



Key Statistics

2014

Issue Date: July 2014

Revision No.: 3

Document No: DOC-150312-BLL

Issued by: Network Strategy Section
Asset Management

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1.0 Network Statistics

1.1 Transmission System

Transmission Lines		Transmission Stations	
	(km)	400kV Stations	5
400kV Overhead Lines	433	220kV Stations	25
400kV Underground Cables	2	110kV Stations	32
220kV + 275kV Overhead Lines	1,876	400/220kV Transformers	5
220kV + 275kV Underground Cables	137	400/110kV Transformers	1
110kV Overhead Lines	4,810	275/220kV Transformers	3
110kV Underground Cables	80	220/110kV Transformers	50

Table 1.1 – Transmission System at end 2013

1.2 Distribution System

Subtransmission		Medium & Low voltage	
220 kV S/Stns & 110kV Networks		MV Network	(km)
220/110kV Stations	3	20kV Overhead - 3 Phase	14,700
220/110kV transformer Capacity (MVA)	2,250	20kV Overhead - 1 Phase	29,500
110kV Lines	439	10kV Overhead - 3phase	12,800
110kV cables	184	10kV Overhead - 1 Phase	25,800
110kV substations		20kV Cable	600
110/38kV	82	10 KV Cables	8,849
110/MV	28	MV/LV S/stns	
110/38kV Transformer capacity (MVA)	6,292	Pole mounted - 3 phase	19,941
110/MV Transformer capacity (MVA)	1,345	Pole mounted - 1 phase	213,784
38kV Network	(km)	Ground mounted	19,787
Overhead	5,731	LV Network	(km)
Cables	951	Overhead - 3ph	4,208
38kV S/Stns		Overhead - 1ph	54,300
No. of Stations	432	LV Cables	12,256
Transformer capacity (MVA)	5,112	LV Minipillars	167,983

Table 1.2 – Distribution System at end 2013

2.0 Distribution System Energy Flow

2.1 Distribution Energy Flow

	2008	2009	2010	2011	2012
Inputs					
Transmission	24093	22579	22967	21493	21309
DSO Connected Generation	1811	2091	1805	2555	2786
Energy Input to Distribution System	25903	24669	24772	24047	24095
GWh Distributed	24043	22955	23063	22580	22324
Distribution System Losses	1860	1714	1709	1468	1771

