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CITY OF CAPE TOWN
ELECTRICITY SERVICES DEPARTMENT
(CCTES)

BUSINESS PLAN REVIEW
2015/16

A plan submitted in fulfilment of good business practice

City of Cape Town
Utility Services Directorate

Approved by:

27 JAN 2015

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13 FEB 2015

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CITY OF CAPE TOWN UTILITY SERVICES

ABSTRACT

CITY OF CAPE TOWN ELECTRICITY SERVICES DEPARTMENT (CCTES)
BUSINESS PLAN

The business plan should be read in the following context:

- A Strategic Management Plan (SMP) is developed and reviewed annually to ensure implementation of the business plan and as such does not form part of the plan.
- Operational strategies are limited in terms of inclusion in the plan. These strategies are being developed and the impact on the budget determined. The business plan will be updated with the result.
- The Integrated Development Plan (IDP) of the City of Cape Town is updated annually and might have an impact on the Plan, as this business plan is aligned to such.

This is a review of the approved 2012/13-2016/2017 business plan that aligns with the 5 year IDP cycle.

Executive Overview

THE LEGAL FRAMEWORK

The Constitution of South Africa Act 108 of 1996

The Constitution was approved by the Constitutional Court on 4 December 1996 and took effect on 4 February 1997. The Constitution is the supreme law of the land under which all laws are framed and under which the operation of municipalities is governed. Municipal powers and functions are dealt with in Section 156 and Schedules 4B and 5B of the Constitution. Electricity reticulation is a Schedule 4B function and the provision of street light is a Schedule 5B function.

Municipal legislation

There is a series of municipal legislation which establishes the legislative framework for local government to exercise its Constitutional powers and functions. These include the Municipal Demarcation Act 27 of 1998, the Municipal Structures Act 117 of 1998, the Municipal Systems Act 32 of 2000, the Municipal Financial Management Act 56 of 2003, the Municipal Fiscal Powers and Functions Act 12 of 2007. Together, these regulate municipal internal arrangements, systems and financial matters and provide for a service authority – service provider arrangement provided through a service delivery agreement.

Legislation specific to electricity provision

The Electricity Regulation Act 4 of 2006 establishes the National Energy Regulator of South Africa (NERSA) and together with the Electricity Regulation Amendment Act 28 of 2007 (Electricity Regulation Second Amendment Bill was published for comment in Notice 905 of 2011) sets the framework under which electricity service providers are regulated in the provision of an electricity service to electricity end users, having regard to good governance, efficiency, effectiveness and long-term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic. NERSA exercises its authority through electricity distribution licences which stipulate service standards in terms of NRS 047, Quality of Service, and NRS 048, Quality of Supply,

The Electrical Installation Regulations of 2009 and the Electrical Machinery Regulations of 1988, framed under the Occupational Health & Safety Act 85 of 1993, govern respectively the safe use of electricity by users in electrical installations and the environment in which electrical machinery operates.

Municipal By-law

Municipalities, in terms of the provisions set out in the Municipal Systems Act, can pass by-laws for promulgation by the Provincial Legislatures. The City of Cape Town passed the City of Cape Town Electricity Supply By-law of 2010 which was promulgated by the Western Cape Provincial Legislature on 16 April 2010. The By-law regulates the relationship with electricity consumers as well as protects and safeguards the integrity of the electricity network infrastructure to ensure a secure supply of electricity. The By-law is only applicable in the Cape Town area of electricity supply (see below).

ELECTRICITY DISTRIBUTION SERVICES ACROSS THE METRO

The City of Cape Town is the Service Authority for the entire Metro. There are three service providers within the metro although there are no formal service delivery agreements with the service authority. The service providers are the City of Cape Town Electricity Services Department (CCTES), ESKOM and AECI, each of which holds an electricity distribution licence for a licenced area of electrical supply issued by NERSA. The licenced areas of electrical supply are shown in Figure 1. In the case of CCTES it is the same legal entity as the City even though it is operated as a financially ring-fenced department within the City. The AECI electricity distribution licence is being transferred piecewise to CCTES as the area is developed. Although there is no formal service delivery agreement with Eskom, an agreement for the provision of Free Basic Electricity (FBE) is in place. It is anticipated that the Electricity Regulation Second Amendment Bill will address the putting in place of service delivery agreements.

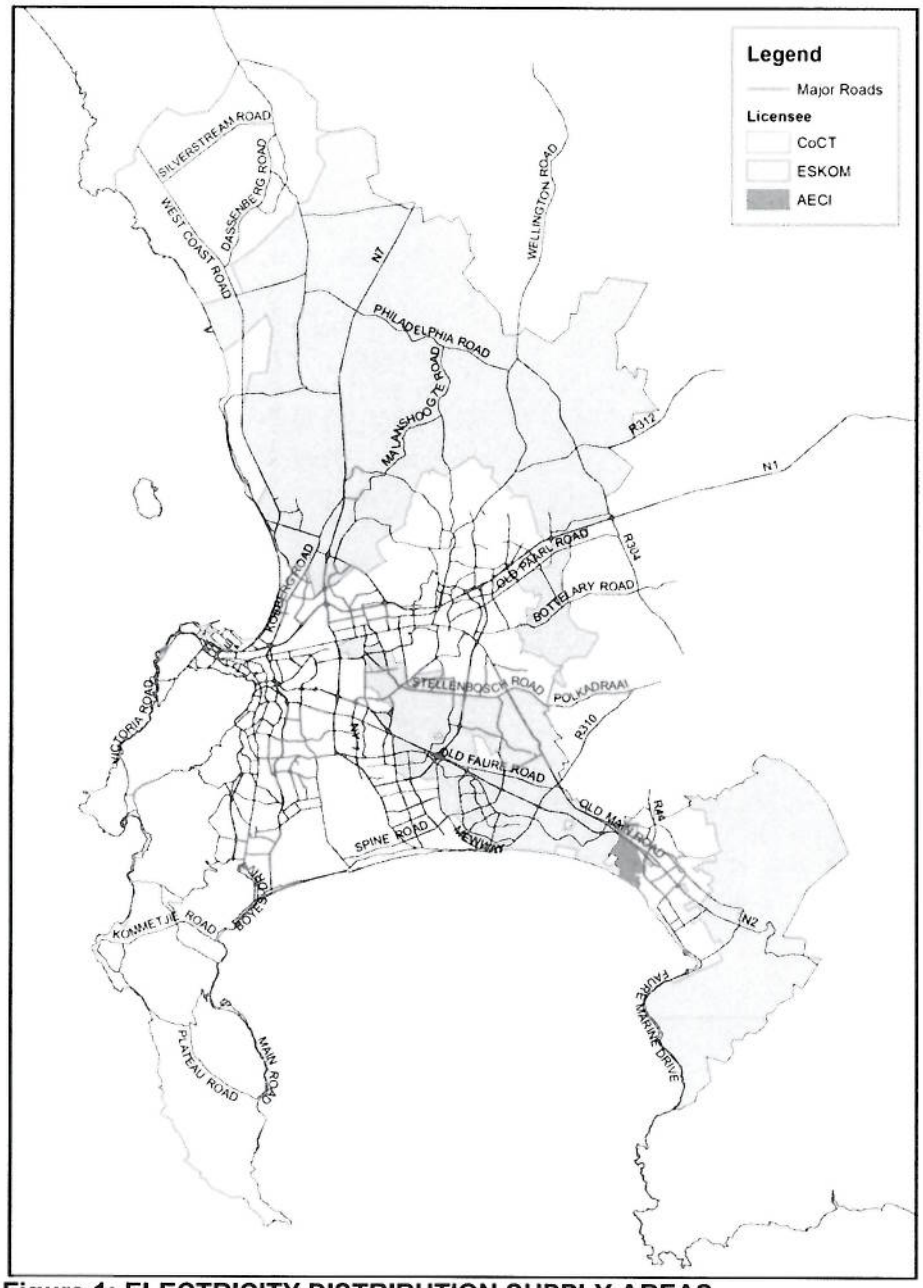


Figure 1: ELECTRICITY DISTRIBUTION SUPPLY AREAS

INDUSTRY CHALLENGES

The Electricity Distribution Industry (EDI) faces a number of immediate and medium term threats which have impact on the CCTES. These are:

- Increasing tariffs above CPIX and customer's ability to pay.
- Electricity bulk supply constraints (resulting in lower reserve margin and possibly load shedding).
- Need for investment into infrastructure (in terms of new demand and refurbishment).
- Skills shortage.
- Challenges associated with carbon emissions, climate change, renewable energy and new technologies.
- Increase in vandalism of electricity infrastructure involving copper theft and other metals.
- Increase in theft of electricity.

These pose real risks to sustainable service delivery in the medium term.

temporary bulk supply from Eskom was only taken in 1965, and converted to a 20 year supply in 1971 marking the City's increasing reliance on Eskom for bulk supply of electricity.

The year 2000 saw the creation of the Unicity after almost a decade of local government restructuring. The consolidation of the CCTES in its current form from five electricity departments occurred in 2005, after a period of interim arrangements.

Since the mid-1990s the electricity distribution industry was the subject of a national restructuring that was aimed at establishing regional electricity distributors (REDs). The City of Cape Town Electricity Services Department was chosen as the pilot project of the national restructuring, and in July 2005 the first regional electricity distributor (RED1) was established as the authorized service provider for the entire metro. For the period July 2005 to December 2006, both ESKOM and the CCTES provided services on behalf of RED1. RED1 was dissolved in October 2009 and the electricity distribution industry restructuring was abandoned in 2011.

Contents

GLOSSARY

13/14 Refers to the financial period 1July 2013 to 30 June 2014

AMI Advanced Metering Infrastructure

AMP Asset Management Plan

BPM Business Process Management

CBD Central Business District

CIP Comprehensive Infrastructure Plan

CoCT City of Cape Town / Council / Municipality

CRM Customer Relationship Management

CCTES City of Cape Town Electricity Service

DoE Department of Energy

EDI Electricity Distribution Industry

EDIR Electricity Distribution Industry Restructuring

EE Employment Equity

IET Industry Expert Team

ERP Enterprise Resource Planning

ESC Enterprise Solution Centre

GCAC Grid Code Advisory Committee

GT Gas Turbine

HDI Historically Disadvantaged Individual

HSE Health, Safety and Environment

HV High Voltage

IBT Inclining Block Tariff

IDP Integrated Development Plan

IRM Integrated Risk Management

ISU Integrated Solutions for Utilities

KPA Key performance areas

KPI Key performance indicators

LV Low Voltage

MTREF Medium Term Revenue and Expenditure Framework

MV Medium Voltage

MYPD Multi-Year Pricing Determination

NERSA National Energy Regulator of South Africa

NMD National Maximum Demand

NRS National Rationalised Specification

OMS Outage Management System

RED Regional Electricity Distributor

RTU Remote Terminal Unit

SAP Systems, Applications and Products

SCADA System Control and Data Acquisition

SDBIP Service Delivery and Budget Implementation Plan

SLA Service Level Agreement

SMP Strategic Management Plan

TREC Trans Mediterranean Renewable Energy Cooperation

ULM Utility Load Manager

Chapter 1 Network Performance

1.1 Quality of Supply

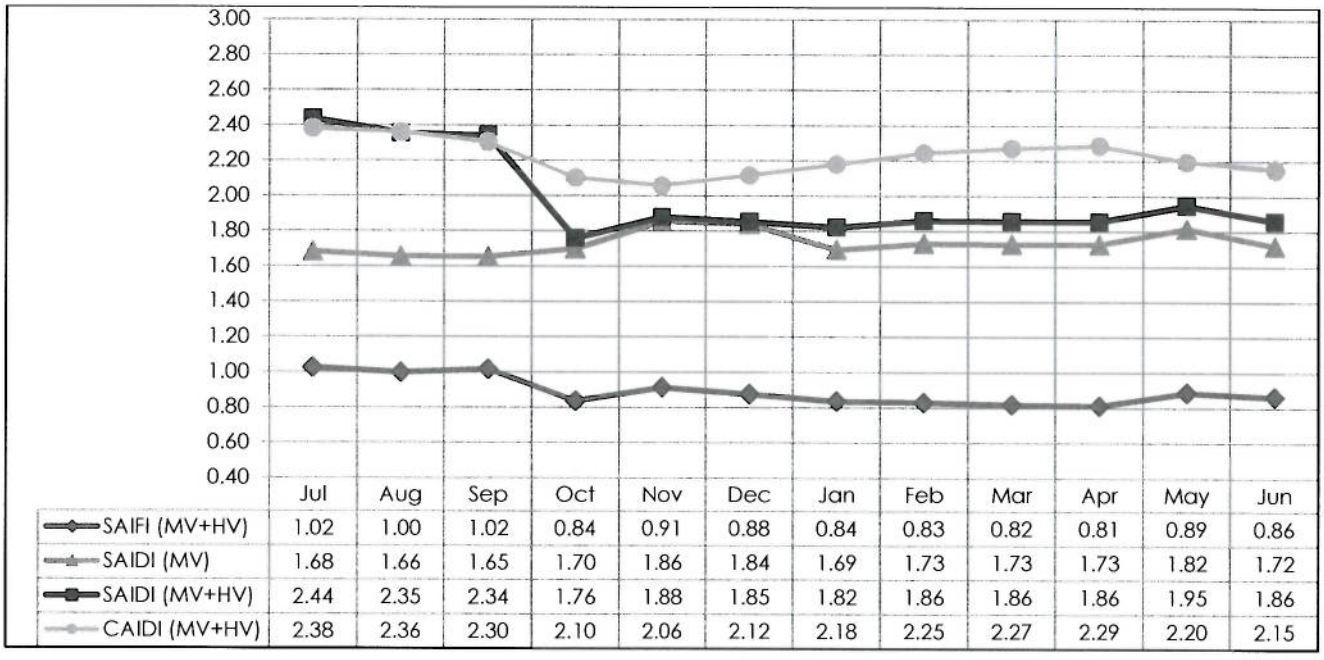
The CCTES core business is to provide reliable electricity supply to customers in the CCTES supply area. To ensure that the quality of electricity supply meets the required regulatory standards, CCTES monitors its performance in terms of NERSA guidelines as set out in the NRS 048 documents.

