Attachment 6.09

Customer Operations Operating expenditure plan

May 2014

Contents

1 Executive Summary

We forecast $167.887 million of opex for Customer operations. This document provides an overview of our proposed opex to support our distribution network in the next five years. We propose total opex of $167.887 million over the period, to provide for emergency response to network and customer's installation safety issues, ensuring customer's installations are safe, impact of organic growth on the distribution network and general customer support.

The total opex is provided in the table below:

Table 1

($million Real 2013/14)	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Customer Operations Operating expenditure excluding Alternate Control	**28.333**	**28.730**	**29.703**	**30.252**	**30.334**	**147.352**
Customer Operations Alternate Control	**3.975**	**4.030**	**4.101**	**4.175**	**4.254**	**20.534**
Total Customer Operations Operating expenditure	**32.308**	**32.760**	**33.804**	**34.427**	**34.588**	**167.887**

The focus of our Customer Operations strategy for the 2014-19 period is to manage the distribution network, facilitate organic growth from connections and associated customer's installation inspections, and respond to general enquiries, complaints and network emergencies while achieving licence conditions for reliability and delivering a high level of public safety.

The proposed total opex is 10.12 per cent more than the current regulatory period before the removal of Alternate Control – Ancillary network services. This reflects the continuance of business as usual operations, CPI, material and labour rate increases. This is equivalent to 0.78 per cent annualised, expressed in 2013/2014 dollar terms.

2 Introduction

The purpose of this document is to provide an overview of our forecast opex to meet our obligations in delivering Customer Operations for the next five years.

The introduction below provides background on the characteristics of our functional operations, and the reasons why we are required to undertake them to achieve the overall strategic objectives of Ausgrid.

Customer Operations are responsible for the management, planning and reliability of the distribution network which includes the facilitation of organic growth from new connections, regular monitoring of the distribution network for quality of supply, responding to complaints and general enquiries concerning the distribution network and responding to network emergencies. They also deliver public safety functions in relation to customer's installations.

These functions primarily relate to the part of the network where the network interfaces with the customer's installation. Ausgrid has a public safety responsibility to ensure customer's premises connected to the network are safe and this is achieved through installation inspection functions and emergency response to installation and network safety issues. This group is also responsible for the delivery of the replacement and duty of care activities at this level to help ensure a safe and reliable standard is achieved and maintained. Other activities include responsibility for providing support to Ausgrid's customers when/if widespread power interruptions occur, addressing supply complaints such as fluctuations in voltage, loss of supply and radio/TV interference and managing general enquiries and complaints such as EMF and property easements.

The historical trend in relation to the allowance is forecast to become less steep compared to the current period after adjusting down for the removal of Ancillary Network Services and will remain at or below CPI. This is based on our current understanding of forecast work load and the fact that the functions provided by this group are essential to the ongoing responsibility for public safety and contributes to achieving the Licence conditions in relation to reliability.

Objectives

The objectives of the Customer Operation program are to:

- Comply with all applicable regulatory obligations or requirements associated with the provision of standard control services.
- Inspect new and upgraded customer installations to ensure customer's premises connected to the network are safe and do not decrease the integrity of the network.
- Emergency response to installation and network safety issues including but not limited to electric shocks received by the public, high voltage injection into the low voltage network and fire related issues.
- Maintain the current staffing levels so that Customer Operations continues to ensure safe installations are connected to the network, adequate distribution network planning and timely response to network and customer's installation incidents
- Planning of the LV distribution network for organic load growth, asset replacement, quality and reliability of supply and management of the LV network operations.
- Deliver general customer service in relation to network management and quality of supply concerns.

Scope of activities

Functions and tasks performed by Customer Operations can be summarised into the following activities:

- 24/7 emergency response to the LV distribution network pertaining to damaged overhead conductors including HV mains impressed on the LV network; supply investigations such as loss of supply; fluctuating supply, low or high voltage levels, neutral integrity investigations; investigation into the report of electric shock or electrocution; defective or damaged network construction components and other hazardous situations.
- 24/7 emergency response to emergency service requests from government agencies including assisting the State Emergency Service typically where overhead mains have dislodged; assisting the NSW Police Force by isolating supply during hydroponic drug busts and providing general electrical related assistance with other criminal investigations; assisting the NSW Fire Brigade by attending fire events to isolate supply and perform safety checks; and performing safety testing (neutral integrity investigations) for water corporations during the renewal of water mains.
- Provision of general administration support within the emergency service including the maintenance of a 24/7 rotating shift roster.
- Provision of Standby Generators
  - A number of mobile generators are on standby hire as system support for summer and winter readiness to mitigate the risk of network failures associated with high seasonal loads, as well as in the event of an emergency or breakdown. These portable low voltage generators are allocated as available for immediate deployment from the vendor's depots allowing expedited delivery on Ausgrid's request.
- LV Planning (minor works)
    - The key objectives of low voltage planning are to:
      - make provision of supply to meet new and organic load growth
      - maintain an optimum quality and reliability of supply for customers
      - make provision for safe operation and maintenance of the LV network, including LV paralleling facilities
      - design to construct the low voltage network using available ratings of the assets and LV paralleling facilities
      - manage the assets to optimise their value
- Customer support
  - Includes providing facilities and resources to respond to all general and technical enquiries, providing resources to liaise in person with customers and respond to enquiries in the field.
- Installation Inspections
  - Includes the inspection of installations following a fire, shock or fatality, audit inspections and reinspections following a defect notice.
- Minor Network Repairs
  - Includes providing on-call and after hours resources to respond to emergencies where costs are not or cannot be recovered from a third party (e.g. vandal damage or mains down), substation fuse replacement, network switching, attending sites as requested by police and fire brigade.
- Administration
  - Includes resources to provide a 'front counter' to allow interaction with customers and contractors, staff support, staff timesheet entry, processing paperwork from electrical contractors and ASP's, arranging staff mandatory training, arranging daily runs for installation inspections, processing inspection defects, process customer complaints, ordering tools and equipment, processing design projects.

Requirement for activities

Ausgrid is committed to ensuring the safe operation of its network and gives priority to safety issues, including workplace and public safety, over all other aspects of network management. The safety of customer's installations is equally important to their wellbeing and the ongoing integrity of the network.

Ausgrid's network planning balances the need to meet applicable legislative and regulatory requirements with our wider organisational objectives and business responsibilities, including meeting customer expectations of a reliable and safe supply of electricity, managing safety, both around the network and in customer's installation, environmental and security risks associated with our network infrastructure, and managing the financial performance of the business.

To deliver these objectives, Ausgrid's Customer Operations focuses on two key areas. These are:

1. Maintaining compliant infrastructure – Achieving this objective involves management of safety, environmental and infrastructure security risk in relation to Ausgrid's network and safety of customer's installations. The various environmental, safety and asset security obligations applicable to Ausgrid's network, and to the services Ausgrid provides as an electricity distributor, have been taken into account in developing Ausgrid's network management strategies particularly chapters on network safety and reliability and customer installation safety plan. These include obligations under regulatory instruments including the Electricity Supply (Safety and Network Management) Regulation 2008.

2. Network performance – Overall network performance is impacted by the performance of individual assets, the number of new customer connections required, and the extent of any imbalance between demand for electricity and supply. The performance requirements for the network are determined by license regulations, thus Ausgrid must ensure appropriate internal and external visibility, communications and liaison during outage and emergency events, and accurate reliability data is available for internal and external reliability reporting.

In meeting these two objectives, Ausgrid targets its investment expenditure to ensure that network performance and compliance outcomes are achieved in a manner that is efficient and prudent, and in accordance with this Plan and all regulatory and other obligations applicable to Ausgrid as an electricity distributor. Ausgrid's network planning processes and asset management strategies reflect and support these objectives.

Ausgrid's emergency service section has an active role in supporting the Network safety and reliability chapter by responding to network incidents and emergencies in compliance with the Incident Management System. Ausgrid's emergency service section also supports the Customer Installation Safety plan by investigating and reporting on electricity shock incidents to identify problems with assets, equipment and electrical installation work.

Operational constraints

The organisation faces operational constraints in delivery of services and Customer Operations will strive to provide a level of service equal to that in previous years. The requirements for the services that relate to customer's installations are driven by economic activity, while the emergency services are unpredictable. During the reporting period of 2012-13, among other things, Customer Operations:

- Completed approximately 36,000 customer installation inspections, and
- Processed approximately 3,600 service applications. These particular applications are of a complexity that requires a low level of LV Planning and assessment.
- Attended 93,229 emergency calls for assistance.