Table 2.1 – Distribution Energy Flow

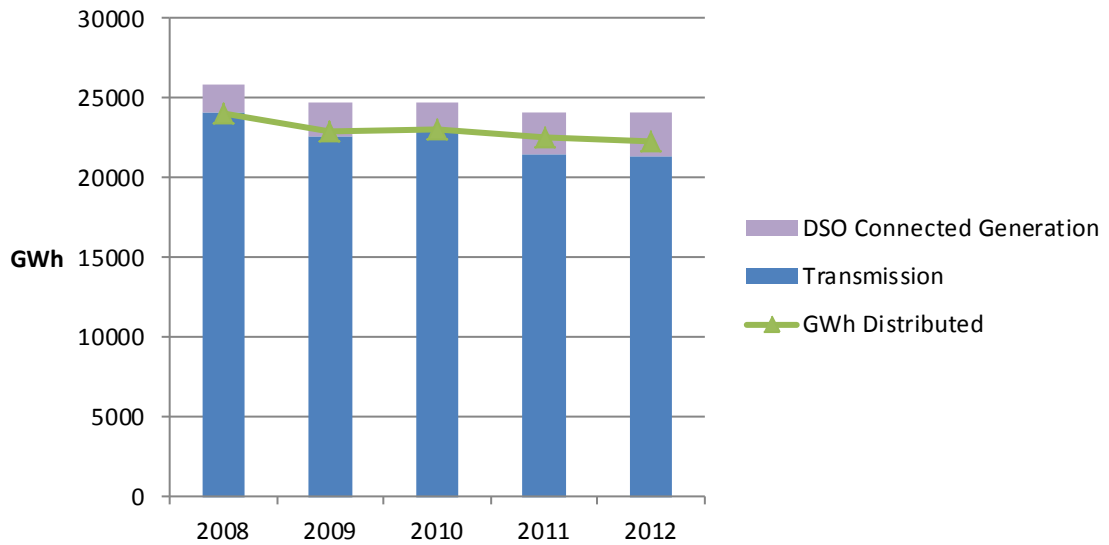


Figure 2.1 – Distribution Energy Flow

2.2 GWh Distributed

Customer Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Urban Domestic	4,426	4,603	5,432	5,712	6,045	5,930	6,049	5,871	5,701	5,582
Rural Domestic	3,406	3,515	3,084	2,992	3,091	3,044	3,119	3,073	2,966	2,908
Public Light, Misc	199	217	223	237	251	259	264	266	269	277
LV Non MD	3,840	4,043	4,212	4,219	4,276	3,995	3,940	3,794	3,675	3,625
LV Max Demand	3,352	3,547	3,841	4,042	4,168	3,992	3,993	3,899	3,850	3,834
MV	4,708	4,925	5,161	5,310	5,281	4,914	4,895	4,898	4,990	4,982
38kV	794	810	861	853	839	739	669	648	678	712
110kV	75	88	88	92	93	83	133	132	196	438
Total	20,800	21,748	22,903	23,457	24,043	22,955	23,063	22,580	22,324	22,359