The measures for network reliability are given below together with the reliability targets:

- CAIDI — customer average interruption duration index, which is the average duration that a customer is without power when affected by an interruption to supply
- SAIFI — system average interruption frequency index, which represents the average number of interruptions that a customer experiences each year
- SAIDI — system average interruption duration index, which is the average duration that customers are without power each year

Measure	*Target (limits)*	*Units*
Outage time HV & MV (CAIDI)	*2.3*	*Hours*
Outage frequency HV & MV (SAIFI)	*1.3*	*Number*
Outage duration HV & MV (SAIDI)	*3*	*Hours*
Outage duration MV (SAIDI)	*2.2*	*Hours*

Interruption performance SAIDI, CAIDI and SAIFI Graph for the year ending June 2014



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
SAIFI (MV+HV)	1.02	1.00	1.02	0.84	0.91	0.88	0.84	0.83	0.82	0.81	0.89	0.86
SAIDI (MV)	1.68	1.66	1.65	1.70	1.86	1.84	1.69	1.73	1.73	1.73	1.82	1.72
SAIDI (MV+HV)	2.44	2.35	2.34	1.76	1.88	1.85	1.82	1.86	1.86	1.86	1.95	1.86
CAIDI (MV+HV)	2.38	2.36	2.30	2.10	2.06	2.12	2.18	2.25	2.27	2.29	2.20	2.15

The SAIDI reported is the MV (Medium Voltage) SAIDI and MV plus HV (High Voltage) SAIDI. The Bulk events such as load shedding by Eskom and other Bulk supply in-feed and major events are excluded in these figures above, as the CCTES has little or no control over these.

Voltage dip performance is another important indicator of quality of supply. Below is the HV (high voltage) dip performance table for 12 months. This shows our network performance when compared to the characteristic values as provided by the NRS 048-2:2006 for X1, X2, S, T, Z1 and Z2 type dips.

CCTES customers experience significantly less dips than the national average.

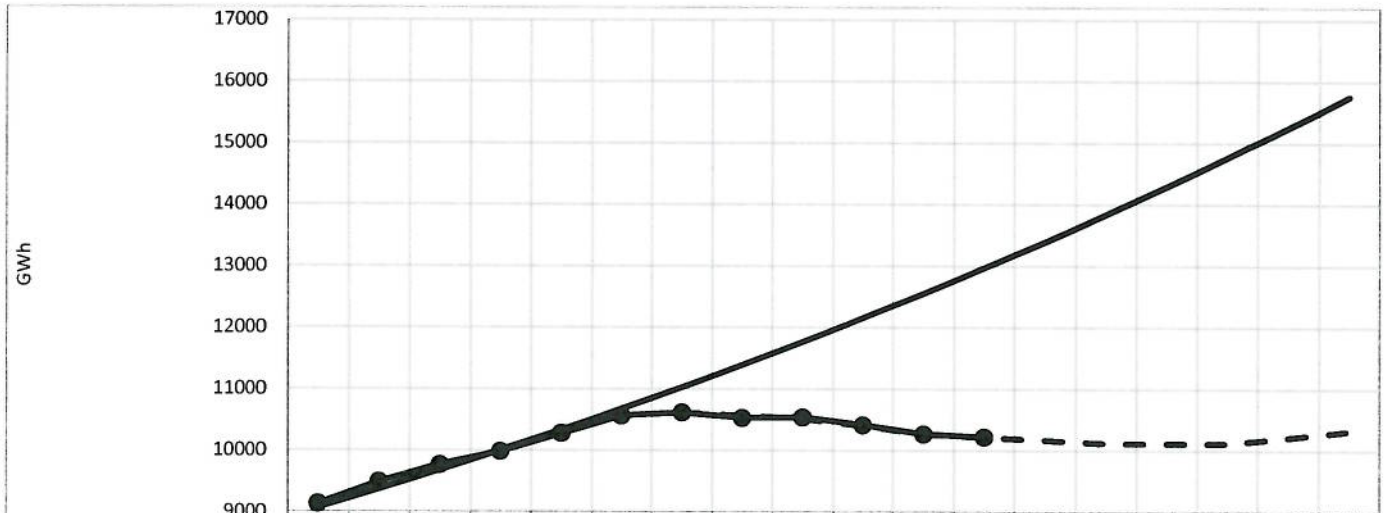
HV Dip performance table for the year ending June 2014

Category	*Duration (millisecond)*	*Depth*	*National Characteristic values*	*CoCT Characteristic values*
X1	*> 20 ms to 150 ms*	*30 % to 40 %*	*13*	*1*
X2	*> 20 ms to 150 ms*	*40 % to 60 %*	*10*	*3*
S	*> 150 ms to 600 ms*	*20 % to 60 %*	*7*	*0*
T	*> 20 ms to 600 ms*	*60 % to 100 %*	*5*	*1*
Z1	*> 600 ms to 3 s*	*15 % to 30 %*	*4*	*0*
Z2	*> 600 ms to 3 s*	*30 % to 100 %*	*1*	*0*

The table above defines the dip categories in terms of duration, depth and the characteristic values of voltage dips per annum for (50% of sites) per NRS 048-2. For example the above information should be read as follows: 50 % of the sites monitored nationwide experience 13 or less X1 dips.

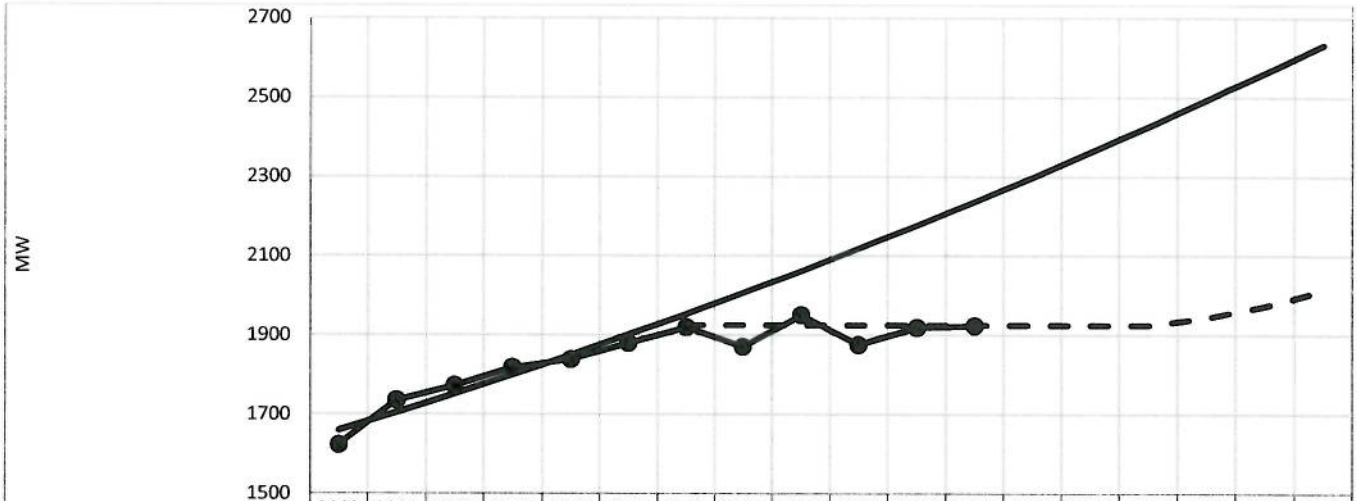
1.2. Electricity consumption and demand growth in the CCTES Supply Area

The Graph below indicates the effects of the energy efficiency programmes, electricity pricing and the recessionary effects in the CCTES area of supply. The old forecast on this graph indicates the energy consumption that the CoCT should be experiencing at a constant growth of 3.3%. The average energy growth experienced in the CCTES for the 6 years July 2000 to June 2006 was 3.3% p.a. Actual growth since 2008/09 was negative and the forecast, shown as dashed lines in the graph below, is expected to remain negative for the next two years.



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Old Forecast 3.3%	9072	9371	9681	10000	10330	10671	11023	11387	11763	12151	12552	12966	13394	13836	14292	14764	15251	15755
New Forecast							10615	10562	10509	10404	10269	10217	10166	10116	10116	10116	10217	10319
Actual	9134	9491	9768	9982	10278	10565	10616	10530	10541	10415	10270	10221						
Growth		3.9%	2.9%	2.2%	3.0%	2.8%	-0.5%	-0.5%	-0.5%	-1.0%	-1.3%	-0.5%	-0.5%	-0.5%	0.0%	0.0%	1.0%	1.0%

Similar trends to the energy graph above can be seen in the system demand graph. There was a sharp drop in demand growth in 2009/10 compared to the historic system demand growth of 2.7 %. Demand growth is more weather dependant than energy growth and has greater fluctuations. The demand growth is expected to fluctuate by 2 % around the dashed forecast line shown in the graph below.

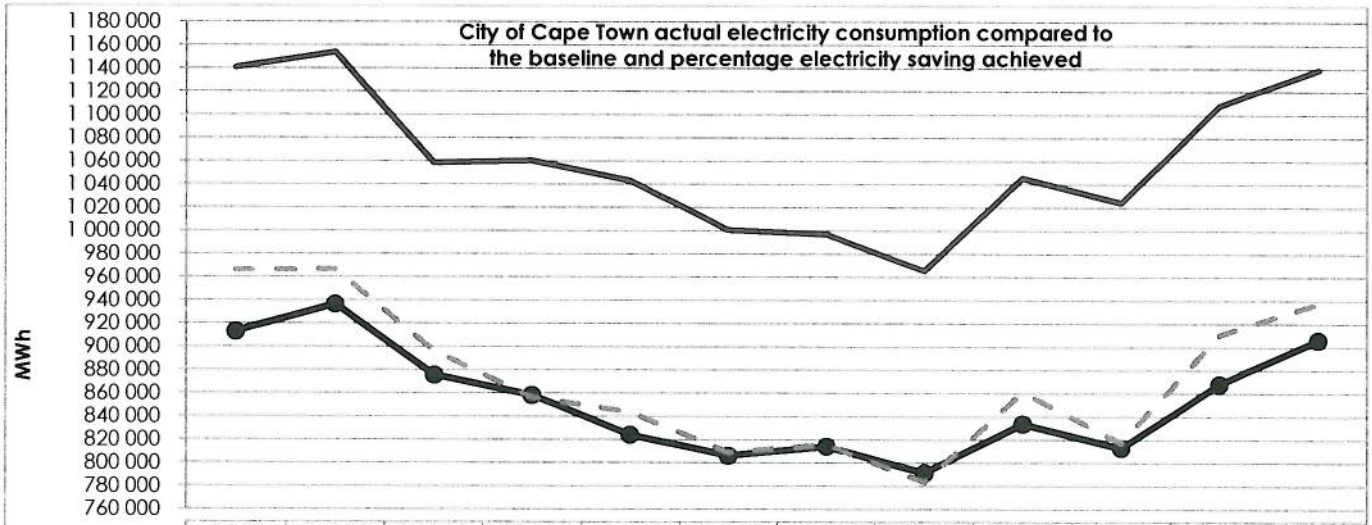


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Old Forecast (2.75%)	1660	1705	1752	1800	1850	1901	1953	2007	2062	2119	2177	2237	2298	2361	2426	2493	2562	2632
New Forecast							1925	1925	1925	1925	1925	1925	1925	1925	1925	1944	1973	2013
Actual Max Demand	1623	1736	1773	1818	1839	1880	1920	1871	1950	1876	1919	1924						
% growth	0.5%	6.9%	2.1%	2.5%	1.1%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.5%	2.0%

1.3 Electricity Demand and Supply

Electricity Savings

Since the call to save 10% in energy consumption, actual consumption compared to growth forecast has been reported graphically as shown below. Since 2008 the objectives were met with the "savings" exceeding 10% and are exceeding 20% since March 2014.