3. Section 1: Current regulatory period outcomes

During the current regulatory period, Ausgrid is expected to spend $152.46 million on Customer Operations opex to deliver its objectives. The purpose of this section is to identify the outcomes of opex in the current regulatory period and the reasons for variation to forecasts. Examination of previous expenditure can provide critical insights on the level of forecast opex, and the veracity of previous forecasting approaches.

3.1 Circumstances during the current regulatory period

The 2009-14 period witnessed delivery of a significant capital program to the Ausgrid network resulting in a larger portion of the forecast opex work being resolved with more significant capital projects. In the previous period much of the distribution work completed related more to maintaining the assets rather than augmenting or was affected by a depressed economic market resulting in a lower demand for customer connections. The current regulatory period also delivered unforseen works associated with the Australian Federal Government's economic stimulus package in the areas of spot growth to the network from school developments under the Education Revolution program and the NSW Government's solar bonus scheme. These unforseen changes coupled with the significant capital program in the period required a shift of focus from the previous maintain strategy to new construction.

3.2 Opex outcomes during the current regulatory period

During the period, Ausgrid incurred $152.461 million of opex in relation to Customer Operations as shown in the tables below:

Table 2

($ million nominal)	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Operating Expenditure	25.070	30.844	34.694	30.314	31.540	152.461
Allowance	35.653	37.475	39.702	41.487	42.828	197.147
Variance to Allowance	-10.583	-6.631	-5.008	-11.173	-11.288	-44.685

This Customer Operations expenditure can be further broken down into the following cost categories:

Table 3

($ million nominal)	2009-10	2010-11	2011-12	2012-13	2013-14 Forecast	Total
Labour	20.305	25.842	28.606	26.230	27.302	**128.285**
Materials	0.464	0.512	0.706	0.463	0.480	**2.625**
Contracted Services	0.481	1.031	0.995	0.607	0.631	**3.745**
Labour Hire	0.300	0.484	0.420	0.434	0.452	**2.090**
Other	3.520	2.975	3.967	2.580	2.675	**15.717**
Total	**25.070**	**30.844**	**34.694**	**30.314**	**31.540**	**152.461**

The above expenditure is representative of the expenses of delivering non capitalised components of work associated with Customer Operations.

3.3 Variations to allowance

During the current regulatory period the opex allowance for this category is estimated to be underspent by $44.685 million. The main driver for this variance was the large capital program of works that was undertaken during the current regulatory period. A large percentage of overspend from the Customer Operations related capital works programs in the current regulatory period was accounted for by the low voltage capacity associated projects. This increased capital expenditure on the low voltage network has strengthened the reliability and robustness of the low voltage network and would have impacted upon the predicted opex expenditure for the current regulatory period. The changes introduced by NSW Government's introduction of Networks NSW in 2012-13 also contributed to the variation by driving down costs to hold future price increases at or below CPI. Overall, the allowance was underspent by 22.7 per cent.

Section 5 of our proposal provides further information on how we have addressed these issues in developing our proposal for the next five years.

4. Section 2: Next five years Customer Operations strategy

Our focus for the next five years is to continue to design and construct the electricity network so that it can be maintained and operated safely while delivering an adequate, reliable and cost effective electricity supply of appropriate quality. We will adhere to relevant legislation, standards and codes of practice to maintain a safe and reliable distribution network environment including customer's installations connected to our network and maintain quality of supply and customer satisfaction.

The purpose of this section is to identify the key circumstances driving Ausgrid's Customer Operations opex in the next five years. The forecast for the period is based on the opex from the current regulatory period and is used to set the base year less the downward change from removing an allocation for Ancillary Network Services:

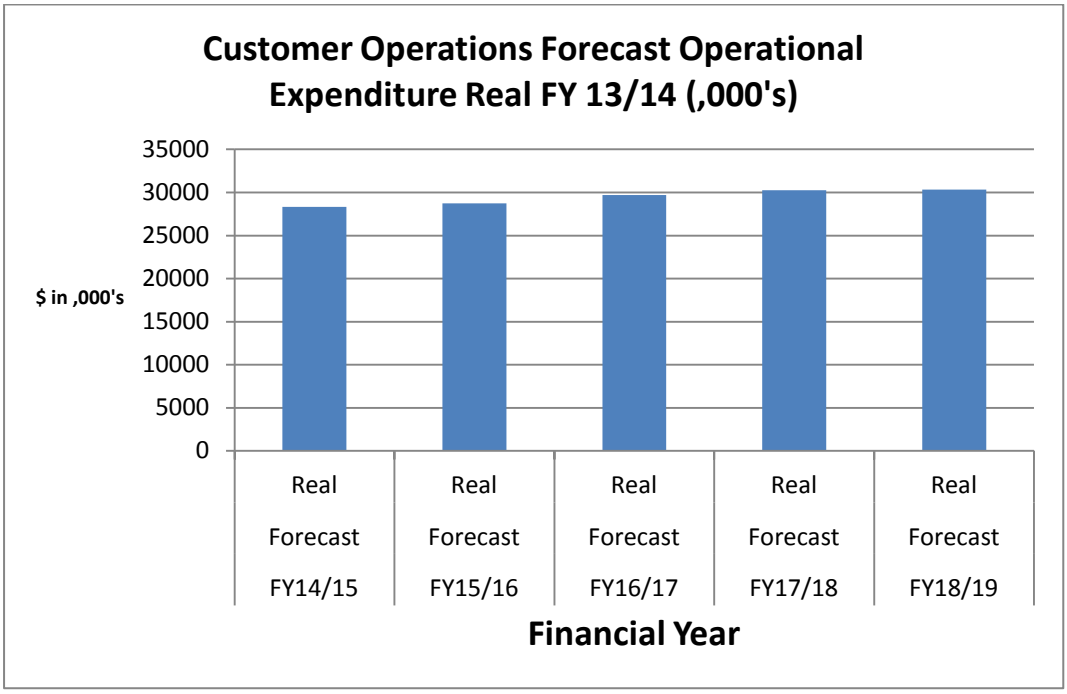

Figure 1

A key reason for this trend is that we have invested in capital programs in the current regulatory period providing a robust low voltage network that we forecast will require this level of opex expenditure going forward. As noted previously the opex is lower than otherwise due to the capex program over the current regulatory period. This ongoing investment in the low voltage network will require the opex in this category for maintenance of the regulatory and licensing conditions of supply and meeting customer expectations.

The focus of our opex strategy is to maintain compliance, reliability and continue to support network activities. At the same time we have sought to minimise price pressures on our customers to the full extent possible by prioritising prudent investment.

The historical trend of spending in relation to the allowance is expected is to be less steep into the foreseeable future based on our current understanding of forecast work load and the fact that the functions provided by this group are essential to the ongoing responsibility for public safety and achieving the Licence conditions in relation to reliability.

4.1 Key circumstances during next five years

During the next five years it is expected that it will be business as usual and there are no foreseen drivers for changes to statutory obligations and or initiatives.

The resulting impact of the change in activities being classed as Ancillary Network Services will see a reduction in the expenditure required by Customer Operations producing a downward change in the opex required for Customer Operations in the next five years as supporting costs are allocated to Ancillary Network Services. This Ancillary Network Service work will be customer funded in the in the next five years. During the current regulatory period, some customer disconnection and reconnection functions and the provision of customer's installation reinspections following a defect has resulted in a reduction of $4.073 million going forward. This is shown in the following table.

Table 4

($ million real)	2014-15	2015-16	2016-17	2017-18	2018-19
Customer Operations Base Forecast	32.308	32.760	33.804	34.427	34.588
Changes to Alternate Services	-3.975	-4.030	-4.101	-4.175	-4.254
Forecast after Changes	28.333	28.730	29.703	30.252	30.334
($ million nominal)	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Customer Operations Base Forecast	33.100	34.287	36.252	37.844	38.972
Changes to Alternate Services	-4.073	-4.217	-4.398	-4.589	-4.793
Forecast after Changes	29.027	30.070	31.854	33.255	34.179

4.2 Key operational drivers and variables

As in previous years, Customer Operations activities for the next five years will include the following, together with allied tasks:

- Customer Support
- LV Planning
- Minor Network Repairs
- Installation Inspections
- Administration

The drivers for these activities are predominantly reactive and based on historic data volumes are forecast to increase each year.