Table 2.2 - GWh Distributed

GWh Distributed

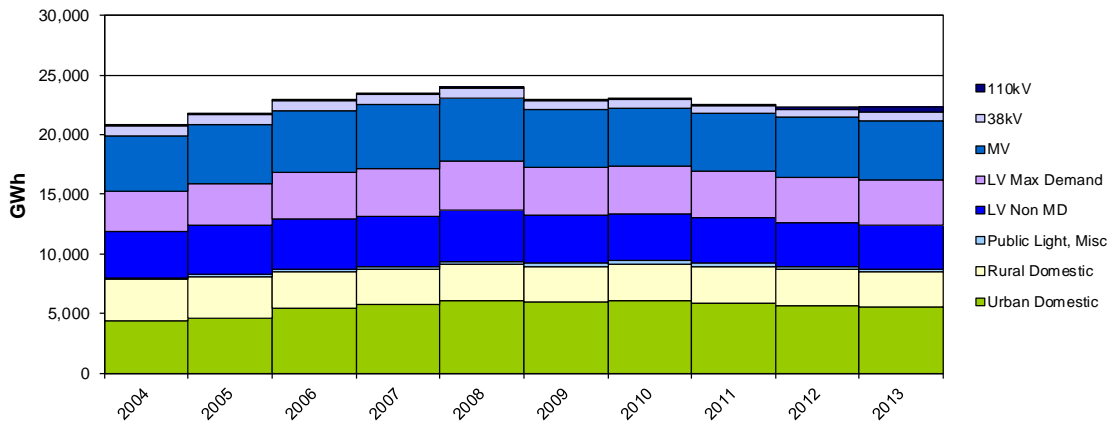


Figure 2.2 – GWh Distributed

GWh Distributed : Growth Rates

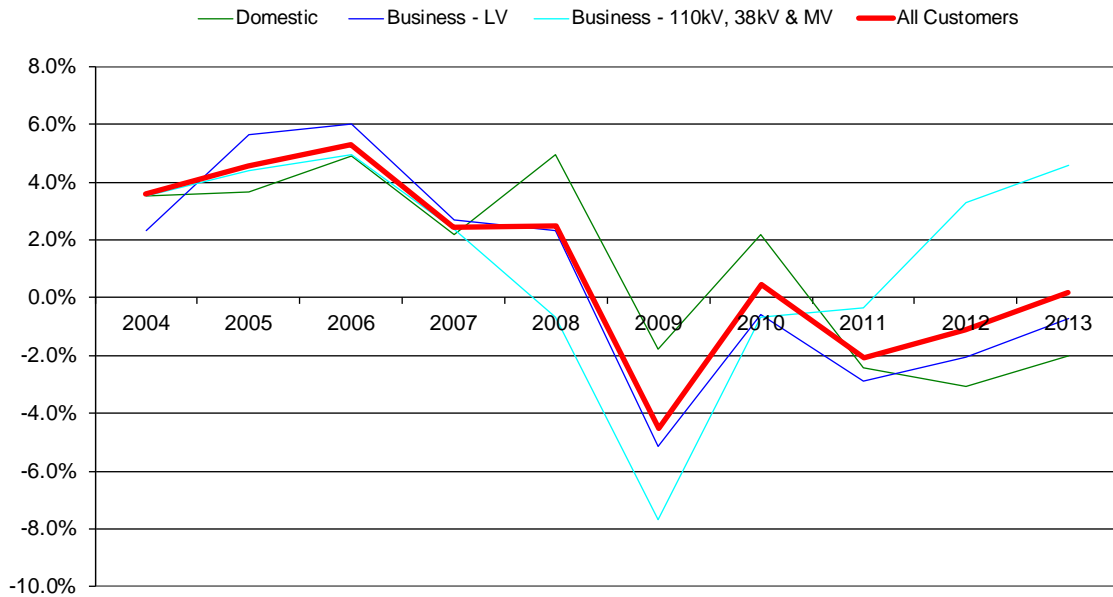


Figure 2.3 – GWh Distributed Growth Rates

3.0 Customer Numbers

Customer Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Urban Domestic	993,811	1,054,865	1,262,034	1,332,956	1,367,757	1,382,608	1,388,249	1,388,130	1,386,836	1,385,768
Rural Domestic	710,761	731,248	608,542	610,687	621,699	628,950	631,716	634,676	634,619	634,306
Public Light, Misc	6,175	6,662	6,487	9,147	10,004	10,437	10,908	11,194	11,383	11,626
LV Non MD	171,999	175,993	180,880	184,855	189,544	190,585	191,505	190,749	189,693	187,066
LV Max Demand	8,682	9,903	11,098	12,221	13,226	13,416	13,303	13,175	13,008	12,929
MV	1,056	1,203	1,271	1,349	1,413	1,444	1,468	1,491	1,503	1,523
38kV	37	59	66	70	77	75	77	86	90	90
110kV	1	1	2	1	4	6	6	6	6	8
Total	1,892,522	1,979,934	2,070,380	2,151,286	2,203,724	2,227,521	2,237,232	2,239,507	2,237,138	2,233,316

