

## 2006/07 Electricity Distribution Quality of Service Report

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**Target Audience:** This document may be of particular interest to electricity network operators, consumer groups and individual consumers.

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### Overview:

This report sets out the quality of service performance in the period 1 April 2006 to 31 March 2007 for the 14 electricity distribution network operators (DNOs).

Performance was impacted by severe weather throughout the year and even excluding the impact of the largest events, the underlying performance was also affected by the weather with many days seeing above average numbers of interruptions. However performance continues to be better than that recorded at the beginning of the incentive scheme.

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## Context

This document brings together quality of service indicators that Ofgem uses as part of its work in regulating network monopolies in order to encourage improvements in quality of service.

## Associated Documents

- 2005/06 Quality of Service Report (Reference 204/06)  
[http://www.ofgem.gov.uk/Networks/ElecDist/QualofServ/QoSIncent/Documents1/16330-204\\_06.pdf](http://www.ofgem.gov.uk/Networks/ElecDist/QualofServ/QoSIncent/Documents1/16330-204_06.pdf)
- 2004/05 Quality of Service Report (Reference 258/05)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13039\\_258\\_05.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13039_258_05.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)
- 2003/04 Quality of Service Report (Reference 260/04)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9361\\_26004.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9361_26004.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)
- 2002/03 Quality of Service Report (Reference 149/04)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/7685\\_149\\_04\\_quality\\_of\\_service\\_report.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/7685_149_04_quality_of_service_report.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)
- 2001/02 Quality of Service Report (Reference 51/03)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/3664\\_OfgemQualityofSupplyReport2001-02\\_Final\\_18June\\_1.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/3664_OfgemQualityofSupplyReport2001-02_Final_18June_1.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)
- Quality of Service Regulatory Instructions and Guidance version 5 (Reference 94/05)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/10735\\_9405app.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/10735_9405app.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)
- Guaranteed Standards: Ofgem Guidance and Proposals on Best Practice - Electricity Distribution  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/14817\\_Guidance\\_distribution\\_April\\_2006.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/14817_Guidance_distribution_April_2006.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/qualityservice/qualityofsupply)

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## Summary

Ofgem considers quality of service to be one of its key priorities in network regulation. Ofgem has been undertaking a programme of work to improve regulation of electricity distribution companies to ensure they deliver an appropriate level of service to customers.

This report sets out the quality of service performance in the period 1 April 2006 to 31 March 2007 for the 14 electricity distribution network operators (DNOs). 2006/07 was the fifth year that the DNOs faced financial incentives on their quality of service performance and it was the 2nd year of the fourth distribution price control period.

2006/07 was a difficult year with many DNOs experiencing above average customer interruptions and customer minutes lost over significant periods of the year. Despite this, since the introduction of the incentive scheme in April 2002 the underlying average number of customer interruptions per 100 customers has fallen by 10 per cent and the number of customer minutes lost has reduced by 4 per cent.

## 1. Introduction

**1.1.** All licensees who operate electricity transmission or distribution systems are required to report annually on their performance in maintaining system security, availability and quality of service. This information provides a picture of the continuity and quality of service experienced by final customers.

**1.2.** Ofgem has made a commitment to publish an annual report on the overall performance of all 14 Distribution Network Operators (DNOs) and this report is the sixth of its kind. The aim of the report is to pull together the key information on the DNOs' quality of service in a format that is easy to understand. Transmission system information is published by the three companies responsible for transmission networks in the UK, National Grid Electricity, SP Transmission and Scottish & Southern.

**1.3.** The document contains the following chapters:

- Chapter 2 Background on the Electricity Distribution Network Operators
- Chapter 3 Key Quality of Service Measures
- Chapter 4 Quality of Service Performance in GB
- Chapter 5 2006/07 Quality and Speed of Telephone Response Performance
- Chapter 6 Customer Service Reward Scheme
- Chapter 7 Ongoing Work

**1.4.** Summary tables and additional information are available in previous reports and in excel on the Ofgem Quality of Service website (2006/07 QOS data).

**1.5.** Data for 2006/07 was audited in respect of reporting accuracy in the summer of 2007, although no data required adjusting as all DNOs met the required accuracy thresholds. This was the sixth year of such audits as well as audits for exceptional events for which Ofgem made adjustments to 13 DNOs' reported information. Ofgem intends to make the complex information relating to the distribution network operators as meaningful and user friendly as possible and welcomes any comments or suggestions for the format of future reports.

**1.6.** Ofgem intends to publish the 2007/08 Quality of Service Report before the end of 2008.

## 2. Background on the 14 Electricity Distribution Network Operators

**2.1.** At privatisation, the Public Electricity Suppliers (PESs) were responsible for both the distribution and supply of electricity, taking the place of the former regional electricity boards. However, with the introduction of competition in supply, it was important to ensure that all supply businesses, both new and old, had fair access to the distribution networks.

**2.2.** The Utilities Act 2000 introduced separate licences for distribution and supply, and required that these be held by separate legal entities.

### Distribution

**2.3.** Distribution Network Operators are responsible for local distribution of electricity along overhead wires and through underground cables. This includes responsibility for ensuring that customers have a reliable electricity supply and restoring customers promptly in the event of an interruption to their electricity supply as set out in the Guaranteed Standards and the Quality of Service Incentive Scheme, which are discussed later in this document. Following privatisation and a number of corporate acquisitions, during 2006/07 the 14 distribution licenses were owned by 7 separate companies (see Map on page 4). In addition to the fourteen distribution network operators, there are also four Independent Distribution Network Operators (IDNOs)<sup>1</sup>

### How much does distribution cost the customer?

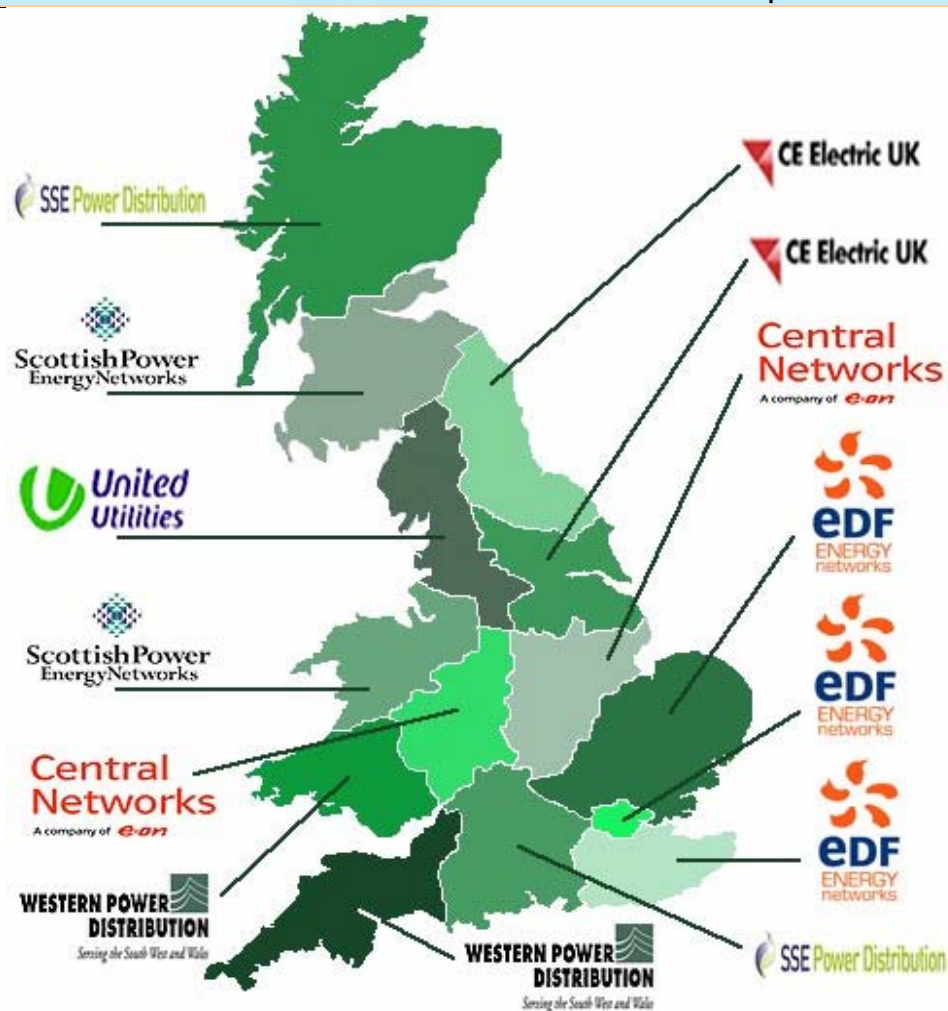
**2.4.** Electricity distribution charges account for around £3 billion annually and make up around 16 per cent of customers' electricity bills.

**2.5.** For a typical domestic electricity customer, based on consumption of 3300 kWh of electricity a year, the distribution element of their bill would be approximately £62.

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<sup>1</sup>these are; Independent Power Network Ltd, Laing O'Rourke Energy Ltd, Energetics Electricity Ltd & The Electricity Network Company Ltd.

## Location of the 14 Distribution Network Operators in GB



Name in the report	Name on Map
CN West	Central Networks
CN East	Central Networks
UU	United Utilities
CE NEDL	CE Electric UK
CE YEDL	CE Electric UK
WPD S Wales	Western Power Distribution
WPD S West	Western Power Distribution
EDFE LPN	EDF Energy Networks
EDFE SPN	EDF Energy Networks
EDFE EPN	EDF Energy Networks
SP Distribution	Scottish Power Energy Networks
SP Manweb	Scottish Power Energy Networks
SSE Hydro	SSE Power Distribution
SSE Southern	SSE Power Distribution

### 3. Key Quality of Service Measures

3.1. There are two main sets of quality of service measures for the DNOs.

- Overall measures of the quality of service the DNOs provide; and
- Guaranteed Standards of Performance (annual performance statistics published by energywatch)<sup>2</sup>

#### Overall Measures of Quality of Service

3.2. The revised quality of service incentive scheme which was introduced in April 2005 financially incentivises the DNOs with respect to the overall quality of service they deliver in the following areas:

- **the number and duration of interruptions to supply per year** – these are defined as the number of customers affected by power cuts per 100 customers per year and the average minutes without power per customer per year, only including power cuts that last 3 minutes or longer. Where several outages occur affecting the same customer as part of the same fault, this will only count as one power cut<sup>3</sup>. DNOs are incentivised based on their annual performance against the targets for each of these measures; and
- **the quality of telephone response** – is assessed through a customer survey carried out on a monthly basis by Accent Marketing and Research. Accent survey a sample of customers who have recently called their DNO with respect to power cuts or a dangerous situation, asking for customers' views in five key areas as set out in the telephony section on page 11.