4.3 Operational strategies

Due to the reactive nature of the Customer Operations operational program of works, there are no planned strategic programs from an operational perspective. Based on history, maintaining the current staffing levels to adequately sustain customer support and low voltage planning is prudent.

4.4 Relationship with capex program

There are no foreseeable capital investments that will influence the opex activities for Customer Operations. Generally the opex expenditure is reactive by nature and driven by external economic activities and influences.

5 Section 3: Forecast method

We have relied on a base year/historical average cost for the purpose of our approach in forecasting opex for the next five years. The overall model also takes into account change factors associated with Ancillary Network Services.

The purpose of this section is to provide an overview of the process we have used to derive the total opex forecast for Customer Operations. In doing so, we have taken into account the business as usual operations carried forward from the current regulatory period and the circumstances in the next five years as described in Section 2.

5.1 General approach

Ausgrid has developed a separate plan for Customer Operations activities. This plan has largely relied on high level models rather than detailed bottom up forecasting. Our forecasting methods across the plan are based on robust assumptions.

A summary of our general method is set out below, with further information provided in supporting information that sets out the model in more detail.

Model approach

Ausgrid's Customer Operations opex forecast is generally based on business as usual. That is, the financial modelling was based on underlying business as usual with factored escalation of labour from expected wage increase and other categories on a CPI basis. The overall model also includes a downward change factor from the removal of Ancillary Network Services supported by Customer Operations.

Key assumptions

Our forecast methods are based on consistent and robust assumptions of the future. The key assumptions include:

- Cost escalation factors
    - Escalation of labour on expected wage increase
    - Escalation factor of CPI on other categories
    - Ancillary Network Services are fully customer funded

6 Section 4: Forecast outcomes

We have forecast $167.887 million of opex for Customer Operations

The purpose of this section is to provide a summary of the total opex proposed.

6.1 Summary of Opex

The following table shows the forecast opex for Customer Operations broken into the following cost categories.

Table 5

($'000 Real 2013/14)	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Labour	27,642.3	28,074.0	28,654.3	29,243.2	29,839.5	**143,453.3**
Materials	480.4	480.4	480.4	480.4	480.4	**2,402.0**
Contracted Services	634.7	641.4	652.1	663.5	675.5	**3,267.2**
Labour Hire	454.1	458.9	466.6	474.8	483.4	**2,337.8**
Other	3,096.7	3,105.2	3,550.2	3,564.9	3,109.3	**16,426.3**
Total	**32,308.2**	**32,760.0**	**33,803.6**	**34,426.8**	**34,588.1**	**167,886.6**

The graph and table below show comparison from current regulatory period to the next five years for Customer Operations. The proposed opex is on average 1.12 per cent lower than the current regulatory period.