Table 3.1 – Customer Numbers

Customer Numbers

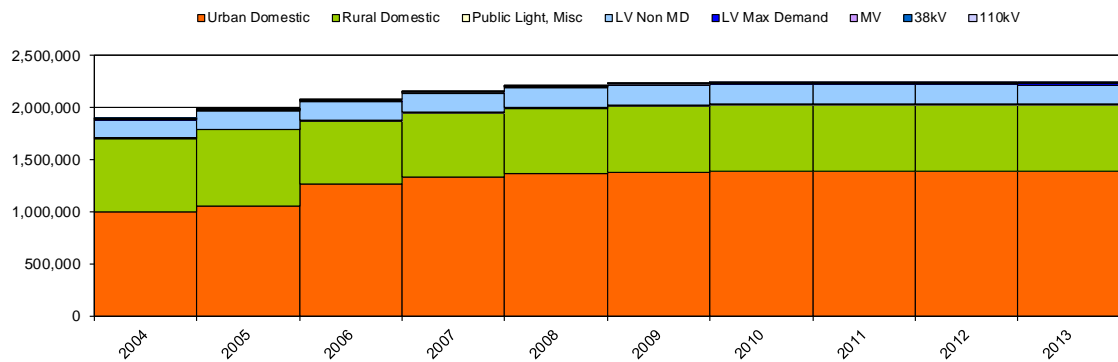


Figure 3.1 – Customer Numbers

Number of Customers

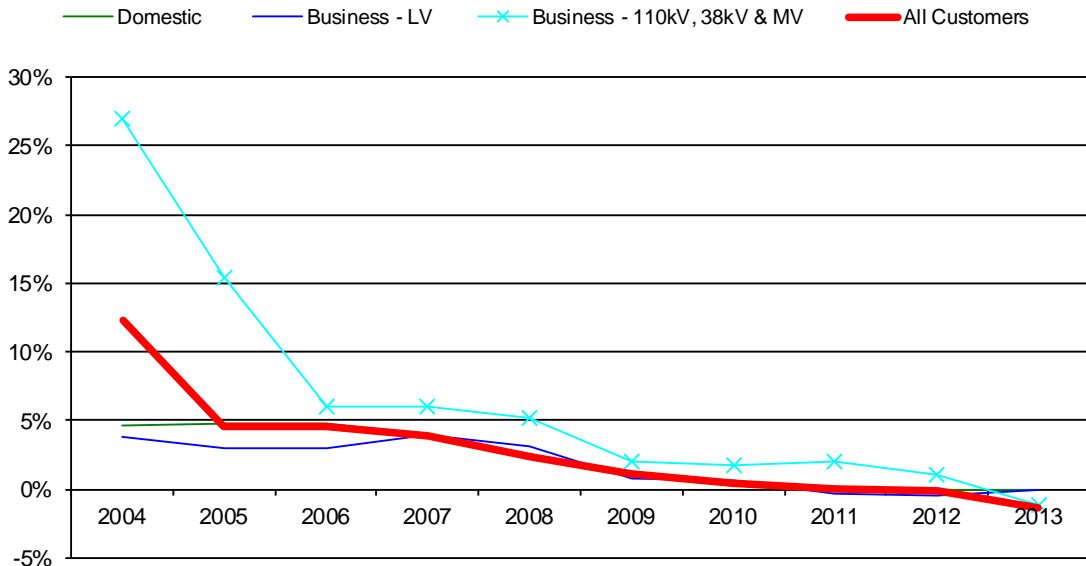


Figure 3.2 – Customer Numbers Growth Rates

4.0 New Connections

Customer / Project Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Connections										
Domestic Scheme	56926	59575	69407	59297	33800	14224	6651	3913	3267	3555
Domestic - Non scheme	22895	19987	21960	19646	17233	11980	7893	6494	5155	4730
Business	10779	9517	13763	10582	12066	7515	5407	4714	4378	7000
Total New Connections	90,600	89,079	105,130	89,525	63,099	33,719	19,951	15,121	12,800	15,285
Increases in Supply										
Domestic - Increases				313	363	277	219	258	281	212
Business - Increases				1715	1588	855	679	633	930	793
Total Increases	0	0	0	2,028	1,951	1,132	898	891	1,211	1,005

Table 4.1 – New Connections

New Connections 2003 -2013

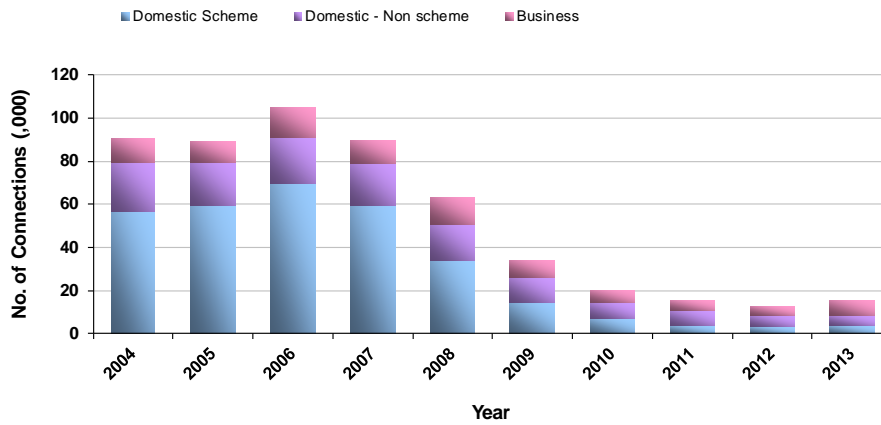


Figure 4.2 – New Connections

4.3 Wind Capacity Connected

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Distribution	202	231	291	299	392	437	535	584	670	719
Transmission	266	377	467	508	611	828	898	939	939	961
Total Connected	468	608	758	806	1,004	1,266	1,433	1,523	1,609	1,680