3.3. In addition, DNOs are required to report the following information:

- the number of short interruptions to supply per year – the number of customers affected by power cuts lasting less than three minutes per 100 customers per year;
- disaggregated information on interruptions by source, voltage and HV circuit; and
- disaggregation by frequency and duration bands

3.4. A summary of the standards of performance and Best Practice guidance document on the guaranteed standards of performance is available on the website (see Associated Documents).

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<sup>2</sup> <http://www.energywatch.org.uk>

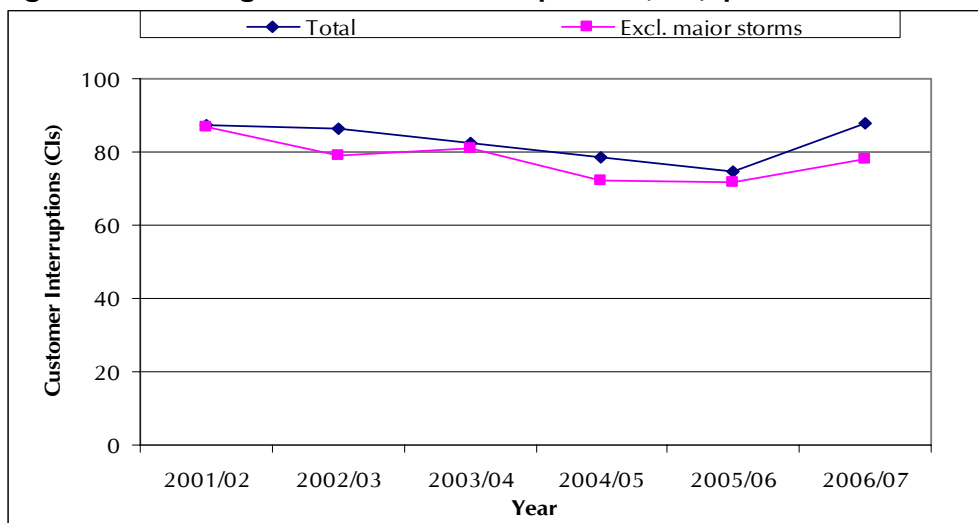
<sup>3</sup> Unless the second or subsequent power cuts occurred more than 3 hours after all customers in the first power cut were restored, or after 18 hours in the case of temporary restoration.

## 4. Quality of Service Performance in GB

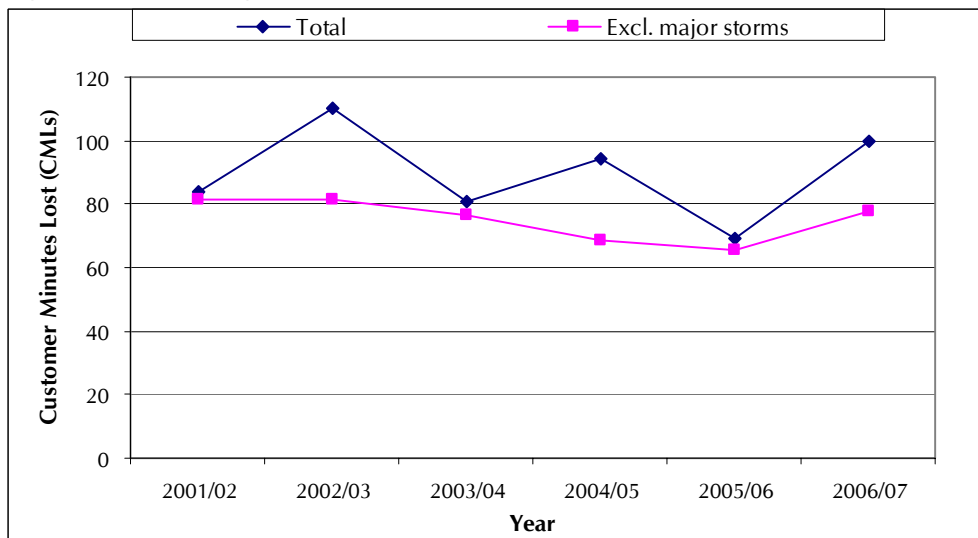
This chapter presents trends in GB customer interruption and customer minutes lost performance over the past six years. We set out the performance in 2006/07 of the 14 distribution companies against their 2006/07 incentive scheme targets, disaggregated performance against benchmarks and short interruptions in 2006/07.

### Trends in GB Performance 2001/02 to 2006/07: total and excluding major storms

**Figure 4.1 Average Customer Interruptions (CIs) per 100 customers**



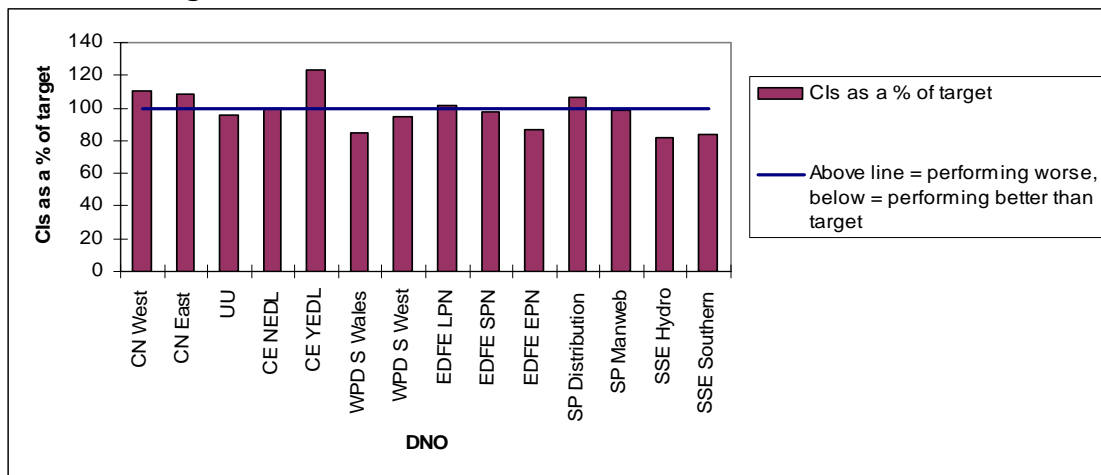
**Figure 4.2 Average Customer Minutes Lost (CMLs) per 100 customers**



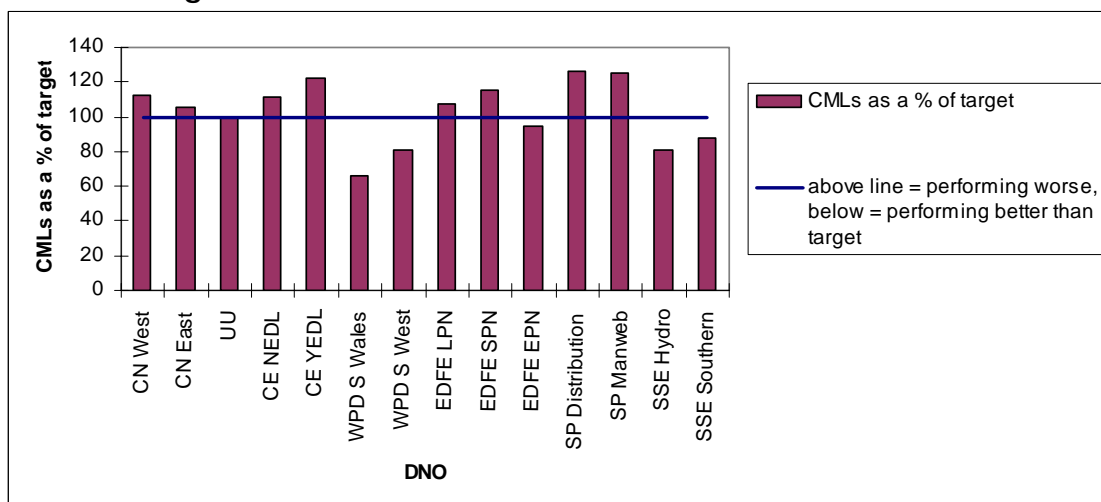
4.1. Figures 4.1 and 4.2 show the average performance for Britain's distribution networks from 2001 onwards. As part of the Information and Incentive Project, more robust definitions and consistent reporting of interruptions data was introduced from April 2001. Historically data had been significantly under-reported. There has been a significant improvement in underlying performance for both the number and duration of interruptions. In a number of years, storms have impacted significantly on performance such as the October 2002 storms in 2002/03, the January 2005 storms in 2004/05 and the storms in December 2006 and January 2007 in 2006/07. In 2006/07 the underlying performance was also affected by the weather with many days seeing above average numbers of interruptions and customer minutes lost.

### 2006/07 Performance against Targets

**Figure 4.3 Customer Interruptions – 2006/07 Performance Relative to 2006/07 Target**



**Figure 4.4 Customer Minutes Lost – 2006/07 Performance Relative to 2006/07 Targets**



**4.2.** Figures 4.3 and 4.4 show DNOs' 2006/07 performance relative to their targets for the year.

**4.3.** In measuring DNOs' performance against the targets, Ofgem recognises that the number of interruptions arising on other networks (e.g. transmission networks), are outside the DNO's control. They are therefore excluded. However, a DNO can take appropriate actions to mitigate the duration of these interruptions. 10 per cent of the duration of interruptions on other networks is therefore included in assessing performance against targets.

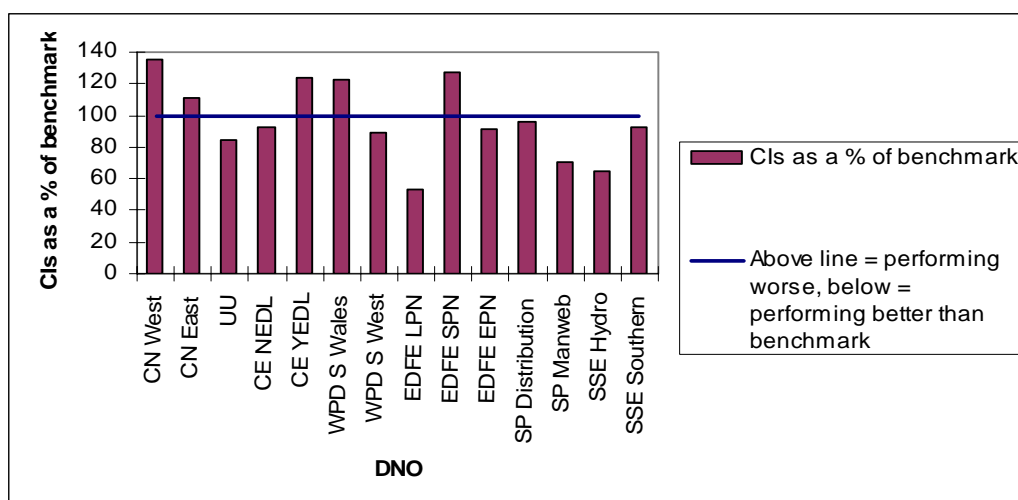
**4.4.** On the evidence of customer research carried out in the price control review, the weighting attached to planned/pre-arranged interruptions and minutes lost was reduced from 100% to 50% as customers were less inconvenienced when they had forewarning of an interruption.