	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14
Actual	913 045	936 644	875 694	858 313	824 174	806 392	814 270	791 501	833 785	813 102	868 144	906 168
Baseline	1 140 5	1 153 8	1 058 6	1 060 4	1 043 0	1 000 8	997 035	965 624	1 045 7	1 024 5	1 108 1	1 138 9
2006/7	966 230	966 673	896 343	856 572	843 598	809 106	815 724	783 623	860 967	817 387	910 370	937 688
% Saving	19.9%	18.8%	17.3%	19.1%	21.0%	19.4%	18.3%	18.0%	20.3%	20.6%	21.7%	20.4%

Renewable Energy

In accordance with the City's draft Energy and Climate Change strategy, the Department aims to promote the use of renewable energy as follows:

- Market and sell Green Electricity being purchased by the City of Cape Town from the Darling Wind Farm. The Darling Wind Farm, a national demonstration project, is South Africa's first commercial wind farm, situated in Darling in the Western Cape. This four turbine (1.3MW each) wind farm is a partnership between the Central Energy Fund, the Development Bank of South Africa, the Danish Government, the private Darling Independent Power Producer and the City of Cape Town. The electricity is 'injected' onto the nearby Eskom electrical network and replaces electricity generated by Eskom. The turbines began generating in May 2008.
- Promote and facilitate the implementation of other renewable generation systems where practical
- Together with the Environmental Resource Management Directorate keep abreast of national and provincial developments regarding renewable energy including the development of feed-in tariffs and Carbon Credits and facilitate the incorporation thereof into City processes
- In the light of proposed Eskom price increases, investigate the practicality of entering into long term PPAs with IPPs to provide electricity at the same price the City purchases electricity from Eskom.
- Promote the finalization of national technical specifications for the connection of small scale renewable generation to utility electrical grids.

Demand Side Management / Energy Efficiency

In partnership with the Environmental Resource Management Department, the Department aims to:

- Establish and implement an Energy Efficiency (EE) programme.
- Promote Eskom's Energy program to the City's electricity consumers.
- Establish and maintain an on-line EE and DSM resource.

The Department completed pilot projects for smart prepayment meter and a Utility Load Management (ULM) to test and assess the appropriateness, uses and availability of technologies for smart meters and improve service delivery. The results will be used to inform a decision on whether to deploy these technologies for use in the business.

Load Shedding

The CCTES is ready to respond to a national declared emergency and activate load shedding in accordance with the national requirements and the published load shedding schedules. Load shedding in the event of a system emergency is required in order to prevent the power system from sliding into an unstable state which can lead to a national blackout with very serious consequences.

The City's load shedding practices and schedules have been aligned with the national standard NRS048 part 9. Load-shedding schedules are posted on the City of Cape Town official website under Services & Departments– Electricity – Load shedding (http://www.capetown.gov.za/EN/ELECTRICITY/Pages/LoadShedding.aspx). Difficulties that are outside our control do exist with these schedules. For example, some suburb boundaries are not defined on maps available to the general public such as the map-studio maps. In addition substation supply area boundaries do not coincide with map-studio suburb areas, but cut across various suburb areas, creating parts that are scheduled at different times. For these reasons, detailed maps are provided on the website, which should assist customers in identifying their load shedding times.

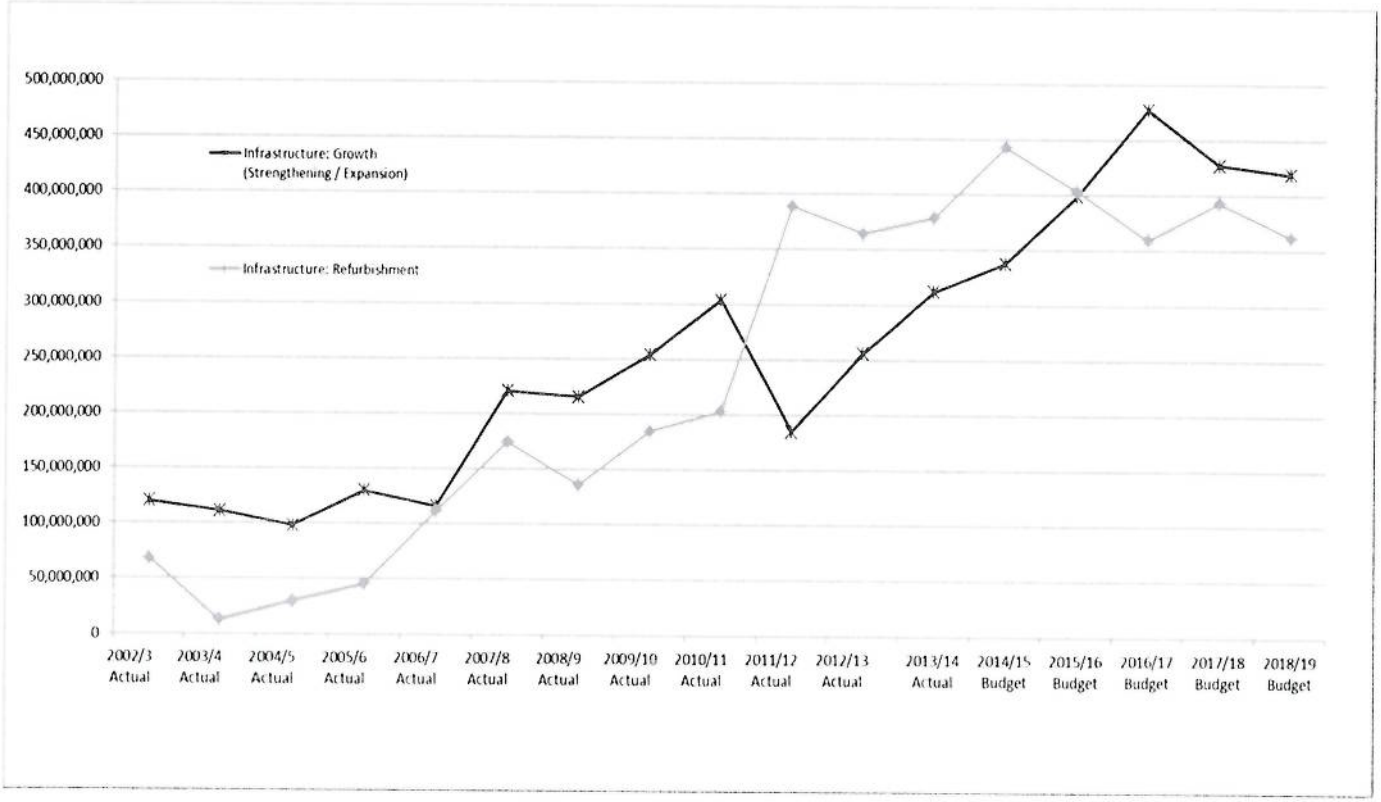
Chapter 2 Network Infrastructure

2.1 Network Infrastructure and Development

The CCTES electricity distribution network is categorized into HV, MV and LV networks. An 18-year HV development plan is maintained. There are currently no, MV and LV development plans, although a medium term (5-year) MV development plan will be developed as part of the Asset Management plan or Comprehensive Infrastructure Plan.

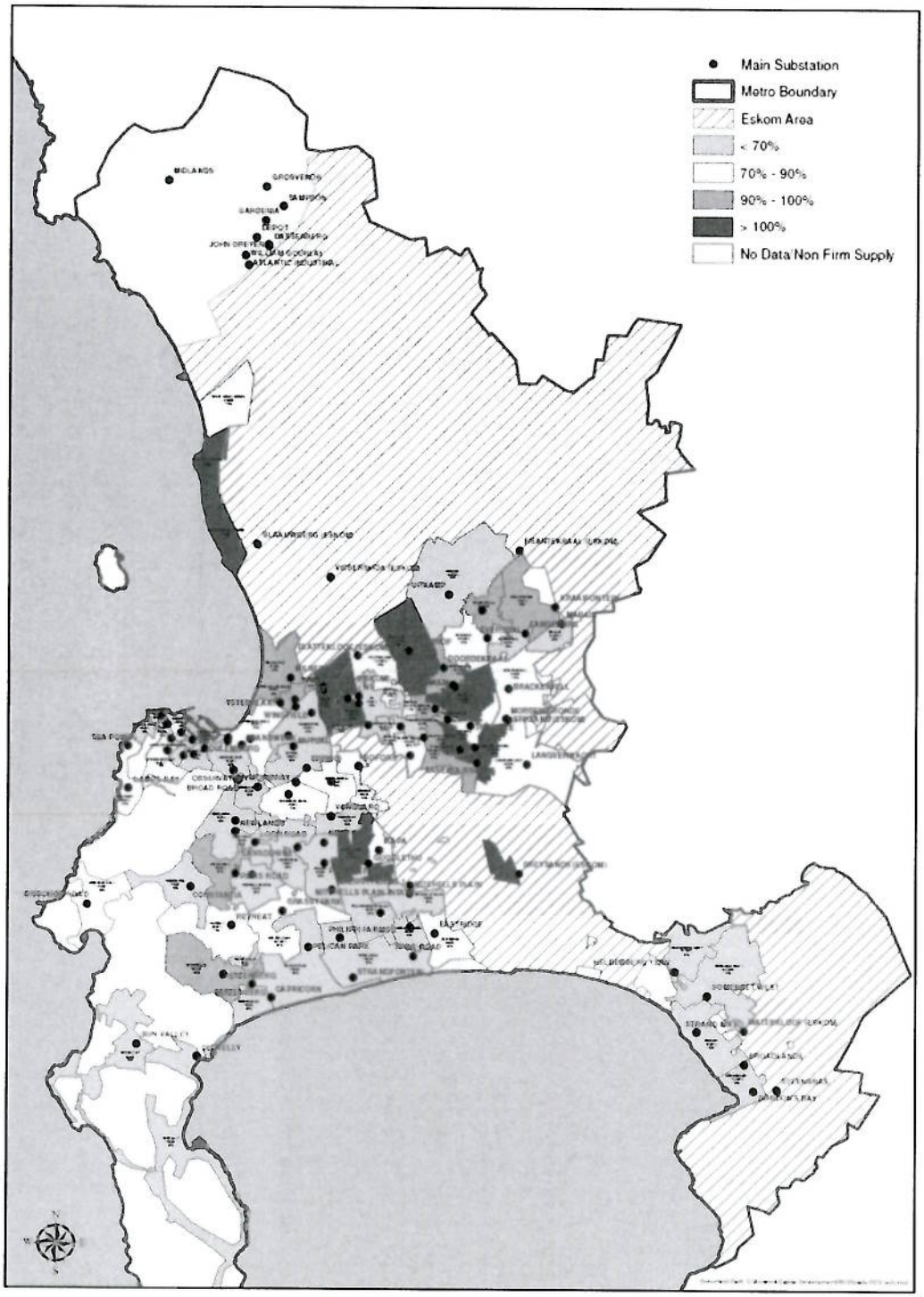
Within the geographical area of Cape Town a backlog exists in refurbishment of infrastructure. The backlog will continue to be financed through internally generated funds and external loans.