Table 4.3 – Wind Generation Capacity Connected

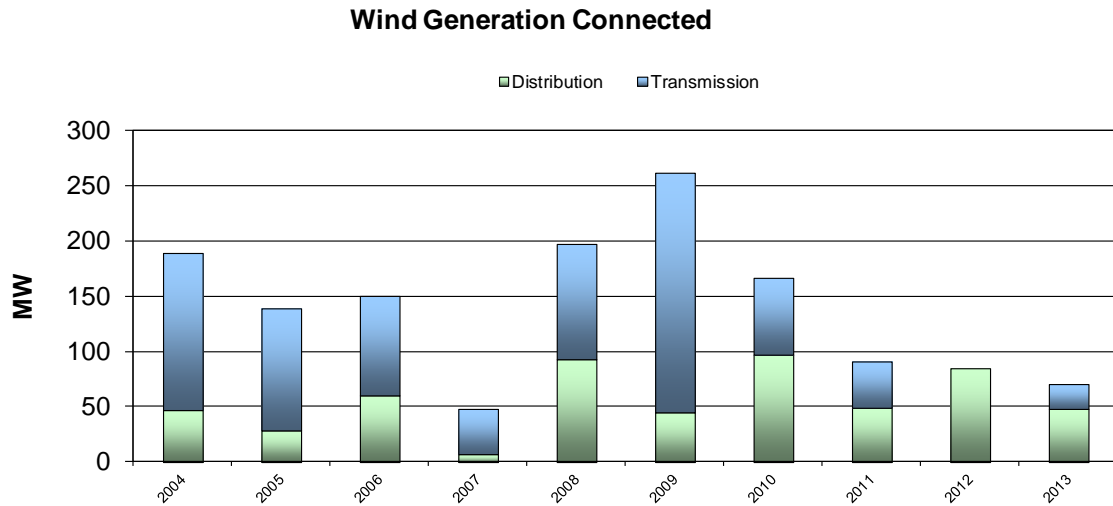


Figure 4.3 – Wind generation capacity

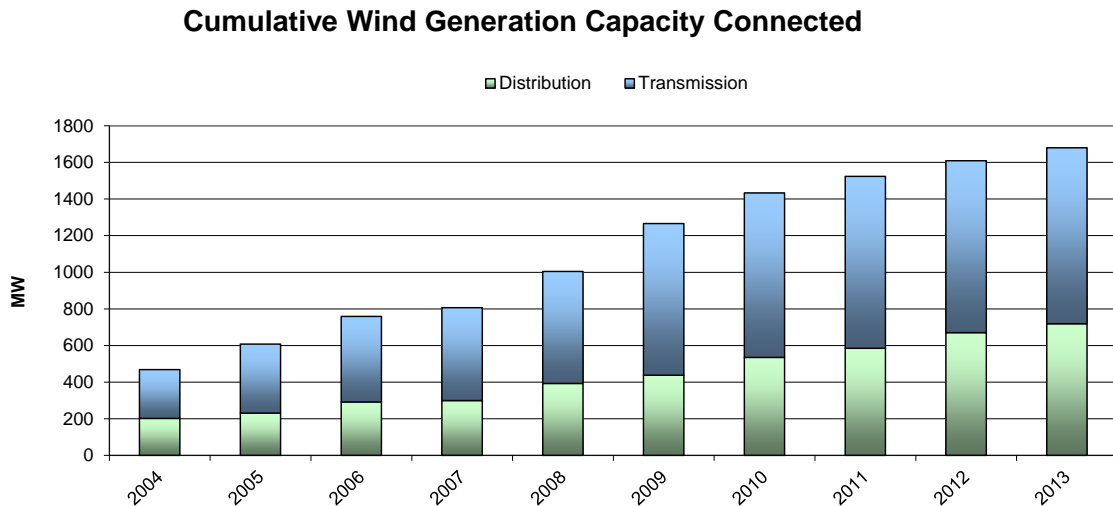


Figure 4.4 – Cumulative Wind Generation Capacity Connected

5.0 Continuity of Supply

Parameter Definitions

System wide continuity of supply is measured by two parameters :-

- **CI** – Average number of interruptions received by customers in a year
This parameter is also referred to as System Average Interruptions Performance Index (SAIFI)
- **CML** – Average duration in minutes without supply of customers in a year
This parameter is also know as System Average Interruptions Duration Index

5.1 Continuity Performance

Table 5.1 summarises continuity performance over the 10 year period 2002 - 2011

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fault										
CML	162.0	156.5	154.9	123.9	115.4	94.1	81.3	82.0	69.6	59.8
CI				1.43	1.48	1.28	1.08	1.18	0.95	0.83
Planned										
CML	422.3	390.7	375.4	268.7	79.0	60.9	59.3	64.1	46.6	45.3
CI				0.68	0.28	0.24	0.24	0.25	0.25	0.19
All										
CML	584.3	547.2	530.3	392.6	194.4	155.0	140.6	146.1	116.2	105.1
CI				2.11	1.77	1.52	1.32	1.43	1.20	1.01
NB Fault CI and CML figures are Storm Adjusted										

Fault performance relates to outages arising from faults on the system. In order to display the underlying trend in fault performance, an adjustment is carried out for storm days., The fault data shown in Table 5.1 is storm adjusted.

Planned performance relates to outages that are required to carry out construction, maintenance or renewal type work which is notified to customers in advance. The level of planned outages is related to the volume of construction and refurbishment work undertaken. The higher level of outages in the period 2002 – 2006 was primarily due to the medium voltage overhead line refurbishment programme undertaken in this period.