**4.5.** DNOs may also claim an adjustment for events which they believe were exceptional and had a significant impact on their performance. Ofgem will only make such an adjustment if the event is found to be exceptional.

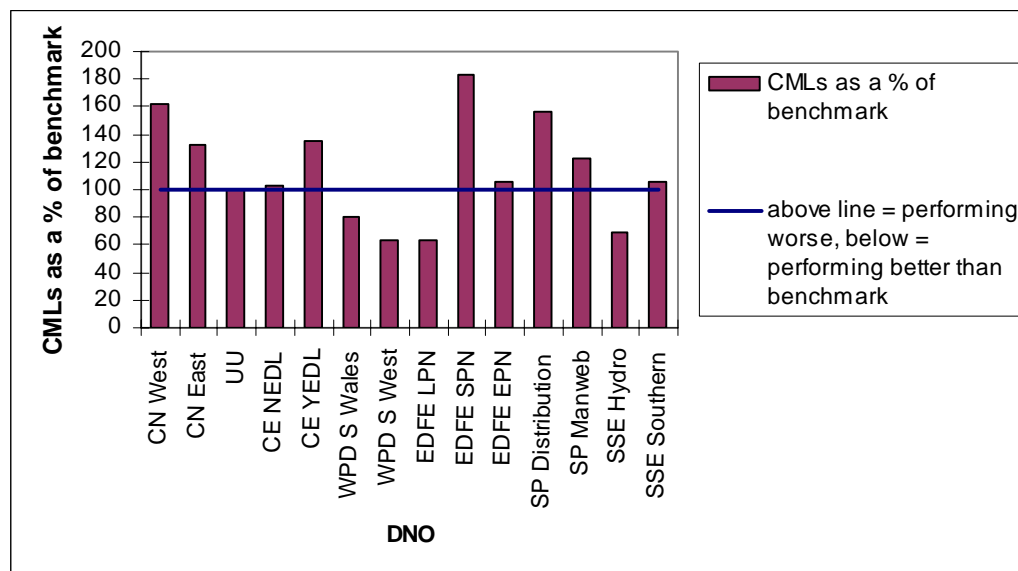
**4.6.** For severe weather exceptional events, Ofgem will exclude the full impact of the event on customer interruptions and customer minutes lost. For one-off exceptional events, only those customer interruptions and/or those customer minutes lost exceeding the relevant CI and CML thresholds are eligible for exclusion. The size of the adjustment(s) also depend on whether the DNO took all reasonable steps to prevent the incident occurring and took all reasonable steps to restore customers in an efficient and effective manner.

## 2006/07 HV Performance against Average HV Benchmarks

**Figure 4.5 HV unplanned Customer Interruptions - 2006/07 Performance Relative to 2006/07 Benchmarks**



**Figure 4.6 HV unplanned Customer Minutes Lost - 2006/07 Performance Relative to 2006/07 Benchmarks**



**4.7.** Although the number of unplanned power cuts per 100 customers (CIs) and the number of customer minutes lost per customer (CMLs) take account of different customer numbers in each DNO, performance still varies significantly. The difference in performance can be as a result of a number of different factors such as;

- Inherited Differences - differences in the business inherited at privatisation such as network design and configuration;
- Inherent Differences - differences in the area in which the DNO operates which may include topographic factors such as length of network, customers' location and customer density etc;
- Exceptional Events - events outside the control of the DNO which can affect performance such as severe weather;
- Incurred Differences - differences that are a direct result of management decisions including the strategy taken for operating and maintaining the network

**4.8.** In order to take these factors into account when comparing quality of supply, Ofgem jointly with the Quality of Service Working Group, has developed a method for calculating benchmarks for CIs and CMLs taking into account inherited and inherent differences in the DNOs' networks (and excluding exceptional events). In essence this method involves looking at physically similar parts of networks and comparing performance at a more disaggregated level.

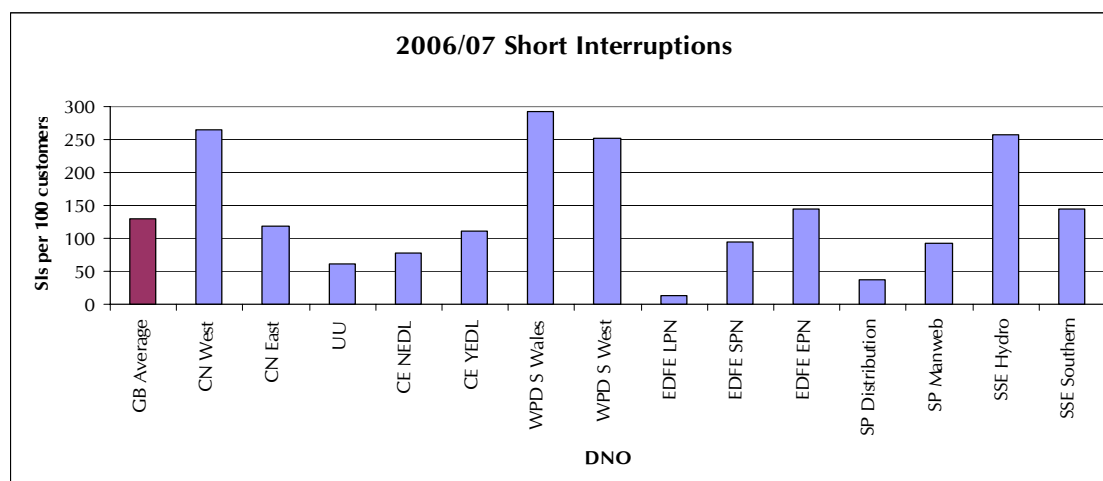
**4.9.** Each DNO's performance is compared to their benchmark (actual performance divided by benchmark, expressed as a percentage). As the benchmarks are calculated based on similar groups of circuits and take into account DNOs' own customer numbers per circuit and average circuit length, this method provides a more robust basis for comparing quality of supply performance.

**4.10.** Care should be taken in interpreting the results as there are a range of factors that may explain the remaining performance gaps. The 2004/05 Quality of Service report contains a more detailed explanation of the process.

**4.11.** Restoration of supplies in remote areas and those with low population density can sometimes be delayed by difficult terrain and longer distances between DNO depots and customers and similarly in urban areas, the time taken to reach a fault may be affected by traffic congestion. DNOs are typically tackling these issues by investing in protection, network automation, remote control, reorganisation of fault teams to locate them closer to the areas they serve and more recently, satellite navigation and in some cases mobile tracking for restoration crews.

## 2006/07 Short Interruptions Performance

**Figure 4.7 Short Interruptions per 100 Connected Customers 2006/07**



**4.12.** The average number of short interruptions per 100 connected customers across Great Britain was 129. Figure 4.7 shows the performance of each of the DNOs. CN West, CE NEDL, SP Manweb and SSE Hydro all reported significantly above the GB average with UU and EDFE SPN also above the average but not significantly so. The remaining eight DNOs, CN East, CE YEDL, WPD S Wales, WPD S West, EDFE LPN, EDFE EPN, SP Distribution and SSE Southern recorded scores below the GB average.

**4.13.** Short interruptions are brought about by operations of the network designed to reduce the length of interruptions. The majority of short interruptions are associated with automatic restoration schemes, such as:

- pole mounted auto reclosers;
- ground mounted auto-reclosers;
- rural automation schemes; and
- load transfer schemes.

## 5. 2006/07 Quality and Speed of Telephone Response Performance

### 2006/07 Quality of Telephone Response Performance

**5.1.** Each of the DNOs is assessed on a customer satisfaction with the quality of telephone response through a customer survey carried out on a monthly basis. Performance is assessed across five key areas:

- The politeness of the members of staff;
- Their willingness to help;
- The accuracy of the information given (if information was given);
- The usefulness of the information given (if information was given); and
- The speed of telephone response.

**5.2.** Customers are asked to score DNOs on a scale of 1 (very dissatisfied) to 5 (very satisfied) based on their individual experiences of the telephone conversation they had with the DNO during a power loss. An overall performance score is calculated for each DNO.

**5.3.** DNOs are only subject to a sliding-scale penalty if their annual mean performance deteriorates below 4.1 (the minimum average performance level at the time of revising the scheme). A DNO will be liable for the full penalty of 0.25 per cent of revenue if its annual mean score falls below 3.6. There is a small reward of 0.05 per cent of revenue for those DNOs with annual mean scores equal to or greater than 4.5. This revised and simplified structure ensures that DNOs are incentivised to maintain a high level of performance with regard to telephony and that exceptional performance is rewarded.

**5.4.** Table 5.1 below shows the combined mean scores for the period from 1 April 2006 until 31 March 2007 for each DNO for the five assessed attributes listed above. The performance scores and rankings reported here are based on the mean annual scores.

**5.5.** The overall assessed mean score for the 12 month period was 4.30. The highest score was recorded for SSE Hydro (4.54) along with WPD S Wales (4.5). They were the only DNOs to receive a reward for 2006/07. Five DNOs performed below the overall mean for 2006/07 but above the penalty threshold of 4.1. SP Distribution was the only DNO who recorded an overall mean below the penalty threshold and as such was penalised.

**Table 5.1 2006/07 Overall Performance Scores (All Assessed Attributes)**

Ranking 06/07 (05/06)	DNO	06/07 Scores	Rewards/Penalties
	<b>Ind. Mean 04/05</b>	<b>4.35</b>	
	<b>Ind. Mean 05/06</b>	<b>4.34</b>	
	<b>Ind. Mean 06/07</b>	<b>4.30</b>	
1(1)	SSE Hydro	4.54	£ 90,500
2(2)	WPD S Wales	4.50	£ 77,650
3(3)	CE NEDL	4.44	£ -
4(4)	WPD S West	4.40	£ -
5(9)	CE YEDL	4.38	£ -
6(7)	CN East	4.37	£ -
7(5)	SSE Southern	4.35	£ -
8(6)	CN West	4.33	£ -
9(8)	EDFE EPN	4.25	£ -
10(11)	EDFE SPN	4.18	£ -
10(12)	SP Manweb	4.18	£ -
12(13)	EDFE LPN	4.17	£ -
13(10)	UU	4.13	£ -
14(14)	SP Distribution	4.00	-£ 157,150

### 2006/07 Speed of Telephone Response Performance

**5.6.** DNOs are required to report to Ofgem each month their performance on the speed of telephone response by an agent, once a customer has decided to speak to an agent (for more information see 2004/05 QoS report).