The current infrastructure within the geographical area of Cape Town needs to be refurbished and maintained to ensure that the condition of the current networks and infrastructure is improved to meet the business and social challenges in electrification in South Africa. Asset management plans need to be consolidated for implementation of programmes in the interim. This plan will feed into and support the operating and capital budgets. Expenses for refurbishment will be funded through internal working capital generation and borrowings.



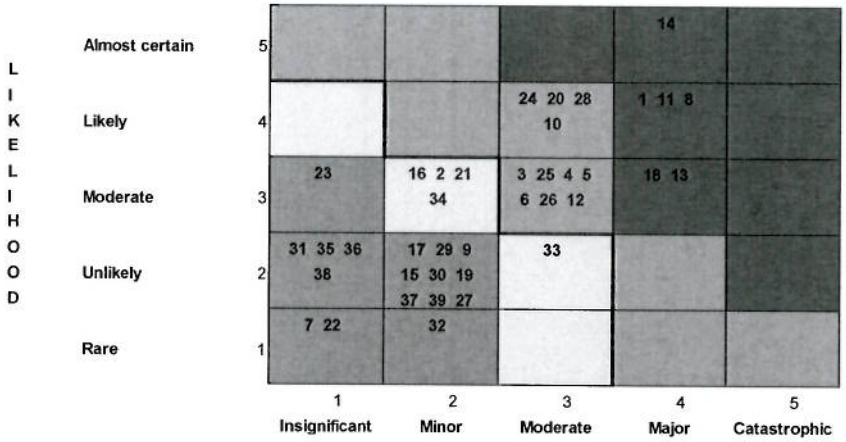
2.2 HV Capacity and Main Sub Station Loading

The loading relative to the design capacity of each main substation, both in the City's and in Eskom's area of supply is shown in the map below. Loading is one of the factors taken into account in prioritising capital projects.



2.3 High Voltage Distribution Network Infrastructure Plan

Capital projects are evaluated and graded on a risk matrix. The likelihood of having an impact and the severity of the impact on the ability to distribute power were evaluated and plotted on the graph below. The numbers on the graph refers to the projects as listed.



5 YEAR TRANSMISSION SYSTEM IMPLEMENTATION PLAN

NOTE: Projects should be implemented before the risk profile exceeds a moderate risk as indicated by the solid line

Key to Risk Assessment:

Extreme risk | High risk | Moderate risk | Low risk

14 Mitchells Plain Intake Integration
1 Athlone - Philippi: OHL Line Undergrounding
11 HV Switchgear Replacement
8 Grassy Park HV Rearrangement
18 MV Circuit Breaker Replacement
13 Main Substation MV Switchgear Replacement
24 Piers Road Upgrade
20 Oakdale Upgrade Phase 2
28 Stikland Main Substation
10 Gugulethu Upgrade
3 Bofors Upgrade
25 Plattekloof - N1 Reinforcement
4 Broad Road Phase 3
5 Durbanville Phase 2
6 Eversdal - Durbanville OH Line Upgrade
26 SANS Main Substation
12 Koeberg Road Switching Station Phase 2
33 Grosvenor Upgrade
16 Mowbray Main Substation
2 Atlantis Industrial Main Substation
21 Observatory Upgrade
34 Sarepta Main Substation
17 Muizenberg Ph3
29 Tamboerskloof Transformer Replacement

9 Grassy Park Upgrade
15 Montague Gardens MS Upgrade
30 Tygerberg Hospital Reinforcement
19 Newfields Transformer Replacement
37 Westcape Main Substation
39 Wingfield Main Substation
27 Stikland Hospital Switching Station
32 Sampson Upgrade
23 Philippi Farms Ph 1
31 Rondebosch Main Substation
35 Transwerke Main Substation
36 Culemborg Main Substation
38 Ysterplaat Main Substation
7 Firlands Main Substation Phase 1
22 Pelican Park Upgrade

2.4 Management of Legacy MV Switchgear

The City faces serious challenges in the management and maintenance of equipment on the medium voltage (MV) distribution system due mainly to ageing infrastructure. These challenges are put in stark relief by the increasingly rigorous international standards in distribution switchgear design and safety. This applies to all forms of MV switchgear on the system.

Legacy switchgear does not comply with current international safety standards (IEC 62271-200) and system fault levels exceed switchgear capability in many cases, posing a substantial risk to operating personnel and system reliability. This current focus is specifically on the indoor "Metal-clad" primary

switchgear but secondary and outdoor oil-insulated switchgear that is assessed to present a specific safety risk is also being replaced with modern gas insulated switchgear as required.. The replacement and refurbishment programmes for the Metal-clad switchgear in the distribution network will run for some years yet before all legacy switchgear has been addressed. Although there are more focused maintenance and replacement programmes, for the MV switchgear in main substations this switchgear was included in the replacement programme and replacement of the last of these switchboards will be completed in the current financial year. Before these programmes were initiated, approximately 6 300 switch panels were in service, the majority being obsolescent (25% more than 50 years old, 30% between 30 and 50 years old). Some 290 of these 6300 panels have been replaced in the last three financial years and a further 1200 have been refurbished to a suitable standard through switch-panel upgrades and retrofit with modern circuit breakers.

2.5 Electricity Enterprise Asset Management (EAM)

In 2006 NERSA conducted technical audits of major electricity distributors including the CCTES in which maintenance was highlighted as a major area of concern. Subsequent to this CCTES has embarked on a multi-year programme to implement enterprise asset management using the SAP platform and conforming to PAS55 standards (programme objectives and deliverables are given in Table 1). Through the systematization, standardization and centralization of functions asset management will form an integral part of day to day activities to create an efficient, predictable operational environment.

With the transfer of assets from the legacy systems to SAP, not enough time was spent on implementing a comprehensive asset management plan. The main focus was on financial systems which resulted in a lack of operational focus. Physical asset master data was extremely limited and of poor quality. This led to the need for a total rebuild of SAP EAM (SAP PM and related modules) and to collect and populate asset master data. This work is in progress, but will take some time yet before it is complete. Full operationalization will take place in the medium term.

As a result of the historic system deficiencies the organizational deficiencies and behaviours have been perpetuated. The operationalization will require fundamental changes to the way business is currently conducted and a significant effort in organizational realignment and change management will be required to achieve success in EAM. Organizational culture change will be one of the biggest challenges to smooth implementation.

As CCTES is leading the EAM initiative with the other infrastructure driven departments following, partnering with Enterprise Solution Centre (ESC), HR and other Directorates for a successful implementation of EAM is of corporate importance.

Table 1: Objectives and Deliverables of EAM

Objectives:

- Standardize master data
- Systematize & streamline maintenance business processes
- Up to date master data and maintenance records on maintenance significant assets.
- Build organizational capacity to centralize core system processes and functions.
- Elimination of wasteful or non-value adding practices
- Establish and foster an Enterprise Asset Management culture
- Invest in human capital to sustain the Enterprise Asset Management culture
- Move from unplanned/emergency work towards planned and scheduled work
- ERP system-supported EAM measures framework for continual improvement
- Zero-based budgeting
- ERP EAM system used and trusted by all
- Expand the SAP EAM footprint to all asset owners/operators
- Financial/operational asset integration (master data and process)

Deliverables:

- Cross-department integrated process for inception of assets and associated master data take on
- Establish core master data processes (low volume, complex, infrequent changes)
- Formal feedback process for correcting inaccurate master data
- Codification framework defining all significant maintenance personnel activities to be recorded & reflected in the system as a basis for capacity optimization and reduction of wasted time.
- On-line quick reference guide (knowledge base) for translating work scenarios to system actions.
- Blog for knowledge sharing and organizational EAM culture change
- Establishment and staffing of central asset management org structure
- Practical set of EAM metrics for routine management meetings at different organization levels to drive continual improvement
- Second generation mobile platform as simple field user interface

2.6 Distribution Grid Code Compliance

In 2012 CTES undertook a self-assessment of Distribution Grid Code compliance. The assessment was reviewed by the NERSA Grid Code Advisory Committee (GCAC) in October 2012. According to NERSA, "the responses given by Cape Town under this code were satisfactory and show that although on some of the clauses there can be improvements. the minimum requirements are met."

A number of exemptions were applied for and the GCAC recommended them for approval by NERSA. A few were referred to the Industry Expert Team (IET) for further interrogation. One was recommended for exemption by NERSA, while for others the IET recommended a revision of the specifications governing them. One of the exemptions was deemed unnecessary as the clause that prompted it requires interrogation at a policy level. The IET recommended that this be referred to the DoE for policy formulation. These decisions are set out in Table 2.

Table 2: GC Exemptions submitted to the GCAC for NERSA approval

NERSA Ref. No.	Code	GCAC Decision
1. 2012DCEX002	Metering code	Accepted for NERSA approval
2. 2012DCEX003	Metering code 4.2.1 & 4.3.1	Accepted for NERSA approval
3. 2012DCEX004	Metering code 4.3.2	Accepted for NERSA approval provided a. It is a temporary 5 year exemption b. Remedial of action plans be outlined and attached with the exemptions directly to NERSA before end of November 2017
4. 2012DCEX005	Metering code 4.5.4	Suggested that this be an amendment and not exemption (Action Secretariat & NERSA)
5. 2012DCEX006	Metering code 4.8.1	Accepted for NERSA approval with exemption period extended from 6 months to 1 year. Action completed December 2013
6. 2012DCEX007	Metering code 4.1.1	The GCAC suggested a revision of the clause. No need for Cape Town to apply for an exemption (Action Secretariat, IET & NERSA)
7. 2012DCEX008	Network Code 3.2(6)	Accepted for NERSA approval
8. 2012DCEX009	Network code 4(2)l	Accepted for NERSA approval
10. 2012DCEX011	Network Code Clause 6.4(3)	Proposed that Cape Town explain in detail this deviation from SANS, why and how has it deviated etc. Submission referred to the Industry Expert Team (IET) for more deliberation and interrogation.
11. 2012DCEX012	Network code 7.1	Accepted for NERSA approval
12. 2012DCEX013	Network Code Clause 7.2.1(4)	Agreed with the exemption for large investments but was unclear for smaller investments. Application referred to the IET, where City of Cape Town has to present their practices on smaller investments.
13. 2012DCEX014	Network code 7.2.1(6)	The GCAC agreed that in the absence of NERSA's process for determining either (a) the discount rate or (b) the customer interruption cost (CoUE), there is no need for exemption. NERSA to develop the framework for CoUE and communicate accordingly with the industry
14. 2012DCEX015	System Ops Code 5.2	Accepted for NERSA approval
15. 2012DCEX016	System Ops Code 6.3	Accepted for NERSA approval
16. 2012DCEX017	Tariff Code 6.0	Mr B. Magoro of the DoE raised that this is a policy issue and needs to be tackled at that level. No need for exemption.

Chapter 3 Operations

3.1 Access to Electricity Service

Access to electricity service is achieved through the demand driven capital programme funded through developer's contributions for non-subsidized housing. Subsidized housing is funded through the electrification plan. The expenditure and budget for Developers Contribution, Private Sector is given in the Table below:

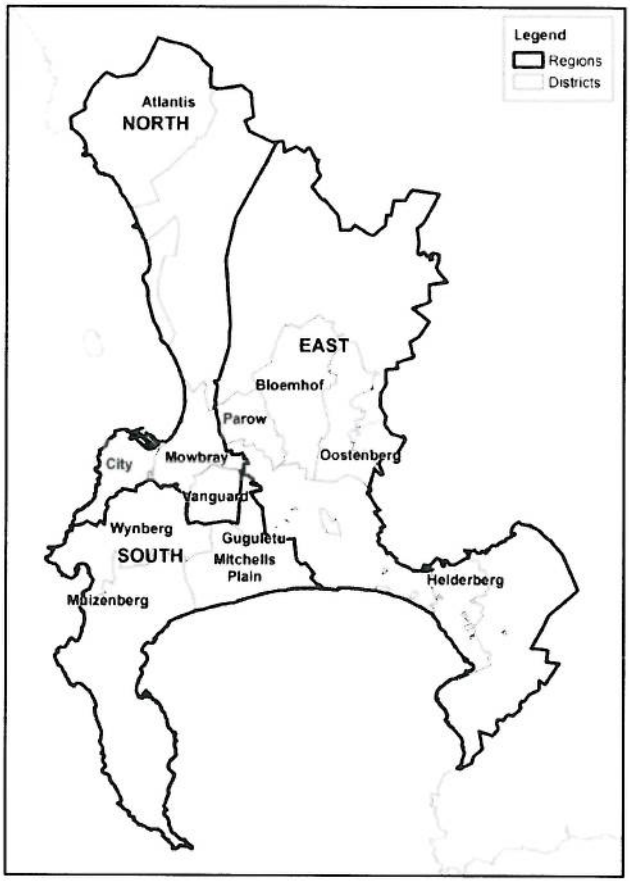
Developers Contributions & Private Sector - Actual and Budget

Year	2008/9 Rm	2009/10 Rm	2010/11 Rm	2011/12 Rm	2012/13 Rm	2013/14 Rm	2014/15 Rm	2015/16 Rm	2016/17 Rm	2017/18 Rm	2018/19 Rm
Budget	149.7	125.5	83.3	68.0	79.0	74.6	78.6	82.3	87.9	94.3	99.9
Actual	146.5	115.2	80.3	65.7	70.3	69.5	-	-	-	-	-

3.2 Electricity Distribution / Service Areas

The Cape Town Supply Area is divided into three Distribution or Service Areas based on the number of substations. Each of the three Distribution Areas South, North and East are serviced by four districts as shown below. Each district is responsible for the repairs, maintenance and safe operation of the Medium Voltage (11 kV), Low Voltage (nominal single phase voltage of 230V) and street lighting networks. In addition to the above work each district has a construction (new works) component that carries out domestic and small power user service connections (including the installation of the pre-payment electricity meters).