Fault Continuity Performance - Storm Adjusted

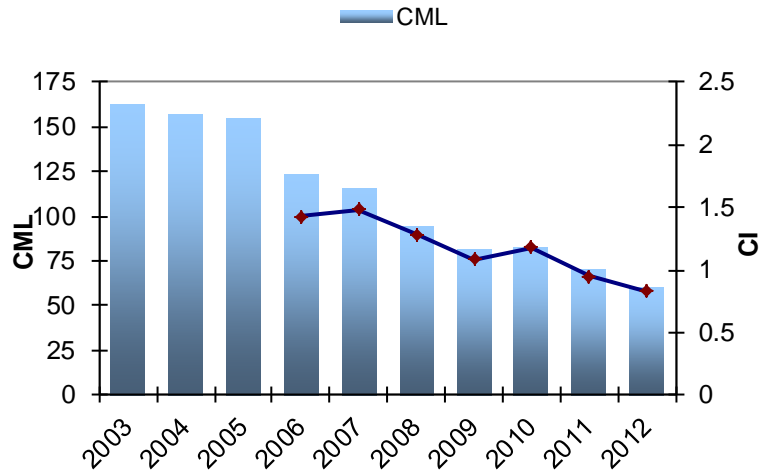


Figure 5.1 – Fault Continuity Performance

Planned Continuity Performance

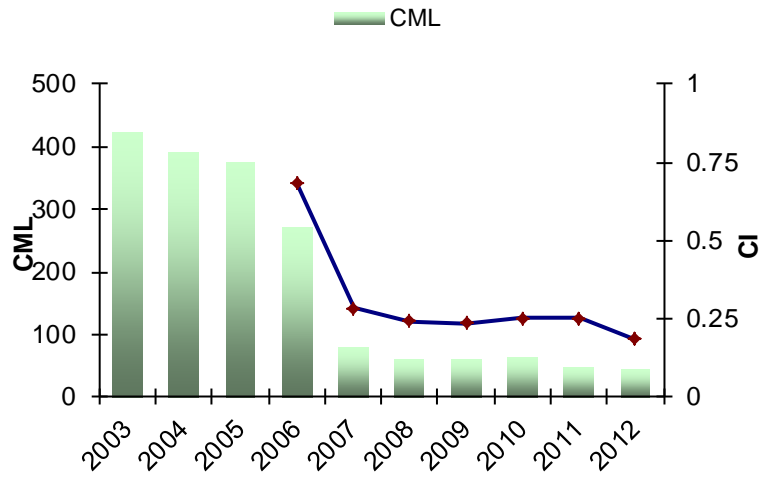


Figure 5.2 – Planned Continuity Performance

6.0 Customer Service

6.1 Call Centre Performance

Call Handling Response	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Answered within 20 seconds	57	63	81	84	86	90	88	90	89	89
Regulatory Incentive Target	0	0	0	0	85.4	85.4	85.4	85.3	85.3	85.3

Table 6.1 Calls Answered within 20 seconds

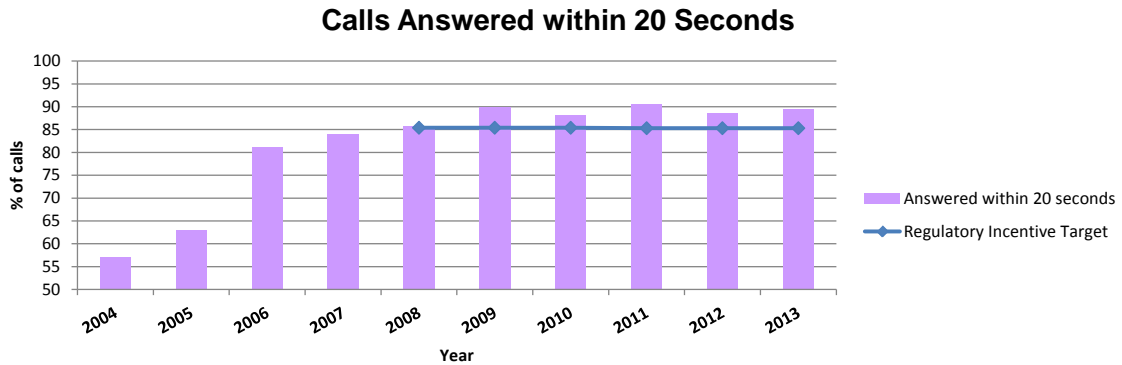


Figure 6.1 Calls Answered within 20 seconds

Call Handling Response	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Calls dropped	13	4	2.7	15	13	4	2.7	1.7	1.1	1.3
Target	0	0	0	0	0	0	0	0	5	5