**5.7.** Table 5.2 below shows the average speed of response (in seconds) for the period from 1 April 2006 until 31 March 2007 for each DNO split by telephony system.

**Table 5.2 2006/07 Average Speed of Telephone Response by Telephony System**

Hold telephony system		Redial telephony system	
DNO	Response time (s)	DNO	Response time (s)
WPD S Wales	2.2	CE YEDL	23.3
WPD S West	2.8	UU	73.8
SSE Hydro	10.0	CN West	80.8
SSE Southern	10.5	CN East	81.3
SP Manweb	20.5	EDFE EPN	81.7
SP Distribution	20.5	EDFE SPN	82.9
CE NEDL	24.6	EDFE LPN	93.3
<b>Average</b>	<b>13.0</b>	<b>Average</b>	<b>73.9</b>

## 6. Customer Service Reward Scheme

2006/07 was the second year in which this new addition to the quality of service incentives package was evaluated. The aim of the customer reward scheme is to encourage better service for consumers in areas that cannot be easily measured or incentivised through more mechanistic regimes.

**6.1.** The scheme aims to achieve this by recognising leading performance and beacons of excellence within the industry and driving innovation and creativity through the promotion of best practice.

**6.2.** The scheme is designed to reward the performance of those DNOs which best serve the interests of customers across the chosen categories throughout the year, particularly those DNOs which exceed their licence obligations and have a holistic approach to these areas embedded in broader business processes, not necessarily 'flagship' projects or one-off initiatives.

### Format for the scheme

**6.3.** The scheme has a total annual reward of £1 million available across all DNOs and in 2006/07 covered the following two areas:

- |    |   |          |
|----|---|----------|
| 1. | Priority Customer Care Initiatives:                 | £600,000 |
| 2. | Wider Communication Strategies implemented by DNOs: | £400,000 |

**6.4.** As in 2005/06, a greater focus was given to the 'priority customer care initiatives' category as this was identified as an area with many challenges and where much improvement could be made. In future years, Ofgem will decide the scope of the categories and how the reward is weighted, on recommendation from the Panel and after consultation with stakeholders.

### Awards for 2006/07

#### Priority Customer Care Initiatives (£600,000)

**6.5.** A reward of £600,000 was available under this category. CE Electric and EDF Energy are each to receive £300,000 to reward their work exceeding their obligations to support vulnerable customers. These companies were chosen in recognition of the progress they have made since the 2005/06 scheme and because they demonstrated a creative, proactive and holistic approach to supporting vulnerable customers, embedded in their broader business processes.

**6.6.** Both companies received praise for being able to demonstrate the impact of their initiatives on customers and for recognising the need to serve customers that may be temporarily vulnerable. CE Electric was congratulated for its treatment of disabled customers and for senior management involvement in its priority customer

care programme. EDF Energy was also congratulated for its talking newspapers and hospital radio initiatives. Both companies had demonstrated a wider business commitment to supporting vulnerable customers.

**Wider Communication Strategies implemented by DNOs (£400,000)**

A reward of £400,000 was available under this category. CE Electric is to receive this reward in whole for the breadth of its initiatives, particularly for its community work with Post Offices, MPs and the media. CE Electric also received praise for its efforts to obtain the RNID charter mark which is an organisation wide gold strand.

**6.7.** The 2006/07 submissions can be viewed on the Ofgem website. Other companies were also highly commended by the panel in both categories.

## 7. Ongoing Work

Whilst the main quality of service incentive framework has been established for DPCR4, Ofgem continues to review the incentives in place. Ofgem and the industry are also beginning to plan the work for the fifth electricity distribution price control review (DPCR5).

**7.1.** Preliminary work for the fifth price control review has begun in a number of areas. An initial consultation letter was issued in May 2007 seeking views on the general approach and key issues for the review. This letter can be found on the Ofgem website at the following link:

<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Documents1/DPCR5%20consultation%20letter%20issued%20170507.pdf>

**7.2.** Ofgem holds regular Quality of Service Working Group meetings with the DNOs and BERR (Business Enterprise Regulatory Reform) discussing topics such as quality of service benchmarking, customer service reward scheme and the interruptions audit. This group is already looking at some of the key quality of service areas likely to be covered by the forthcoming price control review.

**7.3.** We are currently undertaking a programme of consumer research into expectations of quality of service and willingness to pay for improvements. The results of the research will be available in May 2008 and will inform the quality of service measures and incentives for DPCR5.

**7.4.** We are also monitoring DNO uptake and progress of the DPCR4 mechanism enabling the undergrounding of overhead lines in Areas of Outstanding Natural Beauty and National Parks. We intend to review this mechanism for DPCR5 in light of the results from the programme of consumer research. To date a number of DNOs have undertaken undergrounding projects making use of the DPCR4 mechanism. Further details can be found at;

<http://www.ofgem.gov.uk/NETWORKS/ELECDIST/QUALOFSERV/Pages/QualofServ.aspx>

## Appendices

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## Appendix 1 - DNO Summaries

This appendix contains pages on the performance of each of the 14 DNOs. It sets out their:

- 2006/07 performance for the number and duration of interruptions;
- 2006/07 targets;
- 2006/07 quality of telephone response performance;
- 2006/07 rewards/penalties;
- 2006/07 unplanned performance against benchmarks; and
- HV & LV overhead and underground fault rates per 100km of circuits.

**1.1.** The unplanned performance used in the disaggregation and benchmarking analysis is based on disaggregated performance with a different treatment for exceptional events. Therefore, these figures may differ from performance reported elsewhere.

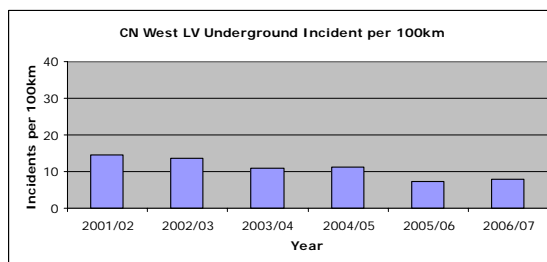
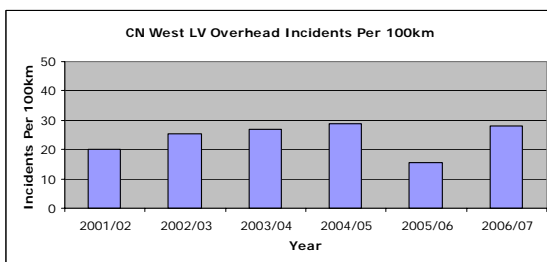
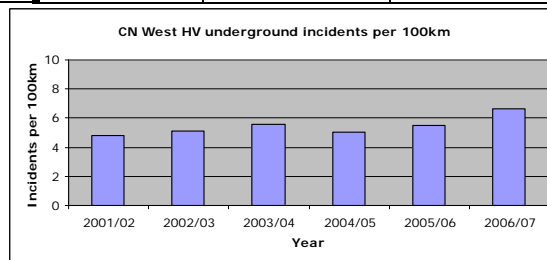
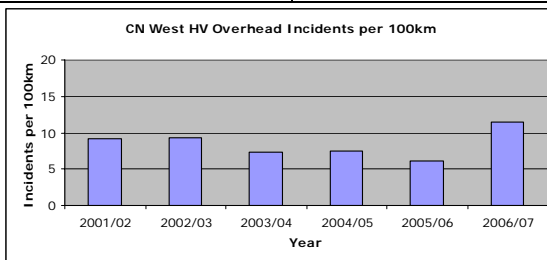
**1.2.** Due to revised reporting requirements set out in the Quality of Service Regulatory Instructions and Guidance Version 5, DNOs now provide a more detailed breakdown of medium term performance information. To provide a track record of information going forward for assessing reliability, DNOs were required to provide historical information according to the revised classifications for the years 2001/02, 2002/03, 2003/04 and with 2005/06 data submissions. The fault rate charts in this report therefore, cover the years from 2001/02 onwards.

**1.3.** In addition each DNO has provided commentary on its 2006/07 performance.

**CN West – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	119.3	110.7	81	63
Target/benchmark	107.8	98.5	60	39

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.33	4.30	0	-1.41	-2.03

**Commentary provided by CN West**

Central Networks continued to target improvements to quality of supply during 2006/7 but progress in this area was masked by several storms.

Unlike the benign conditions of the previous year, severe weather affected the region on a number of occasions and for extended periods of time. Lightning storm activity during July and August caused supply interruptions across the region, though the individual events did not reach exceptional event exclusion thresholds. Severe winds in December and January further contributed to the recorded interruptions. Whilst Central Networks minimised the impact of these storms by deploying its emergency plans, the effect of both the lightning and wind events is clearly demonstrated by the increase in overhead line fault rates.

Global metal price increases appear to be driving network theft and damage activity in both rural and urban areas. In one particular incident, a cable bridge was destroyed by fire and resulted in damage to 20 high-voltage circuits and a major supply interruption near the centre of Birmingham. Central Networks staff delivered an exceptional response to this major event.

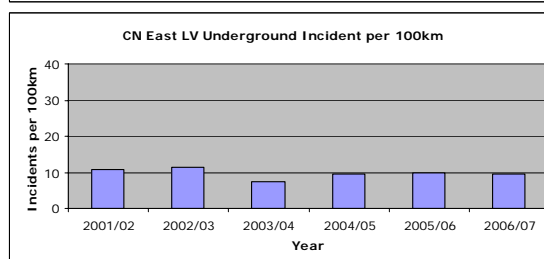
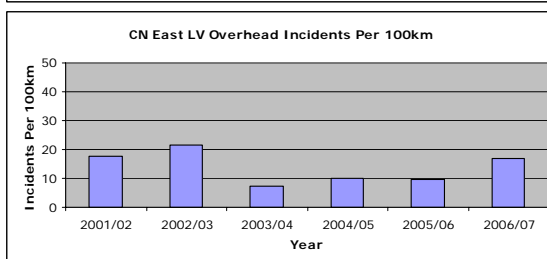
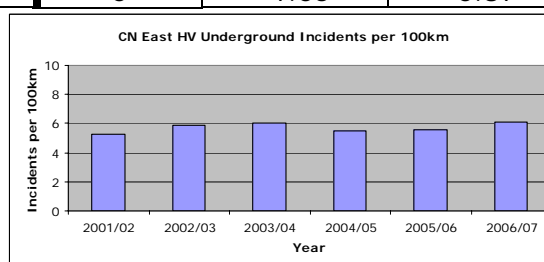
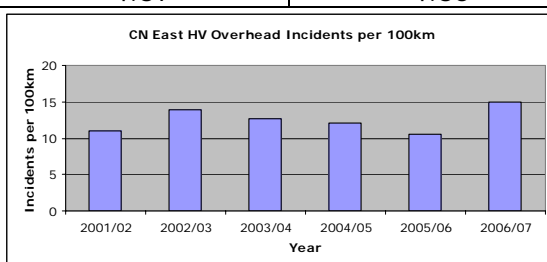
Throughout the year the company continued to invest in network replacement and refurbishment programmes to reduce fault rates, including the replacement of less reliable 'small cross-section' overhead lines and the targeted replacement of low voltage 'Consac' underground cable. This was supplemented by the installation of protection and automation technology which reduces the numbers of customers affected by faults or restores supplies more quickly through remote control operations.