A building works program is in place and the renovation of depot facilities at Parow and Brackefell was completed during 2013. Renovations at Mitchells Plain, Atlantis, Vanguard and Helderberg depots are phased over the next two years and the relocation of the Atlantic Road, Muizenberg depot to White Road, Retreat is awaiting environmental approvals. With the ever expanding metropolis, service sites or satellite depots are planned for Hout Bay and Noordhoek in the next 3 to 5 years and the construction of a dedicated street lighting depot in Bothasig to service the northern Eskom areas of supply is planned for 2014/15. The relocation of City Depot at Hudson Street to a new facility at the old Beaufort House site in Bree Street, Cape Town has progressed to an advanced stage with construction to commence in 2014. This relocation will allow for the redevelopment the old quarry site.



3.3 Customer Services

This section is responsible for customer services including 24 x 7 Technical Operational Centre, revenue protection and customer prepayment vending services and is planned to be structured based on ISU functionality over the medium term.

The Electricity Services Technical Operations Centre (TOC) receives calls from customers on the City's centralised contact telephone number (0860 103 089) and generates works notifications which are electronically sent to the relevant Distribution Area for the First Line Response Teams to be dispatched to respond to the complaint. The City of Cape Town's Corporate Call Centre handles calls of a financial (back office) nature. The TOC operates 24 hours, 7 days a week. Besides being able to contact the TOC via the normal telephonic exchange, it is also contactable via the following communication channels:

- Tel: 0860 103 089
- SMS: 31220;
- Fax: 086 576 2740; and
- Email: power@capetown.gov.za

Electricity Department is implementing a fully integrated Outage Management System (OMS). ABB/Ventyx has been contracted to supply, install and commission the OMS by end November 2015. The system will provide benefits such as automated fault location, customer feedback, crew & workflow management as well as accurate reporting on SAIFI/CAIFI indices.

The City has approximate 445 000 electricity prepaid customers. The Online Prepaid Vending System (OVS) ensures that all these customers are able to purchase prepaid electricity via internet, cell-phone, ATM/AVM, Point-of Sale outlets and scratch cards. As part of the ongoing enhancements on the OVS an upgrade currently underway is the integration of the prepaid vending system and SAP for the meter-change process. This will consist of an automated process that updates SAP periodically once the prepaid vending system has been updated. This will ensure customer technical data is always accurate

and a seamless debt collection process.

The single prepaid vending system became fully operational during the second quarter of 2009. Since then several enhancements has been made to the system to improve performance for pre-payment customers, the most recent, a complete soft- and hardware upgrade in November 2013 to a webserver environment. The next upgrade consists of integrating the Vending system to SAP CRM which would eliminate the need for customer database in the Vending system. A major overall of the vending system will be required when STS (Standard Transfer Specification) introduces the 13 digit prepaid meter number.

The Revenue Protection Branch is responsible for the management the Department's key customers, being the large power user and time-of-use customer base. Special attention is given to these customers who provide a large percentage of the Department's revenue. The Branch also has a dedicated unit which detects and corrects cases of meter bypassing and tampering, which action is followed by recovery of revenue for electricity used and for which no payment has been received.

The Minimum Standards and Reporting Lines for the Quality of Service of Electricity Supply to customers were published as a standard document, namely the NRS 047 Part 1 and Part 2. These specifications cover a number of services including customer driven Complaints, Enquiries, Requests, Quotations and Forums. The standard response times and satisfaction indices for counter services, telephonic replies and written replies are stipulated in these documents.

3.4 Energy Supply

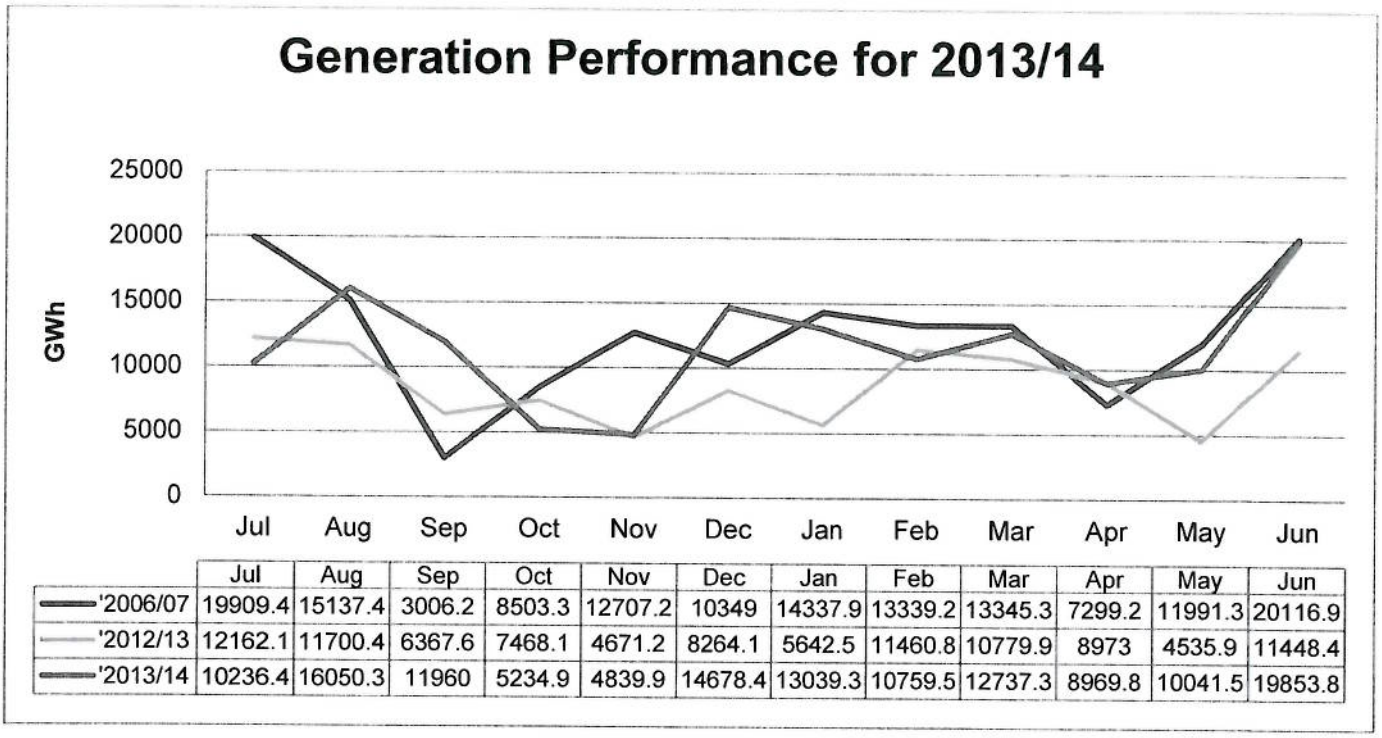
The branch of Electricity Supply consists of Network Control, SCADA Services, Generation and Green Energy. Network Control manages the operations of the network and the supply of energy to the end consumer. They also assist maintenance crews on planned and unplanned maintenance functions. SCADA Services provides the tools required by Network Control staff to perform their function.

The Newlands and Bloemhof Control Centres are to be consolidated into one new Control Centre to be located within the Bloemhof Electricity Complex. Thereafter; in terms of the Emergency Preparedness Plan, Electricity Supply will retain the existing Control Centre facility at Newlands as a back-up Control Centre.

Electricity is currently implementing a fully integrated Outage Management System. The system will provide customers much improved feedback on fault conditions, status reports and timeframes.

The current Supervisory Control and Data Acquisition / Distribution Management System (SCADA / DMS), installed in 2007, is to be upgraded in 2014 with revised hardware and the latest version of the system. Currently the system provides visibility and control of the HV and MV networks for the North, South and 60% of the East. Complete coverage of the East is expected by year end 2014.

Generation manages maintenance and operations of the City's generating facilities and dispatch these as required by Network Control. The City's power stations (Steenbras Hydro Pump Storage, Athlone Gas Turbine and Roggebaai Gas Turbine) play the important role in regulating the target maximum demand supply. The Steenbras pumped station is despatched regularly, particularly during the winter peak periods, while the Gas Turbines are utilised as a peak lopping power stations and assisting during the extreme winter peak period demand. Such strategy will be in place until Eskom Phillip Intake is upgraded. During 2013/2014 season the Gas Turbines were dispatched more and up to the breakeven utilisation that ensures the return in project investment were realised. Steenbras was operated optimally and yield an increase of 25% utility in 2013/14 fiscal year. The performance of the City's generating facilities is shown below.



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
'2006/07	19909.4	15137.4	3006.2	8503.3	12707.2	10349	14337.9	13339.2	13345.3	7299.2	11991.3	20116.9
'2012/13	12162.1	11700.4	6367.6	7468.1	4671.2	8264.1	5642.5	11460.8	10779.9	8973	4535.9	11448.4
'2013/14	10236.4	16050.3	11960	5234.9	4839.9	14678.4	13039.3	10759.5	12737.3	8969.8	10041.5	19853.8

Steenbras Hydro Pump Storage currently is undergoing the refurbishment of the main plant. This project commenced in 2013/14 with the generator rotor set replacement due to begin in 2015/16. The programme will see one the other generator unit replaced each year until all four generator rotor sets are completed in 2018. The power station power output will be reduced to 75% capacity (135MW) during this period in order to accommodate for such plant refurbishment. Together with the already completed replacement of the four transformers and the replacement of the Gas Insulated Switch-gear in 2014, this will extend the life of the power station by another 40 years.

The Gas Turbines will continue as a strategic power supply alternatives for the CBD and also to maintain the local transmission stability. As a result of a business case study, the Athlone Gas Turbine is to be refurbished and tied into the CBD network which will extend its operational life by 15 years.

Green Energy researches emerging technologies and facilitates the generation of renewable electricity. Foremost projects are the City's purchase of renewable electricity from the Darling Wind Farm and onward sale of the green attributes of the energy to voluntary customers, and facilitating the grid connection of small scale embedded generation such as commercial, industrial and residential rooftop photovoltaic systems.

3.5 Health, Safety and Environment (HSE)

Electricity Services is committed to conducting its operations in a manner that is without undue risk to, the health and safety of its employees, visitors, public and contractors as well as, the environment. in accordance with the following areas objectives:

- Advice on compliance to pertinent legislation, standards, policies and procedures
- Monitor occupational exposure, injuries, environmental impacts and losses that occur as a result of a failure in the area of risk control
- Assist Line Management in identifying and evaluating Safety, Health and Environmental risks facing Electricity Services
- Develop various risk control strategies based on Risk Profile
- Research and recommend appropriate systems of control

As part of this commitment Technical Support Services coordinates the roll out of OHSAS 18001 by the HSE function located in the business operations. OHSAS 18001 accreditation has been obtained by:

- Technical Support Services: General Engineering & Plant Services
- Technical Support Services: Fleet Management & Maintenance
- Technical Support Services: Electrical Support Services
- Electricity Supply: Generations
- Electricity Supply: Network Control
- Infrastructure: Distribution East, Bloemhof Depot
- Infrastructure: Distribution South, Muizenburg Depot
- Infrastructure: Distribution North, Atlantis Depot
- Infrastructure: Protection, Telecoms and Measurement

3.6 Restructuring of Public Lighting Branch

A restructuring of the Public Lighting Branch was commenced in 2009 and the Public Lighting function was reintegrated with LV operations within the 3 service areas.