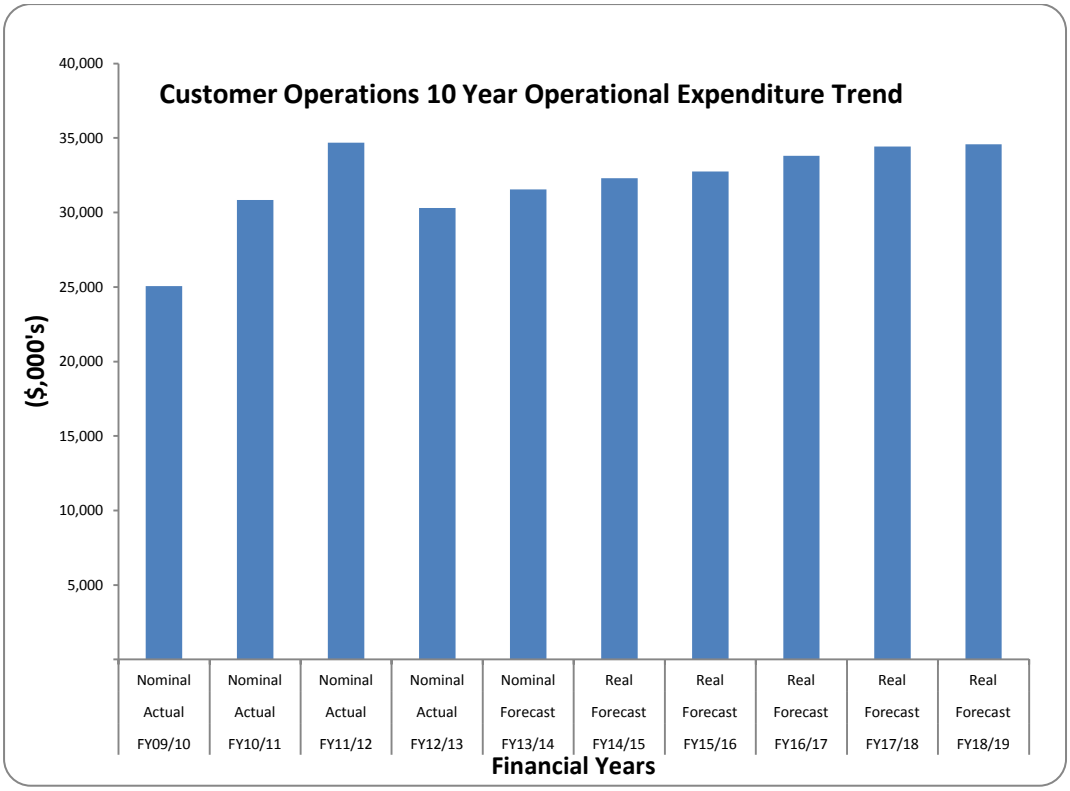
Customer Operations 10 Year Operational Expenditure Trend
($,000's)
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
Nominal Actual FY09/10
Nominal Actual FY10/11
Nominal Actual FY11/12
Nominal Actual FY12/13
Nominal Forecast FY13/14
Real Forecast FY14/15
Real Forecast FY15/16
Real Forecast FY16/17
Real Forecast FY17/18
Real Forecast FY18/19
Financial Years

Figure 2

7 Section 5:High level review

Our forecast opex reflects the efficient costs that we would require to deliver the outcomes we are required to deliver by the National Electricity Rules. It also reasonably reflects the prudent costs that a prudent operator would require and a realistic expectation of the forecast and cost inputs required to achieve these outcomes.

The purpose of this section is to demonstrate that our proposed opex meets the opex objectives and criteria, with regard to the opex factors in the Rules.

7.1 Meeting the opex objectives

Our forecast opex of $167.887 million is required to achieve the following objectives:

- Comply with all applicable regulatory obligations or requirements associated with the provision of standard control services.
- Inspect new and upgraded customer installations to ensure customer's premises connected to the network are safe and do not decrease the integrity of the network.
- Emergency response to installation and network safety issues including but not limited to electric shocks received by the public, high voltage injection into the low voltage network and fire related issues.
- Maintain the current staffing levels so that Customer Operations continues to ensure safe installations are connected to the network, adequate distribution network planning and timely response to network and customer's installation incidents
- Planning of the LV distribution network for organic load growth, asset replacement, quality and reliability of supply and management of the LV network operations.
- Deliver general customer service in relation to network management and quality of supply concerns.
- This forecast also represents expenditure that is properly allocated to standard control services in accordance with the principles and policies set out in Ausgrid's cost allocation method approved by the AER.

7.2 Meeting opex criteria

The Rules sets out the criteria that the AER must be satisfied before it can accept our proposed opex forecast. These criteria are that the proposed forecast opex must reasonably reflect the efficient cost of achieving the opex objectives, the prudent cost that a prudent operator would require to achieve the opex objectives and a realistic expectation of the demand forecast and cost inputs required to achieve the opex objectives.

The opex allowance for Customer Operations during the current regulatory period was underspent by $44.685 million or 22.7 per cent. This was generally a result of the significant capital program delivery which alleviated the need to only maintain the distribution network as new construction rectified many of the constraints and changes introduced by NSW Government's introduction of Networks NSW in 2012-13. The low economic activity also impacted customer connection activity. Going forward the forecast spend is expected to be business as usual and is based on the actual results which are under the current regulatory period allowance.

The Customer Operations forecast trend for opex over the current regulatory period and next five year period is increasing. For the 10 year period since 2009 to 2019 the overall average is 3.27 per cent. The observable jumps in 2011-12 and 2012-13 are a result of increased activity in Service disconnects/reconnects, minor network repairs and from the NSW Government solar bonus scheme that drove an increase in customer's installation inspections and customer support.