Central Networks is determined to improve customer service and will continue to invest to maintain the underlying reliability of the network and develop operational incident response to further reduce the number and duration of interruptions.

**CN East – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
			HV unplanned CI	HV unplanned CML
Performance	83.3	80.8	61	49
Target/benchmark	77.5	76.7	55	37

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.37	4.30	0	-1.05	-0.87

**Commentary provided by CN East**

Central Networks continued to target improvements to quality of supply during 2006/7, but progress in this area was masked by several storms.

Unlike the benign conditions of the previous year, severe weather affected the region on a number of occasions and for extended periods of time. Lightning storm activity during July and August caused supply interruptions across the region, though some of the individual events did not reach exceptional event exclusion thresholds. Severe winds in December and January further contributed to the recorded interruptions. Whilst Central Networks minimised the impact of these storms by deploying its emergency plans, the effect of both the lightning and wind events is clearly demonstrated by the increase in overhead line fault rates.

Global metal price increases appear to be driving network theft and damage activity in both rural and urban areas, with earthing systems being particularly targeted. Safety considerations have required some sites to be switched out with a consequential impact on network performance.

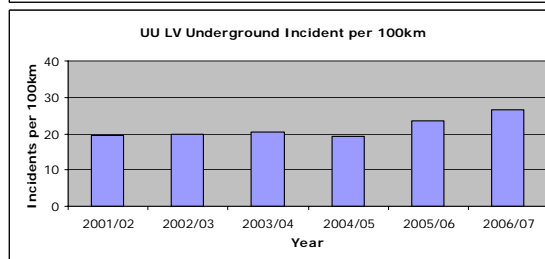
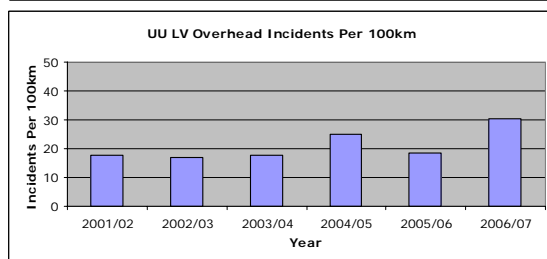
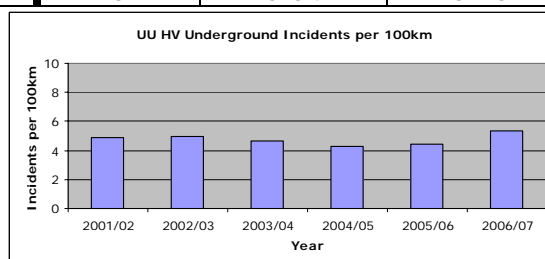
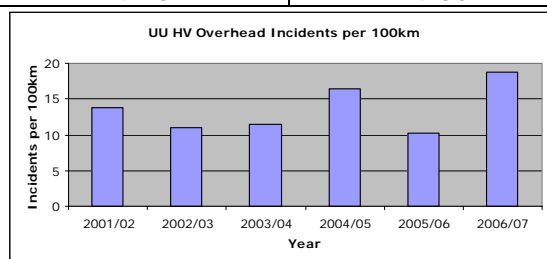
Throughout the year the company continued to invest in the installation of both rural and urban protection and automation technology which reduces the numbers of customers affected by faults or restores supplies more quickly through remote control operations.

Central Networks is determined to improve customer service and will continue to invest to maintain the underlying reliability of the network and develop operational incident response to further reduce the number and duration of interruptions.

**United Utilities – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	54.4	57.7	38	29
Target/benchmark	57.1	58.1	45	29

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.13	4.30	0	0.54	0.10

**Commentary provided by United Utilities**

A primary objective of our asset management strategy is to maintain stability of asset fault rates despite an ageing asset base. We continue to maintain network investment focussing particularly on deteriorating or poor performing assets. Across the high and low voltage networks five year fault rates are generally stable, although in 2006/07 we have seen a small increase in fault rates.

Whilst aiming to maintain stable asset fault rates we are continuing to focus on minimising the customer service impact by seeking to reduce the number and duration of interruptions of supply to our customers. We have continued our programme of installing additional switching devices on high risk circuits and are continuing to extend the use of remote control and automation on the high voltage system. We continue to monitor and review our operational practices, including despatch of key personnel to affected parts of the network and an appropriate use of mobile generators.

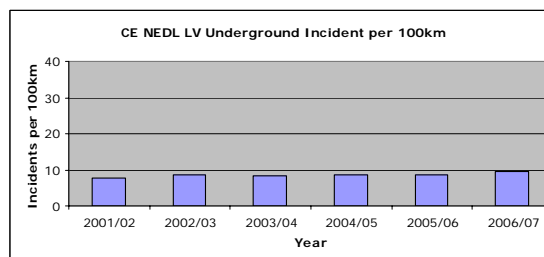
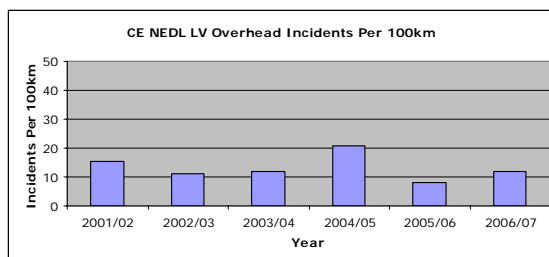
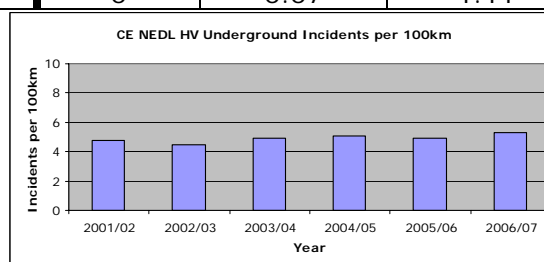
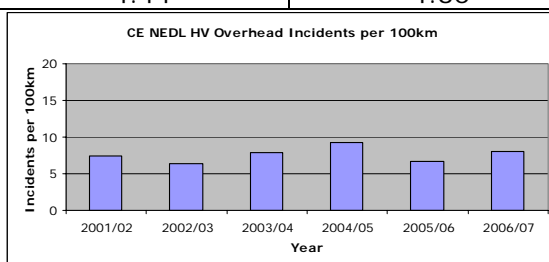
It should be noted our annual performance for customer interruptions and customer minutes lost may be influenced by annual weather conditions and may also be disproportionately affected by a small number of significant incidents, particularly on the extra high voltage network. In 2006/07 average customer interruptions were higher than the previous year. This was mainly due to a small number of significant incidents affecting our overall performance.

United Utilities is committed to providing a high quality and efficient service to its customers. Future investment will continue to be focused on meeting growing customer demands whilst maintaining a high level of network reliability.

**NEDL – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	74.0	78.2	50	37
Target/benchmark	74.5	70.4	54	36

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.44	4.30	0	0.07	-1.11

**Commentary Provided by CE NEDL**

The NEDL network continues to perform relatively well and in 2006/7, despite a year of continuing poor weather, beat the CI and was close to the CML performance targets set by the regulator. We are particularly pleased that the average restoration time for HV faults has improved as a result of both operational and investment initiatives introduced by the company.

Although there were no major storms in 2006/7, it was disappointing that the continuous poor weather adversely affected the overhead line fault rates and the service delivered to rural customers. Overhead lines are now refurbished to a much more resilient specification that will provide, in the longer term, improved performance in poor weather conditions.

A disaggregation process has been introduced to take into account some of the inherited and inherent differences in DNOs' networks so that more meaningful comparisons can be made between the performances of DNOs. While not fully accounting for all the differences, the process is a step forward on where we were previously. The results of this process show that NEDL's network performs well against the interruption (CI) benchmark and is close to the restoration (CML) benchmark.

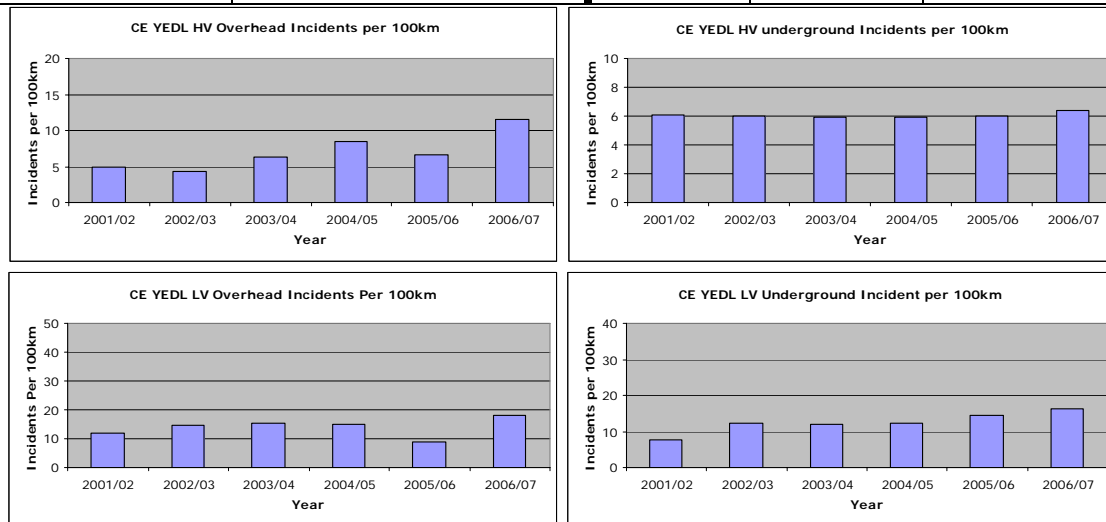
As a result of the output of the disaggregation process, we had moved the focus of our improvement initiatives towards restoration time. In particular we have already introduced a "Power in an hour" initiative which aims to restore as many customers as possible within an hour of the start of an interruption and are using the latest mobile phone technology to locate and contact the nearest persons able to deal with faults. In addition to this we are continuing with our investments to expand the remote control of the distribution network. In 2006/7, despite the poor weather, the improvements seen in HV restoration times in 2005/6 have been maintained with average restoration time for HV faults now down to 74 minutes. Further improvements, though not at the same rate, are expected in future years.

