs relative to base year levels in the subsequent three years. Escalation factors have not been applied to these costs.

Table 17 Step change costs: Network OT Support

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.57	0.81	0.33	0.34	0.00	2.06
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	0.76	1.07	0.44	0.45	0.00	2.73
Total	1.33	1.89	0.78	0.79	0.01	4.79

ii) Benefits

Option 2 provides the greatest balance of benefits.

c. Option 3: Outsource new positions

This option considers a support structure where additional resource requirements (relative to base year levels) are provided by the system vendor. Proposals were considered from vendors to provide on-site support and maintenance services.

The vendor proposal centred on training a local resource (employed by the vendor) to provide that service, as vendors are based overseas and are not willing to relocate a project resource to Canberra to fulfil this role.

i) Step change costs

The proposals were evaluated and pointed to a significant increase in operating expenditure to support these systems as the vendor will provide a full time resource on-site with 24-hour availability. This option will attract overhead costs of the vendor organisation.

A dis-benefit of this option is that the resource supplied by the vendor will not have the intimate knowledge of the implementation as it was cited in the proposals that a local resource will need to be trained.

ii) Benefits

This option enables mitigation of compliance risks and delivery of support services. While vendor resources will have intimate access to vendor support, it is unlikely that they will have access to support that isn't already provided by the baseline vendor support offering.

8. Corporate Services charges

a. Option 1: Do nothing

This option is not considered appropriate due to the need to ensure the stability and future reliability of the core systems, and the risks that exist if this option is pursued. These are base costs which would be expected to be driven higher in the instances of employee health claims and obligations breaches. These costs include labour cost escalation, which are included within the corporate services charge when allocated to Electricity Networks, rather than included by Electricity Networks.

Table 18 Base & step change costs: Corporate Services

\$ million, real 2013/14

	2014/15	2015/16	2016/17	2017/18	2018/19
Base year operating expenses (2012/13)	22.3	22.3	22.3	22.3	22.3
Salaries & wages escalation	0.7	1.0	1.5	1.7	2.0
Software licence escalation	0.3	0.3	0.3	0.3	0.3
Warehousing	-	-	-	-	-
Other operational savings	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Total net opex changes	1.0	1.3	1.7	1.9	2.2
Forecasted operating expenses	23.2	23.5	24.0	24.1	24.4

b. Option 2: Additional costs associated with committed programs only

This option incorporates the additional costs associated with the existing programs of work. These are base costs which would be expected to be driven higher in the instances of employee health claims. These costs include labour cost escalation, which are included within the corporate services charge when allocated to Electricity Networks, rather than included by Electricity Networks.

Table 19 Base & step change costs: Corporate Services

\$ million, real 2013/14

	2014/15	2015/16	2016/17	2017/18	2018/19
Base year operating expenses (2012/13)	22.3	22.3	22.3	22.3	22.3
Salaries & wages escalation	0.7	1.0	1.5	1.7	2.0
Software licence escalation	0.3	0.3	0.3	0.3	0.3
Ongoing opex related to CSRP	0.1	0.1	0.1	0.1	0.1
Compliance Management	0.1	0.1	0.1	0.1	0.1
FTE reductions	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Warehousing	-	-	-	-	-
Other operational savings	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Total net opex changes	1.0	1.2	1.6	1.8	2.1
Forecasted operating expenses	23.2	23.5	23.9	24.1	24.4

c. Option 3 (Preferred): Incorporation of all drivers and additional costs

This option incorporates all of the drivers and additional costs as discussed in this section. These costs include labour cost escalation, which are included within the corporate services charge when allocated to Electricity Networks, rather than included by Electricity Networks.

Table 20 Base & step change costs: Corporate Services

\$ million, real 2013/14

	2014/15	2015/16	2016/17	2017/18	2018/19
Base year operating expenses	22.3	22.3	22.3	22.3	22.3
Salaries & wages escalation	0.7	1.0	1.5	1.7	2.0
Software licence escalation	0.3	0.3	0.3	0.3	0.3
Ongoing operating expenditure related to CSRP	0.1	0.1	0.1	0.1	0.1
Ongoing opex related to capex programs	0.3	0.3	0.3	0.5	0.5
Health Strategy	0.2	0.2	0.1	0.1	0.1
Compliance Management	0.1	0.1	0.1	0.1	0.1
FTE reductions	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Warehousing	-	-	-	-	-
Other operational savings	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Total net opex changes	1.4	1.7	2.0	2.4	2.7
Forecasted Operating Expenses	23.6	23.9	24.3	24.6	24.9

i) Costs

These step change costs are relative to the 2012/13 base year and include escalation factors.

Table 21 Step change cost: Corporate Services charge

\$million, real 2013/14

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Engineers	0.00	0.00	0.00	0.00	0.00	0.00
General labour	0.00	0.00	0.00	0.00	0.00	0.00
other	1.37	1.66	2.02	2.38	2.67	10.10
Total	1.37	1.66	2.02	2.38	2.67	10.10

ii) Benefits

The preferred option benefits are largely based around risk mitigation and cost avoidance. There are some small financial benefits associated with FTE reductions related to CSRP, however the focus for the business is on accepting only incremental costs which are aligned with material risk mitigation related to employee health and compliance management and to ensure the stability and future reliability of the core systems.