Table 6.1a Calls Dropped

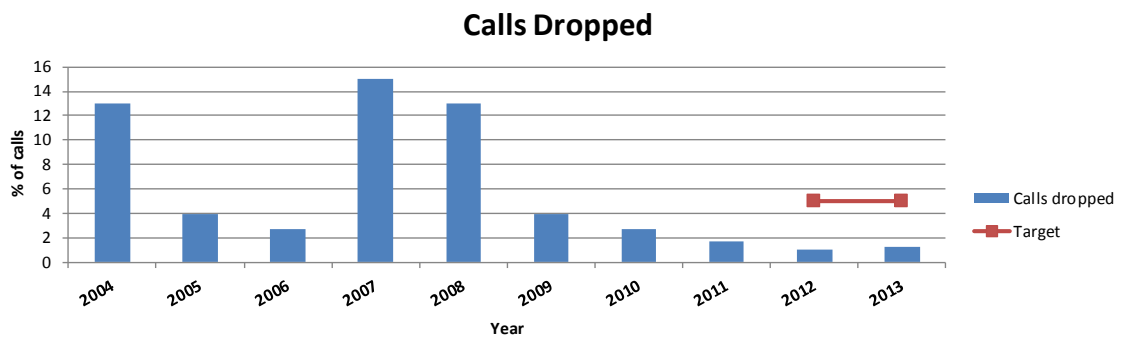


Figure 6.1a Calls Dropped

6.2 Complaints

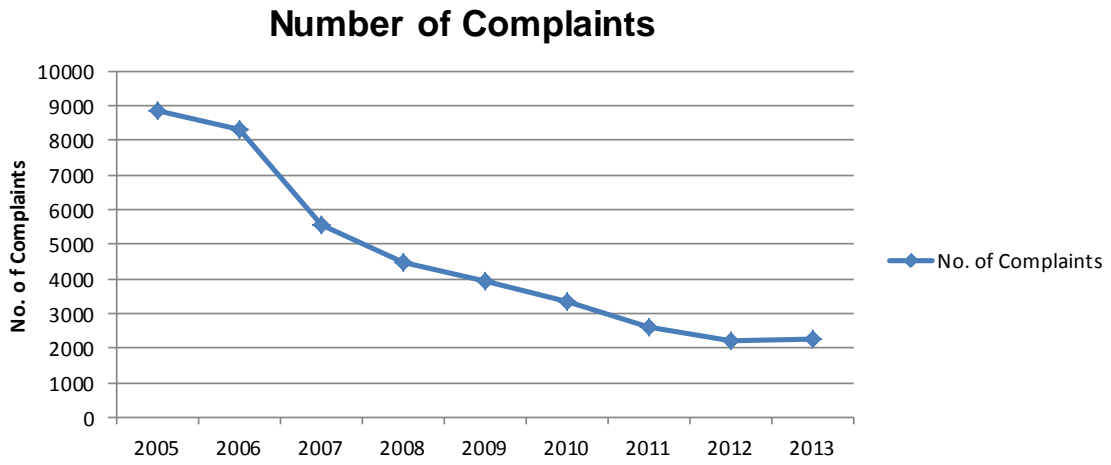


Figure 6.2a Number of Complaints

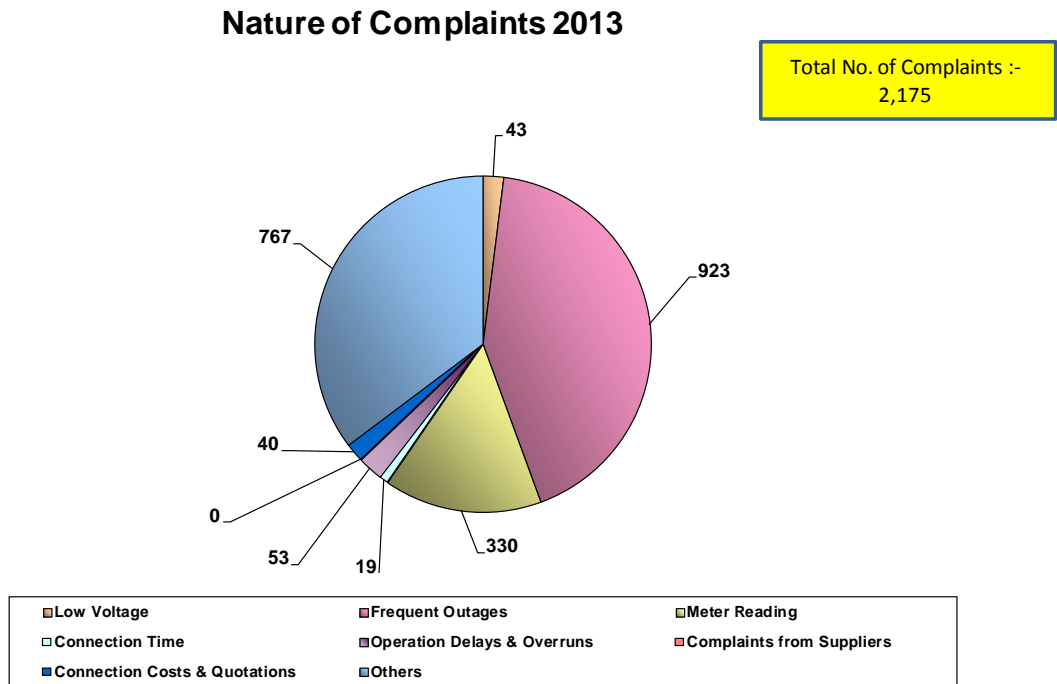


Figure 6.2b Nature of Complaints 2013

7.0 Operating Costs