NEDL has put a great deal of effort into improving both the speed and usefulness of the information provided to customers through its call centre. This is reflected in the figures on telephony performance. NEDL aims to maintain this good performance going forward.

**YEDL – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	84.8	81.7	58	42
Target/benchmark	68.6	66.8	47	31

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.38	4.30	0	-2.52	-2.98

**Commentary provided by YEDL**

During 2006/7 the YEDL network was badly affected by continuing poor weather, which resulted in a 75% increase in the number of faults on HV overhead lines compared with 2005/6 and a doubling of faults on LV overhead lines. This position is reflected in the higher than normal fault rates seen for both HV and LV overhead lines. The poor weather cumulated in a severe storm on 18 January that resulted in 153 HV/EHV faults, 239 LV faults, and nearly 100,000 customers losing supply. Despite the extent of the damage caused by this storm all but 372 customers were restored within 48 hours.

Although the poor weather caused the company to fail both the CI and CML targets set by the regulator, we are still pleased that the average restoration time for HV faults, the performance factor that is more under the company's control has improved as a result of both operational and investment initiatives introduced by the company.

A disaggregation process has been introduced to take into account some of the inherited and inherent differences in DNOs' networks so that more meaningful comparisons can be made between the performances of DNOs. We are disappointed that the continuing poor weather conditions in 2006/07 meant that YEDL's network did not perform well against either the interruption (CI) benchmark or the restoration (CML) benchmark.

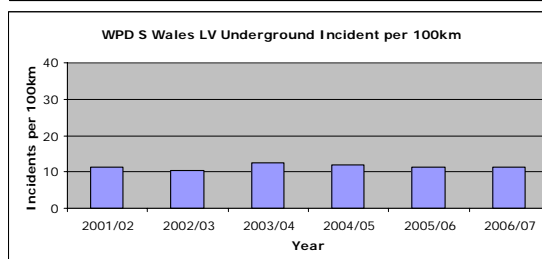
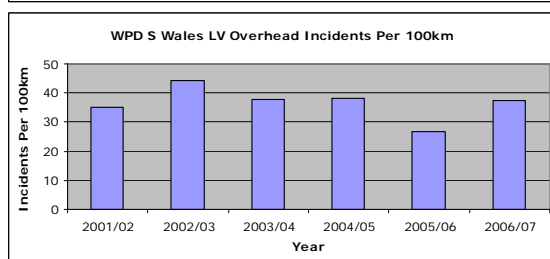
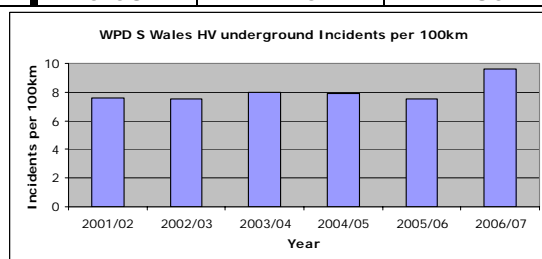
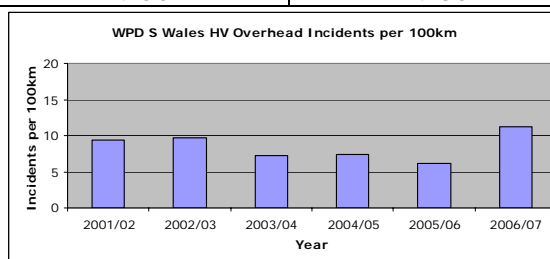
As a result of the output of the disaggregation process, we had moved the focus of our improvement initiatives towards restoration time. In particular we have already introduced a "Power in an hour" initiative which aims to restore as many customers as possible within an hour of the start of an interruption and are using the latest mobile phone technology to locate and contact the nearest persons able to deal with faults. In addition to this we are continuing with our investments to expand the remote control of the distribution network. In 2006/07, despite the poor weather, the improvements seen in HV restoration times in 2005/06 have been maintained with average restoration time for HV faults now down to 72 minutes. Further improvements, though not at the same rate, are expected in future years.

YEDL has put a great deal of effort into improving both the speed and usefulness of the information provided to customers through its call centre. This is reflected in the figures on telephony performance. YEDL aims to maintain this good performance going forward.

### WPD South Wales – Quality of service and network performance for 2006/07

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	83.4	47.6	69	33
Target/benchmark	98.2	72.2	56	41

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.50	4.30	0.08	1.15	2.80



### Commentary provided by WPD South Wales

Western Power Distribution (WPD) South Wales delivers electricity supplies to customers in the south west of Wales including Cardiff and Swansea, the South Wales valleys, Carmarthenshire, Pembrokeshire and parts of Ceredigion in West Wales and Powys in Mid Wales.

In 2006/07 our performance was 83.4 interruptions per 100 connected customers (CI) and 47.6 customer minutes lost (CML). The company outperformed Ofgem's 2006/07 targets for both customer interruption and customer minutes by 15% and 34% respectively.

Much of our continued improvement has been due to our focus on operational response via our "Target 60" initiative to restore customers within one hour of a fault occurring, together with the delivery of an investment programme targeted at reducing the impact of HV faults through the use of remote control and automation technology. The latter has enabled us to restore supplies within three minutes on those circuits where automation has been commissioned.

The weather is memorable because of the gale force winds and flooding which affected the entire UK during the winter months and this received widespread press and media coverage at the time.

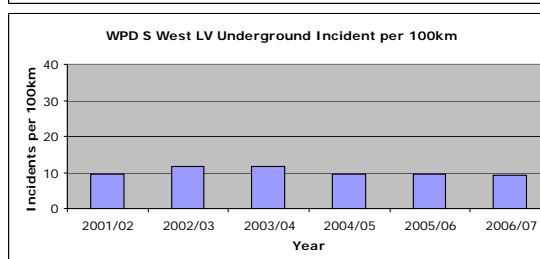
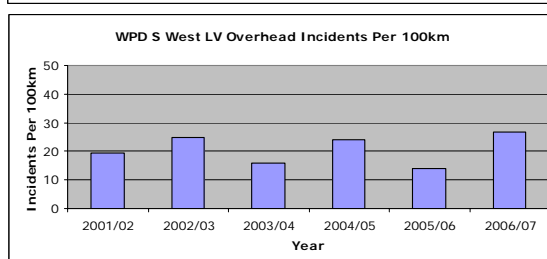
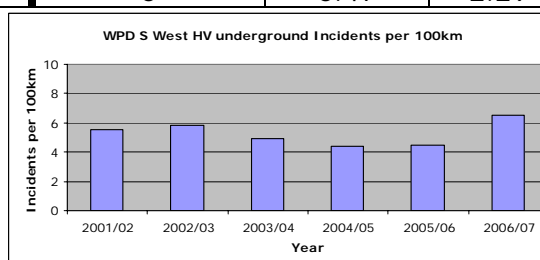
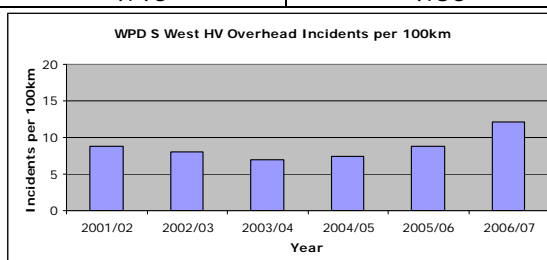
As a result, a total of four exceptional events were reported to Ofgem during the year. Ofgem have verified that we had taken all reasonably practicable steps to safeguard our overhead line network and that we did all we could in response to these events to restore customers in an efficient and effective manner. The impact of these events is therefore excluded from our IIS performance.

We are proud that WPD has maintained its high score in quality of telephone response surveys. Our initiative to proactively contact vulnerable customers to offer support during an outage has been well received and using this together with other direct feedback from our customers has enabled us to introduce further initiatives that will hopefully further improve our performance in this area.

**WPD South West – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	80.3	50.1	51	27
Target/benchmark	84.5	62.2	57	43

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.40	4.30	0	0.47	2.29

**Commentary provided by WPD South West**

Western Power Distribution (WPD) South West delivers electricity supplies to customers in the south west of England incorporating the major towns and cities of Bristol, Taunton, Exeter and Plymouth. We serve all of the counties of Somerset, Devon and Cornwall and parts of Dorset and South Gloucestershire.

In 2006/07 our performance was 80.3 interruptions per 100 connected customers (CI) and 50.1 customer minutes lost (CML). The company outperformed Ofgem's 2006/07 targets for both customer interruption and customer minutes by 5% and 19% respectively.

Much of our continued improvement has been due to our focus on operational response via our "Target 60" initiative to restore customers within one hour of a fault occurring together with the delivery of an investment programme targeted at reducing the impact of HV faults through the use of remote control and automation technology. The latter has enabled us to restore supplies within three minutes on those circuits where automation has been commissioned.

The weather is memorable because of the gale force winds and flooding which affected the entire UK during the winter months and this received widespread press and media coverage at the time.

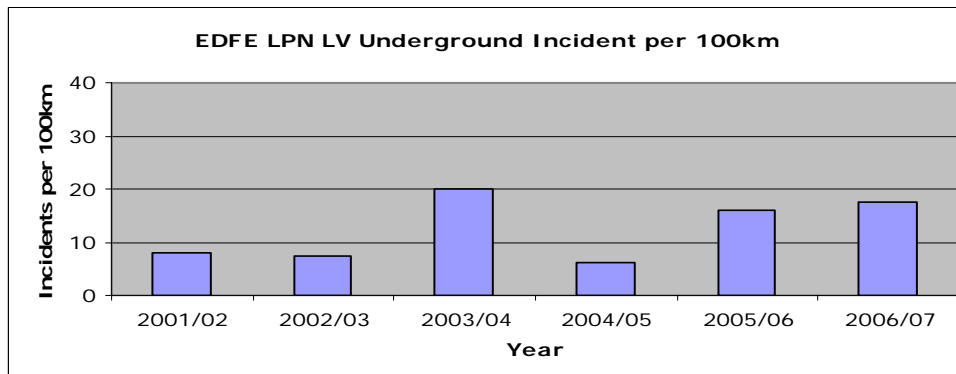
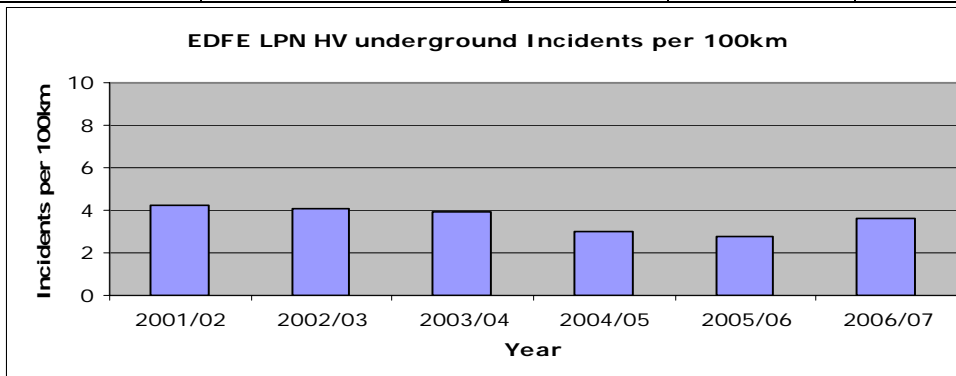
As a result, a total of five exceptional events were reported to Ofgem during the year. Ofgem have verified that we had taken all reasonably practicable steps to safeguard our overhead line network and that we did all we could in response to these events to restore customers in an efficient and effective manner. The impact of these events is therefore excluded from our IIS performance. There were a number of other lightning and wind events during the year which caused widespread disruption but these did not meet the exclusion threshold.