In two of the three distribution areas, namely North and South, the public lighting operations and maintenance functions are managed from a central point (Area Headquarters). In Distribution Area East the public lighting operations and maintenance functions are devolved to Depot level. Within the Eskom supply area, the conventional street lighting function is performed by a separate Public Lighting section currently based at Ndabeni. This section also operates and maintains the majority of the High Mast Lights located in township developments. The Public Lighting design, specifications and procurement is a separate section within the Engineering Branch and located at Bloemhof."

There are plans in place to move the Public Lighting section (Eskom areas) closer to the location of geographical service requirement, the first such move will be the new depot in Bothasig.

3.7 Electrification Plan

The electrification plan aligns with the Integrated Human Settlement 2012-2017 Plan of the City Of Cape Town.

New housing developments are normally serviced, including the provision of electricity, by the developer with these service costs being recovered from the homeowner. In the case of housing developments which consist of dwellings for which the beneficiaries are eligible for Government housing subsidies, the provision of electricity is subsidized via Integrated National Electrification Plan or Urban Settlements Development Grant funding with the remainder being sourced internally by the Electricity Service. The result is that the City achieves a 100% electrification rate for formal housing developments.

The informal settlement is not encumbered by any of the following elements:

- High voltage power lines
- Servitudes
- Road or rail reserves/corridors
- Areas below the 1:50 year flood return period contour; Residential Electricity Reticulation Policy
- Storm water retention or detention ponds as defined by the Roads and Stormwater Department
- Unstable land
- Any other health or safety hazard

An informal settlement encumbered by a servitude (excluding high voltage power line servitudes) or a road or rail reserve/corridor may be considered for electrification if permission is granted in writing by the relevant line authority. An informal settlement within a high voltage power line servitude cannot be serviced, not even on a temporary basis.

At this stage the bulk of these are found in the portion of the Metro which is in the Eskom area of supply. With a change in the DoE policy, Eskom have embarked on the electrification of informal areas which comply in terms of the City's electrification policy utilizing INEP grant funding. The City has also allocated

USDG grant funding aid funds sourced internally by the Electricity Services to fund electrification in informal settlements.

Electrification is an on-going process which follows on the Human Settlements Programme and will therefore continue over the medium to long-term.

Chapter 4 Support

4.1 Strategic Management Plan and Integrated Risk Management

A strategic management plan (SMP) is developed to ensure implementation of the business plan and is reviewed on an annual basis.

Key issues identified in the 2013/14 SMP review include:

- Implementation of EAM structure
- Standardization of Districts based on EAM measured workload.
- Implementation of Outage Management System
- Structuring of Customer Services based on ISU functionality
- Development of facilities master-plan to support business growth

The City is obliged to implement risk management in terms of the MFMA and the King II Code on Corporate Governance. In terms of the MFMA, section 62(1)(c)(i) the accounting officer is responsible to maintain effective, efficient and transparent systems of financial and risk management and internal control. The Department participates in the City's Integrated Risk Management (IRM).

4.2 Human Resource Plan

Staffing Strategy

The CCTES staffing strategy is based on expanding the apprentice training program, continued assistance in terms of bursaries to electrical engineering university students in conjunction with our Graduate Internship program and ongoing staff development in line with the needs of the business. The Graduate Internship program has been registered with ECSA under Commitment and Undertaking Number CU2011006P to train pupil engineers. Technicians in specialised areas are recruited via Learner Technicians Project which allows for the business to assess the potential of the individual in these areas of expertise and creates the opportunity for the learner technician to fulfil their academic conditions of practical training in order to graduate.

Training & Skills Development

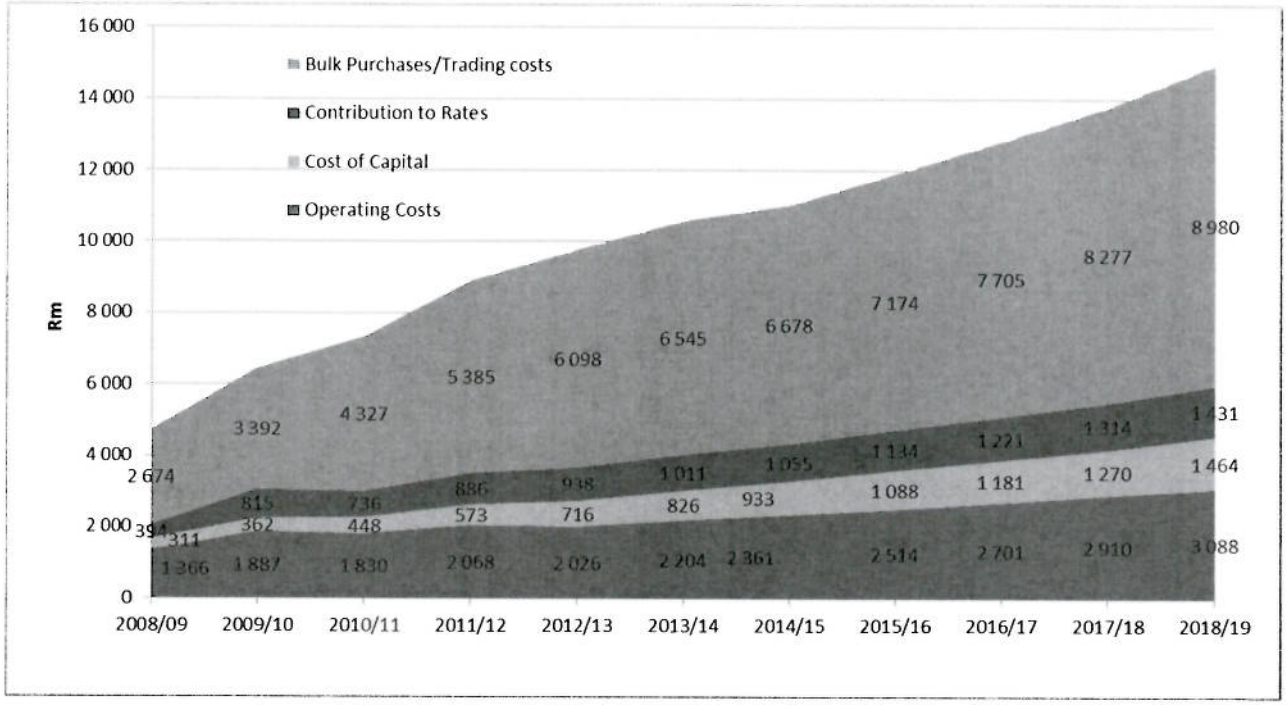
The apprentice training program is run in-house to allow for in-house training skills development to ensure repeatability and has moved to the new Electricity training centre in Brackenfell. This is complimented by a Learner Technicians' Training program and a Learnership program commencing at AET level 3 and continuing through to NQF 4.

Skills Programme training are linked primarily to the Work Place Skills Plans and SAJD program where the throughput of learners on these various programs average 2500 interventions per year. A Skills Development to Job Description (SAJD) model has been developed for all the job designations within Electricity Services with the core elements of the model being that employees are able to perform their job functions competently and safely.

4.3 Financial Plan

Annual review of 3 year budget

The budget presented is based on a combination of zero as well as parameter based budgetary methods. The planned change is premised on the framework that will allow the Finance function to add value to the business it serves. The financial plan is cognitive of the key cost drivers shown in the figure below:

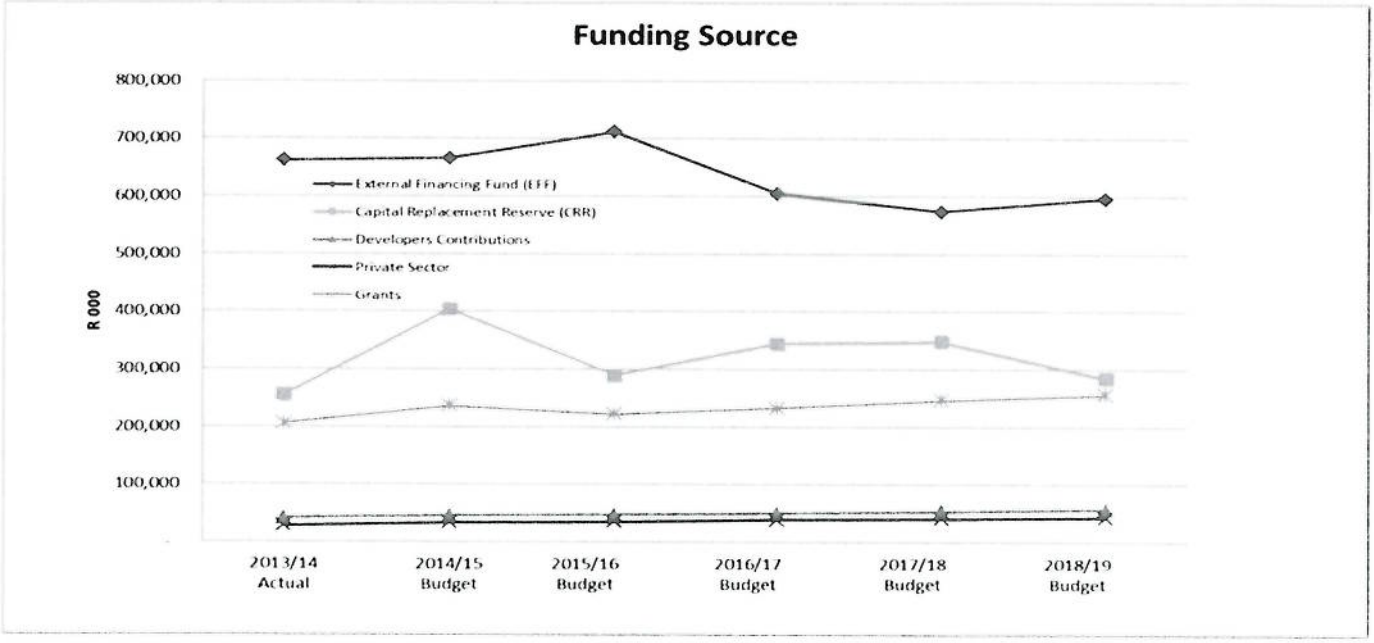


Unless otherwise stated, financial modelling will be based on the assumptions as listed below:

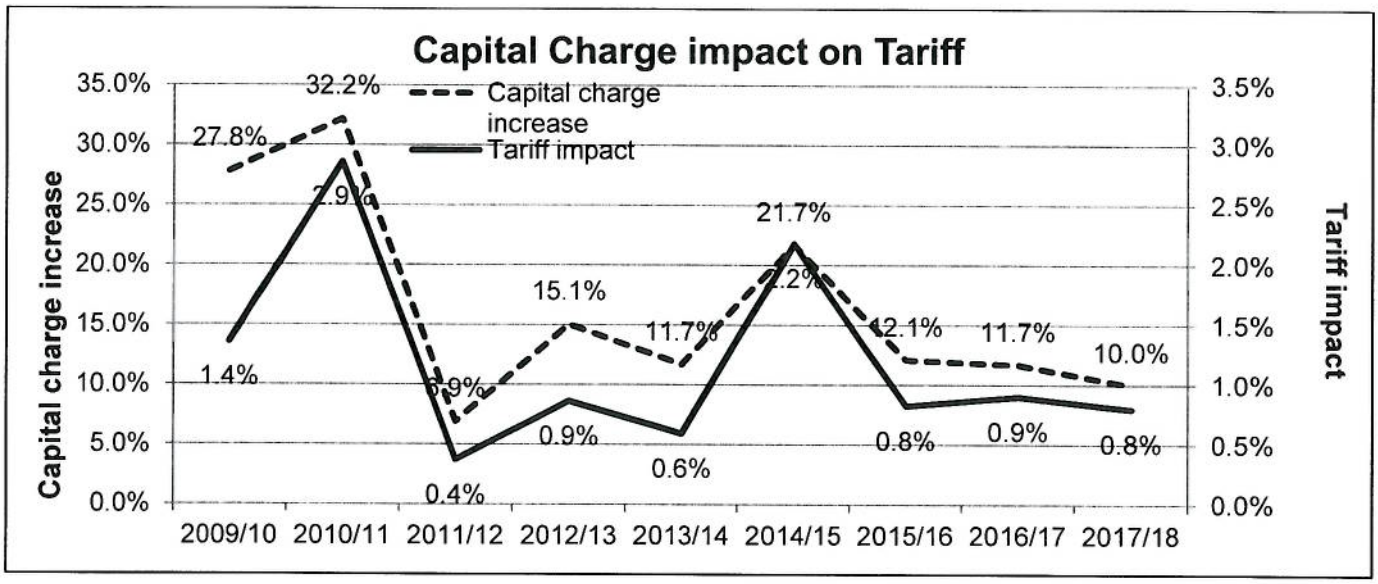
- Contribution to Rates Account - basis of calculation = 10% of Electricity Sales (excl FBE)
- System energy growth calculation based on recent and current energy consumptive patterns
- CPIX as determined by Corporate Finance for the next three years
- Effective Eskom increase is based on the NERSA approved multi-year pricing determination
- Collection ratio of 98% for the next three years

Funding of Capital Budget

The capital funded from a number of funding sources with the, Capital Replacement Reserve (CRR) and Grants & Donations (CGD) being the largest. The following graph indicates the planned capital expenditure per funding source. It is critically important that a benchmark for the investment in refurbishment is established in accordance with international best practice to ensure good quality of supply and excellent customer and delivery service.