Controllable Operating Cost per KW Unit Distributed

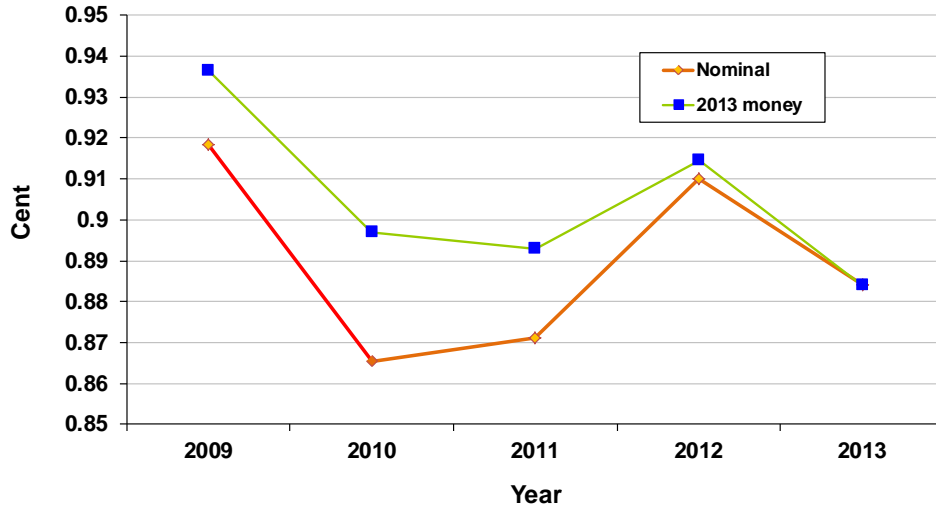


Figure 7.1 – Controllable Operating Costs per KW Unit Distributed

Controllable Operating Cost per Customer

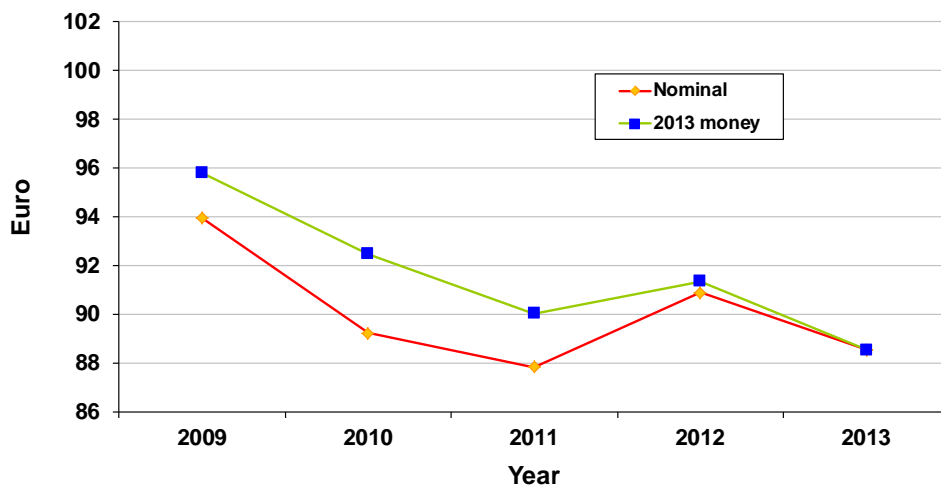


Figure 7.2 – Controllable Operating Costs per Customer