We are proud that WPD has maintained its high score in quality of telephone response surveys. Our initiative to proactively contact vulnerable customers to offer support during an outage has been well received and using this together with other direct feedback from our customers has enabled us to introduce further initiatives that will hopefully further improve our performance in this area.

**LPN – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	36.9	43.0	19	12
Target/benchmark	36.2	40.1	36	19

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.17	4.30	0	-0.23	-1.06

**Commentary provided by LPN**

We are pleased to report that customers in EDF Energy (LPN) plc distribution area continue to enjoy the most secure electricity supplies in the country despite a year that has seen a sharp increase in network incidents over the previous two years. With performance for 2006/07 being 36.9 interruptions per 100 connected customers (CI) and 43.0 customer minutes lost (CML) – just missing Ofgem's CI and CML target for the year.

In order to maintain the improvements in network performance achieved last year through our highly successful HV automation programme we continued to look for ways to improve performance. Currently we have circa 950 HV feeders automated resulting in a saving of 10 CI per year.

In 2006/07 EDF Energy continued its work to improve the service it provides to vulnerable customers and for a second year in a row, this was recognised by Ofgem when EDF Energy was rewarded under Ofgem's 2006/07 discretionary reward scheme.

In order for LPN to continue to meet its quality of supply targets set for 2005/10 we will:

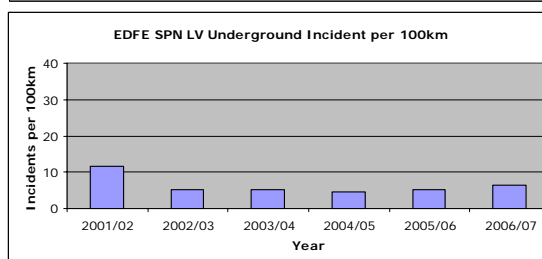
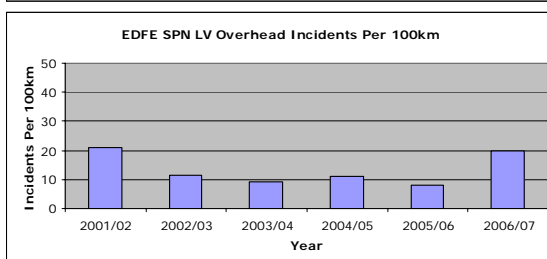
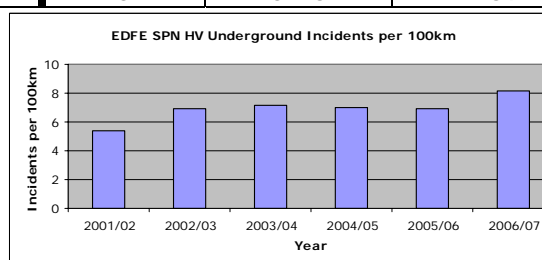
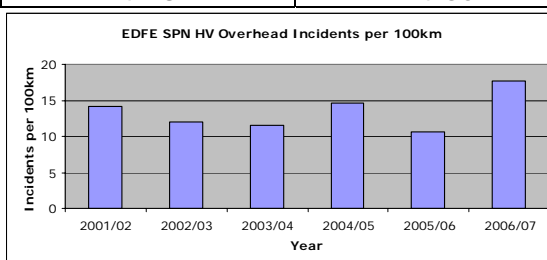
Deliver improved performance to HV remote control and automation.

Improve the performance of our LV network through the removal of poorly performing LV circuit breakers.

**SPN – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	85.9	88.7	69	64
Target/benchmark	88.5	77	54	35

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.18	4.30	0	0.26	-1.69

**Commentary provided by SPN**

We are pleased to report that customers in EDF Energy (SPN) plc distribution area continue to enjoy a good quality of supply, despite a year that has seen a sharp increase in network incidents over the previous two years. With performance for 2006/07 being 85.9 interruptions per 100 connected customers (CI) and 88.7 customer minutes lost (CML) – achieving Ofgem's CI target but missing the CML targets.

In order to build on the improvements in network performance achieved last year, we continued to invest in a range of initiatives. These included the refurbishment of poorly performing High and Low voltage overhead line networks and the application of HV automation, along with improved operational response procedures.

In 2006/07 EDF Energy continued its work to improve the service it provides to vulnerable customers and for a second year in a row, this was recognised by Ofgem when EDF Energy was rewarded under Ofgem's 2006/07 discretionary reward scheme.

In order for SPN to continue to meet its challenging quality of supply targets set for 2005/10, particularly with respect to CML's, we are implementing a number of performance improvement initiatives, including:

Delivery of enhanced HV remote control and automation, through the introduction of a new control system.

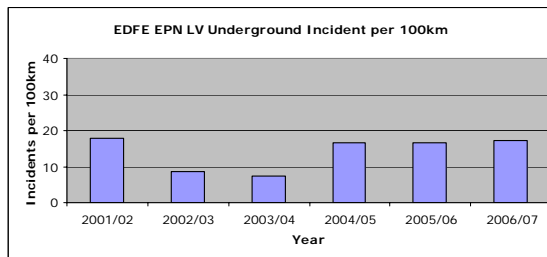
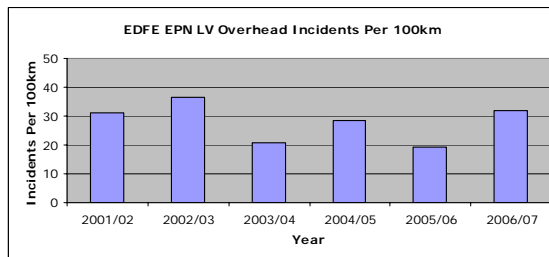
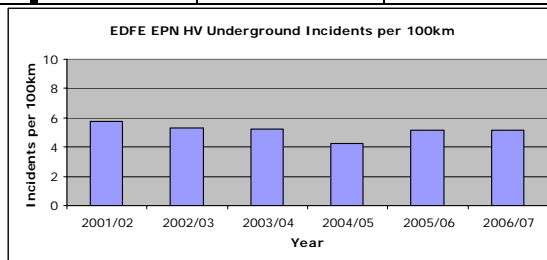
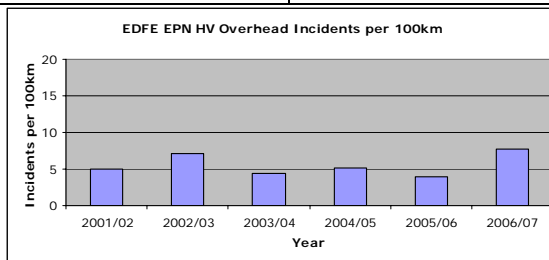
Introduction of remotely monitored fault passage indicators; and

Improved earth fault protection.

**EPN – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	77.2	68.4	52	42
Target/benchmark	88.8	72.2	57	40

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.25	4.30	0	1.93	1.01

**Commentary provided by EPN**

We are pleased to report that customers in EDF Energy (EPN) plc distribution area continue to enjoy a good quality of supply despite a year that has seen a sharp increase in network incidents over the previous two years. With performance for 2006/07 being 77.2 interruptions per 100 connected customers (CI) and 68.4 customer minutes lost (CML) – achieving both Ofgem's CI and CML targets.

In 2006/07 we continue to improve the performance of our highly successful High Voltage (HV) automation programme and currently we have circa 1800 HV feeders automated resulting in a saving of 11 CI. This year customers have also benefited from the improved restoration performance remote control and automation during severe weather events. With customers experiencing supply restoration performance during severe weather, 90% of customers are restored within three hours.

In 2006/07 EDF Energy continued its work to improve the service it provides to vulnerable customers. For a second year, this area of work was recognised by Ofgem when EDF Energy was rewarded under Ofgem's 2006/07 discretionary reward scheme.

In order to continue to meet our quality of supply targets set for 2005/10 we will be implementing a number of performance improvement initiatives, including;

Replacement of drop out expulsion fuses with auto-sectionalisers on HV overhead line networks;

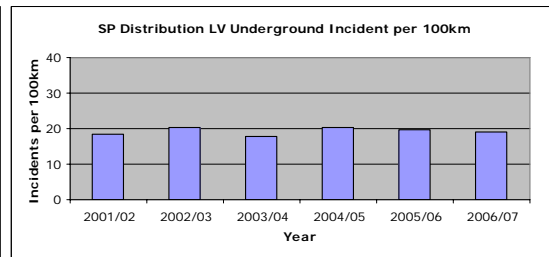
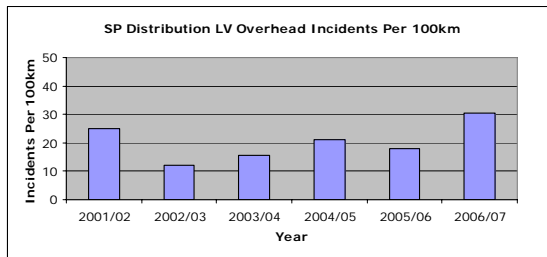
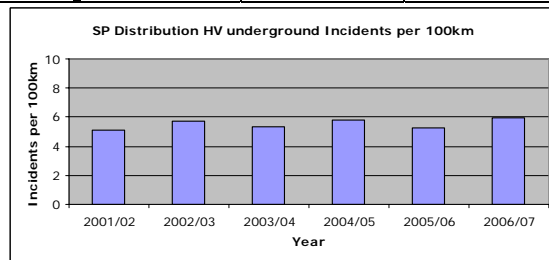
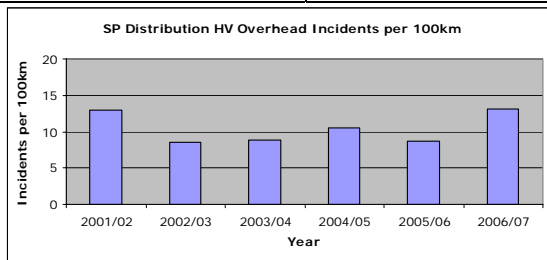
Introduction of remotely monitored fault passage indicators; and

Further improve the performance of remote control and automation on HV networks.