External Financing Fund (EFF) envelopes are set by Corporate Finance and increases in capital charges related to this funding source has an impact on tariffs. With effect from the 2014/15 financial year, non-generating revenue projects in respect of infrastructure and refurbishment have been moved from EFF (loans) to CRR (revenue) funding. This practise over an extended period will have the effect of reducing tariff increase requirements.



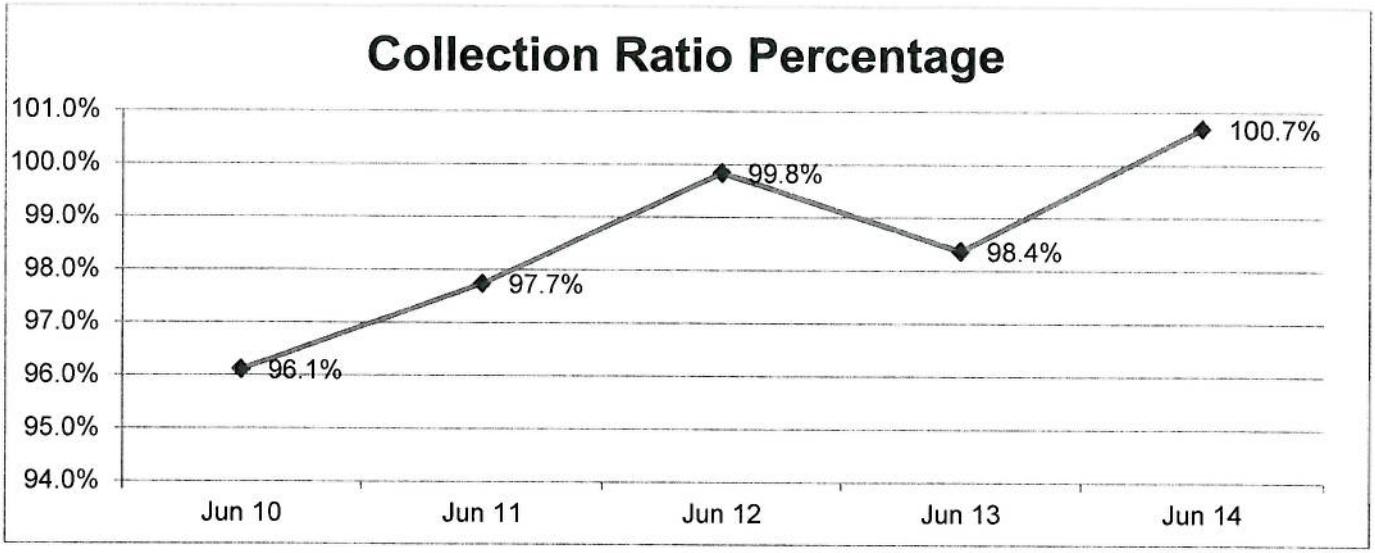
The City of Cape Town was assigned a National scale issuer rating of A1.za long – term credit rating with a stable outlook by Moody's Investment Service on 10 November 2014. A National scale short – term debt Issuer rating of P-1.za was also assigned on this date. These ratings reflect the City's buoyant budgetary performance and its comfortable liquidity position. However, financial sustainability is heavily dependent on maintaining and improving the collection of accounts receivable.

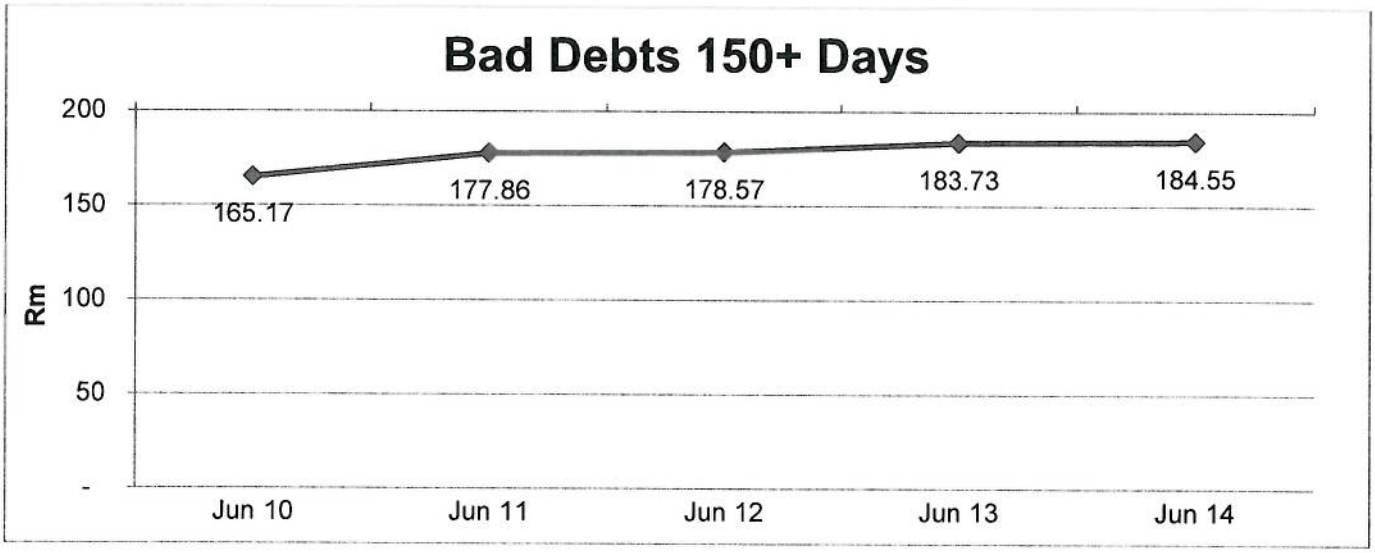
Revenue Management

The Electricity Regulation Act No. 4 of 2006 and its Regulations govern the electricity supply industry. Compliance with SANS 474:2009 (NRS 057:2009) "Code of practice for electricity metering" has been a license condition of the NERSA for the distribution of electricity since December 2005.

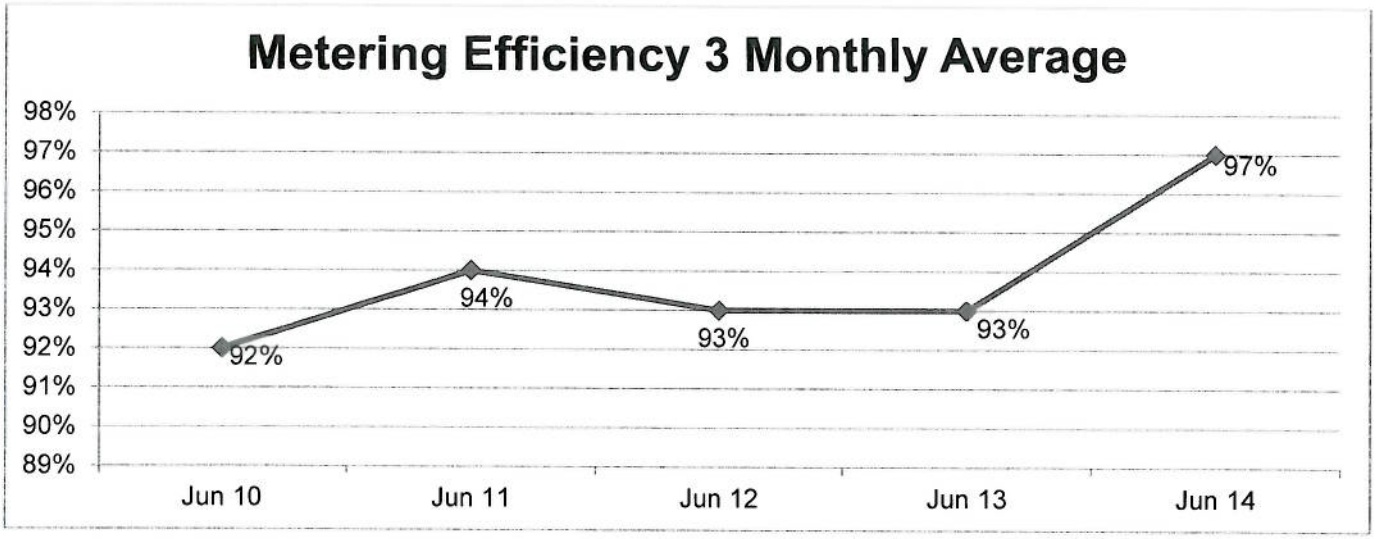
There is tremendous pressure for City as well as the Electricity Department to perform in the areas of cash collection for services rendered as well as the number of meter reading estimates performed on a monthly basis. Various initiatives have been implemented including encouraging indigent debtors to register, in which case they may have all their arrears, except those relating to tampering and bypassing of meters, written off.

As can be seen in the graph below the bad debts for all conventionally metered electricity consumers has increased as shown by the +150 days line for the period June 2009 to June 2013 but must be seen in the context of large electricity tariff increases over the same period. The 12 monthly average collection ratio has improved over the same period.





Electricity has some 149,819 conventional meters which are read both In-house and by Contractors with the NRS requirement that 95% meters are read 3 monthly on average. The move to prepaid meters for domestic customers and to AMI – SAP for large commercial and industrial customers, together with a number of data clean-up exercises have contributed to an improvement to this indicator.



Electricity Tariffs

NERSA, on an annual basis calculates an appropriate tariff guideline increase which is then sent to municipal distributors as a guide in determining their annual electricity tariffs. This guideline does not preclude a distributor from the legal obligation to seek approval from both the Energy Regulator and Council (in terms of the Municipal Finance Management Act requirements) for tariff increases before implementation. When annually determining the percentage increase guidelines, the following issues are considered:

- The proposed Eskom price increases applicable to municipal distributors;
- The economic outlook and inflation;
- The analysis of other municipal costs besides purchase costs such as operating and maintenance costs, and;
- NERSA's regulatory objectives.

NERSA is currently in the process of introducing a new system of regulation, namely the Rate of Return Regulation methodology (ROR), which will replace the current "benchmarking" system whereby tariffs within the former proposed RED boundaries are compared directly with each other. ROR will have the benefit that each distributor will be treated as an individual case, and their tariffs regulated according to those specifics. This will have some impact on the levels at which Cape Town's electricity tariffs is set, but it is not envisaged to have too significant an impact at this point. It will take a number of years before any impact at all is seen from this change in regulatory methodology, as the system will take some time to be set up and become fully functional.

The following principles, which are in the long-term interests of the electricity consumer in South Africa, will inform the annual tariff adjustment process:

- Electricity tariffs will, in the long-term, reflect as closely as possible the underlying costs of supply for the majority of consumers. This will ensure that consumers make rational decisions on electricity consumption, and that the correct levels of resources are, over time, dedicated to electricity supply in South Africa. Considerations of affordability of electricity shall be taken into account, both in the short and longer terms. Tariff structure adjustments shall be introduced in a phased manner, in order to give consumers the opportunity to respond and adjust behaviour accordingly.
- Electricity supply to substantially low-income households will need to be held below full cost-reflective levels in the medium to long term, for social-development reasons. This is a critical element of government policy, and the City will be placed under an explicit regulatory obligation to offer "electricity basic services support tariffs" to poor households.
- Any levies or cross-subsidies will be transparent and the City should provide sufficient information to consumers in order that they may understand its purpose.

Residential Tariffs

The structure of the current and medium-term future residential tariffs has multiple objectives:

- To safeguard the financial sustainability of the distributor as best possible;
- To provide protection to the poor through a cross-subsidy from the larger consumers;
- To discourage bulk buying;
- To encourage the efficient use of electricity;
- To meet NERSA's regulatory objectives;
- To safeguard the financial sustainability of the distributor as best possible.

Medium-Term Tariff Outlook

In terms of the MTREF (based on the assumptions as forecast by) Eskom's MYPD – extrapolated into the MYPD 4 period, and also taking into account the subsequent adjustments in terms of the Regulatory Clearing Account of Eskom) the medium-term outlook for tariffs would entail overall increases for the next 5 years as indicated in the table above. Note that these are overall average increases, and will not

be specific to all tariffs.

Tariffs throughout this period will however come under increasing pressure from a loss of sales as a result of the mass adoption of alternative technologies. The impacts of this are still being investigated, and early indications are that these impacts may be substantial.

Although from the MTREF and MYPD data as shown in the table above it would appear as if overall the gap between City and Eskom tariffs is narrowing as a result of the City generally having lower or similar overall average increases, this will likely not be the case in all areas as a result of the different philosophies surrounding tariff design and cross subsidies.

Cost of Supply

Eskom have recently completed a "Cost to Serve" study, which resulted in the municipal supply tariffs for 2013/14 (i.e. the tariffs at which municipal distributors purchase electricity) increasing at a lower rate than the average Eskom increase. This in turn resulted in a lower than otherwise expected increase for the municipal consumers for the same period.

The City's Electricity department is currently busy with our own "Cost of Supply" study, with the intention of being able to determine the levels at which the tariffs should be set, as well as being able to then also quantify exactly what subsidies exist and how much these are. The study is expected to be refined over a number of years; and the first version will be complete in time for the 2015/16 financial year. At that time a migration path will be proposed in order for the relevant adjustments over the medium-term to be made, should any be required.

2015/2016 ELECTRICITY DEPARTMENT SDBIP

ANNEXURE D

ALIGNMENT TO IDP		Lead (L)/ Contributing (C) Directorate	Corporate Objective	Indicator (to include unit of measure)	Baseline 2013/2014 (30 June 2014)	ANNUAL TARGET 2014/2015	ANNUAL TARGET 2015/2016	QUARTELY TARGETS				Capex Budget	Responsible Person	General Comment
Pillar, Corporate Objective and Programme/Statutory or Strategic Plan	CSC Indicator No							30-Sep-15	31-Dec-15	31-Mar-16	30-Jun-16			
SFA1 - The Opportunity City Obj 1.2 1.2 (b) Maintenance of infrastructure 1.2 (c) Investment in Infrastructure		Finance	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Percentage spend of Capital Budget	87.5%	95%	90%	17%	34%	57%	90%	90%	Brian Leetch	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	R value growth expenditure on Capital Budget.	R311.90m	R252.6m	R393.2m	R72.5m	R131.5m	R227.5m	R393.2m	R440 467 070	Brian Leetch	Proposed Budget
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	R value refurbishment expenditure on Capital Budget.	R379.0m	R368.1m	R345.7m	R80.0m	R152.1m	R216.6m	R345.7m	R387 311 655	Brian Leetch	Proposed Budget
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	R value Electrification expenditure on Capital Budget.	R152.80m	R129.3m	R79.7m	R0.6m	R3.9m	R25.2m	R79.7m	R89 245 015	Brian Leetch	Proposed Budget
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	R value Public Lighting expenditure on Capital Budget.	R42.50m	R43.9m	R62.4m	R5.3m	R17.3m	R31.4m	R62.4m	R69 889 550	Brian Leetch	Proposed Budget
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Percentage spend on repairs and maintenance	103.7%	95%	95%	24%	48%	71%	95%		Brian Leetch	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Expenditure on operational maintenance budget. (based on 95% target spend) (Rand)	R491.78m	R488m	R488m	R123m	R247m	R365m	R488m		Brian Leetch	Proposed Budget
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	SAIFI (Systems Average Interruption Frequency Index)	0.86	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3		Peter Jaeger	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	CAIDI (Customer Average Interruption Duration Index)	2.15hrs	<2.3hrs	<2.3hrs	<2.3hrs	<2.3hrs	<2.3hrs	<2.3hrs		Peter Jaeger	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	HV + MV SAIDI (System Average Interruption Duration Index):	1.86hrs	<3hrs	<3hrs	<3hrs	<3hrs	<3hrs	<3hrs		Peter Jaeger	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Percentage Power transformer availability HV	95.80%	95%	95%	95%	95%	95%	95%		Peter Jaeger	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	GWh of electricity purchased to meet electricity consumption target	10 241GWh	10 018 GWh	10 166 GWh	2 699 GWh	5150 GWh	7 520 GWh	10 166 GWh		Peter Jaeger	

The baseline data will be updated to reflect actuals as at 30 June 2015 once the 2014/2015 reporting period has closed.

ALIGNMENT TO IDP		Lead (L)/ Contributing (C) Directorate	Corporate Objective	Indicator (to include unit of measure)	Baseline 2013/2014 (30 June 2014)	ANNUAL TARGET 2014/2015	ANNUAL TARGET 2015/2016	QUARTELY TARGETS				Capex Budget	Responsible Person	General Comment
Pillar, Corporate Objective and Programme/Statutory or Strategic Plan	CSC Indicator No							30-Sep-15	31-Dec-15	31-Mar-16	30-Jun-16			
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Maximum Demand - maximum loading placed on system transmission network	1 924 MW	1 872 MW	1 925 MW	1 925 MW	1 925 MW	1 925 MW	1 925 MW		Peter Jaeger	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	% burning rate of all public and street lights.	93.40%	90%	90%	90%	90%	90%	90%		Brinley van der Schyff	
		Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Contribution to Rates Account.	R1010m	R1055m	R1169m	R292.25m	R584.50m	R876.75m	R1169m		Brian Leetch	Proposed Budget
	1.G	Utility Services	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	1.G Number of outstanding valid applications for electricity services expressed as a percentage of total number of billings for the service	0.10%	<0.9%	<0.8	<0.8	<0.8	<0.8	<0.8		Gary Ross	
SFA1 - The Opportunity City Obj 1.2 1.2 (d) Expanded Public Works Programme (EPWP)		Dep CM	1.2 Provide and maintain economic and social infrastructure to ensure infrastructure-led economic growth and development	Number of Expanded Public Works programmes (EPWP) opportunities created	432	1 183	800	200	400	600	800		Hein Boshoff	These targets only refer to Mainstream projects.
SFA1 - The Opportunity City Obj 1.3 1.3 (a) Sustainable utilisation of scarce resources such as water		Utility Services	1.3 Promote a sustainable environment through the efficient utilisation of resources	Percentage technical and non-technical losses	10.5%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%		Gary Ross	
SFA 1 - The Opportunity City Obj 1.6 1.6 (a) Seta and EPWP funding used to train aprentices and create other external training opportunities.Training apprentices for vacant posts in the administration and the city		Corp Services	1.6 Maximise the use of available funding and programmes for training and skills development	Number of external trainee and bursary opportunities (excluding apprentices)	22	20	20	5	10	15	20		Selwyn Scholtz	
				Number of apprentices	129	90	150	150	150	150	150		Selwyn Scholtz	
SFA 3 - The Caring City Obj 3.4 3.4 (b) Service Delivery Programme in informal settlements 3.4 (c) Backyarder Service Programme	3.F	Utility Services	3.4 Provide for the needs of informal settlements and backyard residences through improved services	3.F Number of electricity subsidised connections installed	4391	1 500	1 500	350	700	1 100	1 500		Maurisha Hammer	Indicator measures installations in the CT Supply Area.
SFA 4 - The Inclusive City Obj 4.1 4.1(a) Managing service delivery through the service management process (C3 notification responsiveness)		Corp Services	4.1 Ensure responsiveness by creating an environment where citizens can be communicated with and responded to	Percentage adherence to Citywide service standard based on all external notifications	104.47%	100%	100%	100%	100%	100%	100%		David Paulse	

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2015/2016 ELECTRICITY DEPARTMENT SDBIP

ANNEXURE D

ALIGNMENT TO IDP: Pillar, Corporate Objective and Programme/Statutory or Strategic Plan	CSC Indicator No	Lead (L)/ Contributing (C) Directorate	Corporate Objective	Indicator (to include unit of measure)	Baseline 2013/2014 (30 June 2014)	ANNUAL TARGET 2014/2015	ANNUAL TARGET 2015/2016	QUARTELY TARGETS 30-Sep-15	31-Dec-15	31-Mar-16	30-Jun-16	Capex Budget	Responsible Person	General Comment
SFA 5 - The Well Run City Obj 5.2		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Percentage adherence to EE target	109.26%	80%	80%	80%	80%	80%	80%		David Paulse	
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Percentage adherence to EE target(disabled)	New	2%	2%	2%	2%	2%	2%		David Paulse	
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Percentage vacancy rate	New	≤ 7%	≤ 7%	≤ 7%	≤ 7%	≤ 7%	≤ 7%		David Paulse	
5.2 (a) HR, Talent Management, Skills Development programme (Integrated Talent management Approach)		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Percentage budget spent on implementation on WSP	104.50%	95%	95%	15%	45%	75%	95%		Brian Leetch	new KOI
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Number of reportable incidents ito S24 of OHS Act.	1	0	0	0	0	0	0		Ian Rose	
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	% Staff absenteeism	3.87%	≤5%	≤5%	≤5%	≤5%	≤5%	≤5%		David Paulse	
		Compliance & Auxiliary Services	5.2 Establishes an efficient and productive administration that prioritises delivery	Number of risk registers signed and submitted to IRM timeously	New	1	1	–	1	1	1		Nikky Anderson	
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Percentage of incidence of overtime hours in excess of 43hrs. (non-emergency)	1.86%	0%	0%	0%	0%	0%	0%		Gary Ross	
		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Retention of scarce skills as measured by % staff turnover	5.15%	<12%	<12%	<12%	<12%	<12%	<12%		David Paulse	
SFA 5 - The Well Run City Obj 5.2		Corp Services	5.2 Establish an efficient and productive administration that prioritizes delivery	Community satisfaction survey (score 1-5) for residents: Electricity	3.2	2.9	2.9	Annual	Annual	Annual	2.9		David Paulse	Annual survey conducted by SDI&GIS
5.2(c) Annual Community Satisfaction Survey				Community satisfaction survey (score 1-5) for business: Electricity	3.2	2.9	2.9	Annual	Annual	Annual	2.9		David Paulse	Annual survey conducted by SDI&GIS
			5.2 Establishes an efficient and productive administration that prioritises delivery	Percentage of Declarations of Interest completed	New Indicator	New Indicator	100%	100%	100%	100%	100%		Sonja Thomas Contact: 021 487 2517	
SFA 5 - The Well Run City Obj 5.3		Finance	5.3 Ensure financial prudence, with clean audits by the Auditor General	Percentage of Operating Budget spent	94.60%	95%	95%	24%	48%	71%	95%		Brian Leetch	
5.3 (a) Financial Management Programme		Finance	5.3 Ensure financial prudence, with clean audits by the Auditor General	Revenue collected as a percentage of billed amount	100.69%	98%	98%	98%	98%	98%	98%		Trevor Blake	
		Finance	5.3 E Ensure financial prudence, with clean audits by the Auditor General	Percentage of assets verified	98.52%	100% asset register verified	100% asset register verified	–	–	60% asset register verified	100% asset register verified		Jason Carelse	Moveable
SFA 5 - The Well Run City Obj 5.3		Internal Audit	5.3 Ensure financial prudence, with clean audits by the Auditor General	Percentage Internal Audit findings resolved	No follow-up audit was performed by	70%	70%	70%	70%	70%	70%		David Paulse	

Director: Electricity
Les Rencontre

Date: 11/02/2015

The baseline data will be updated to reflect actuals as at 30 June 2014 once the 2013/14 reporting period has closed.

Executive Director Utility Services:
Gisela Kaiser

Date: 13 FEB 2015

Targets are subject to final approval of the budget.

The baseline data will be updated to reflect actuals as at 30 June 2015 once the 2014/2015 reporting period has closed.