**SP Distribution – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and Benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	64.9	77.5	44	50
Target/benchmark	60.8	61.2	46	32

Quality of telephone response Performance		Rewards/Penalties (£ million)		
DNO Score	Industry Mean	Telephony	CI	CML
4.00	4.30	-0.16	-1.05	-5.07



**Commentary provided by SP Distribution**

SP Distribution, part of the ScottishPower Group, owns the distribution network which supplies electricity to over 1,950,000 customers in Southern and Central Scotland. The area comprises contrasting environments from the heavily populated areas of the Clyde and Forth valleys to the exposed, sparsely populated areas of the Borders and Dumfries and Galloway.

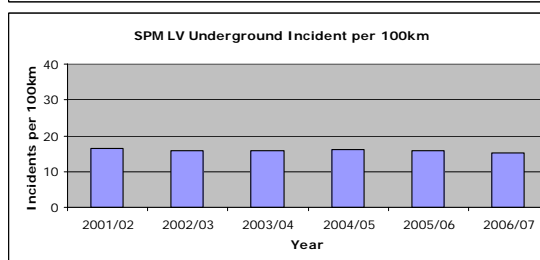
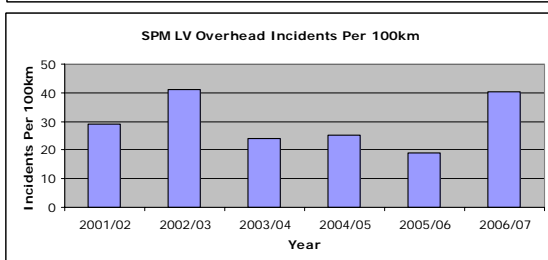
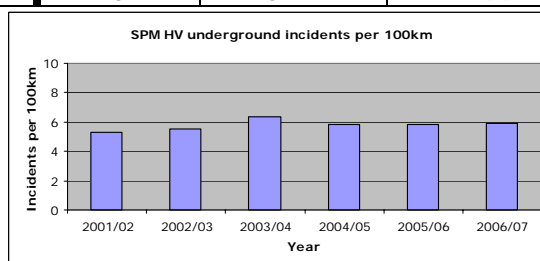
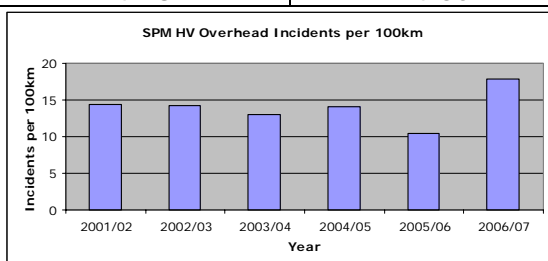
2006/07 was a challenging year for SP Distribution with a general increase in weather related events throughout the year including three exceptional weather events, as demonstrated by the significantly higher incident numbers on our overhead line network. Two of these severe weather events occurred within a fortnight of each other over December 2006 and January 2007 with each lasting for several days. These two periods of severe gales affected over 133,000 customers. The second of these events affected many of the same areas still recovering from the first period of severe gales.

SP Distribution continue to be committed to providing high levels of customer service and through 2006/07 continued to increase investment in the distribution network to remove unreliable assets from the system and increase the level of network control within the HV system. These schemes, which will be delivered over a number of years are aimed at increasing our ability to reduce the duration and impact of faults when they occur. We will continue to look for new opportunities and initiatives which will provide further improvements in the quality of service to our customers.

**SP Manweb – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	46.1	62.7	31	39
Target/benchmark	46.7	49.9	44	32

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.18	4.30	0	0.12	-2.99

**Commentary provided by SP Manweb**

SP Manweb, part of the ScottishPower Group owns the distribution network which supplies electricity to over 1,450,000 customers in Merseyside, north and mid Wales and parts of Cheshire, Shropshire and Staffordshire. The area comprises contrasting environments from the heavily populated area of Merseyside to the exposed, sparsely populated areas of Wales.

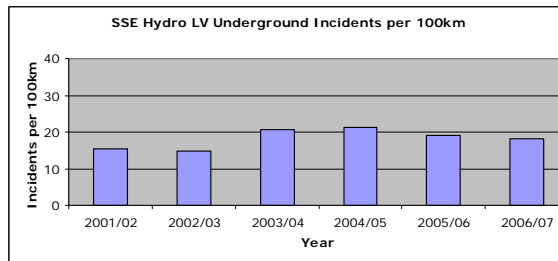
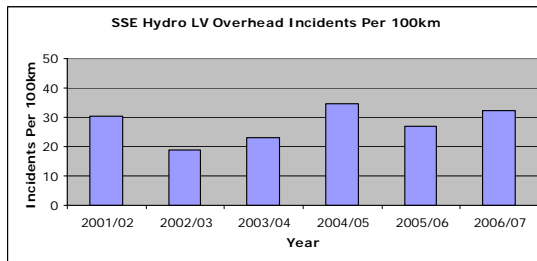
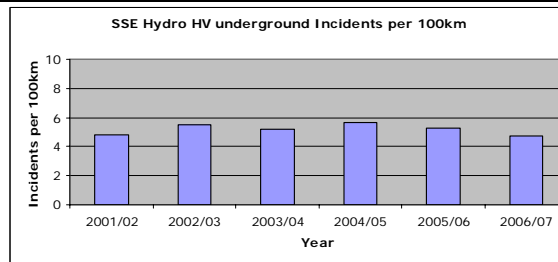
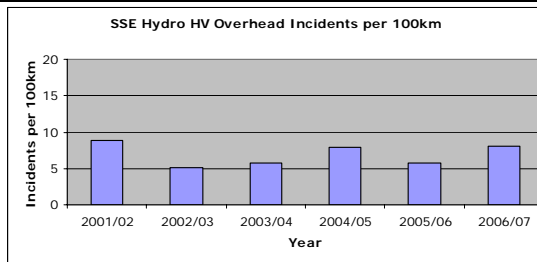
2006/07 was a challenging year for SP Manweb with a general increase in weather related events throughout the year including four exceptional weather events, as demonstrated by the significantly higher incident numbers on our overhead line network. Two of these severe weather events occurred within a week of each other in mid January. The largest of these severe weather events affected 97,000 customers over the entire SP Manweb distribution area on the 18th January 2007 and lasted for several days.

SP Manweb continue to be committed to providing high levels of customer service and through 2006/07 continued to increase investment in the distribution network to remove unreliable assets from the system and increase the level of network control within the HV system. These schemes, which will be delivered over a number of years are aimed at increasing our ability to reduce the duration and impact of faults when they occur. We will continue to look for new opportunities and initiatives which will provide further improvements in the quality of service to our customers.

**SSE Hydro – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	78.6	76.8	44	41
Target/benchmark	95.8	94.9	68	59

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.54	4.30	0.09	1.53	2.21

**Commentary provided by Hydro**

Scottish Hydro-Electric Power Distribution [SHEPD] delivers electricity supplies to customers in the north of Scotland, including the Western and Northern Isles, and some of the remotest areas in the country. Our territory covers 25% of the UK land mass and includes the major conurbations of Aberdeen, Inverness, Dundee and Perth.

The 'Hydro' system continues to perform extremely well with the 2006/07 performance close to our best ever. Although the winter months included unusually long and repetitive periods of high winds, these challenges were offset by our effective operating procedures and contingency plans, supported by the money we invested in the system which produced this excellent performance.

The unusual winter weather developed into severe gales and hurricane force winds, leading on four occasions to severe weather events. Wind speeds of up to 94mph were recorded during one event.

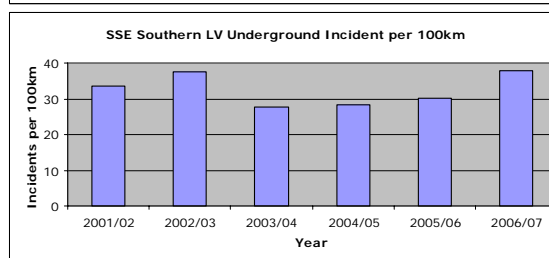
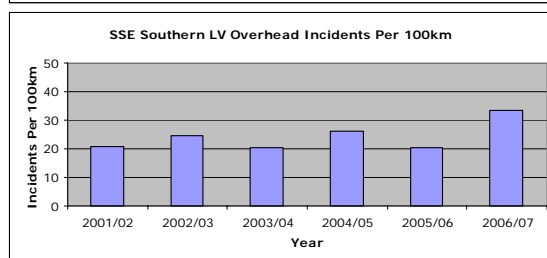
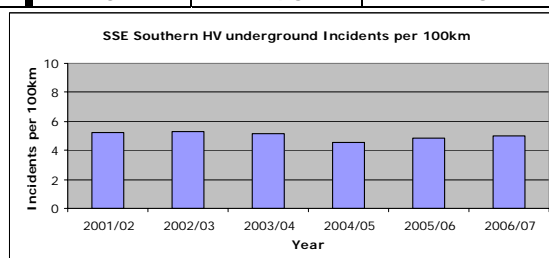
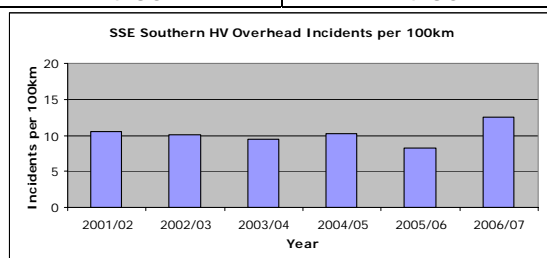
We increased investment in our network during 2006/7. In the year we continued to refurbish our overhead line network and installed more system automation. These actions improve general network resilience, reduce the number of customers affected by faults, and also reduce the duration of supply loss. A high proportion of our network now has the benefit of remotely controlled circuit breakers and switches, which enable blocks of customers to be restored more quickly, although these programmes now suffer from diminishing returns.

We are proud that 'Hydro' has continued to maintain first place for another year in the quality of telephone response surveys and we were pleased to receive a reward for the quality of our telephony service. Our teams are proud that their considerable effort has been recognised as they continue to deliver the highest level of customer service.

**SSE Southern – Quality of service and network performance for 2006/07**

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	HV unplanned CI	HV unplanned CML
Performance	75.3	70.9	49	37
Target/benchmark	90.1	80.5	53	35

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.35	4.30	0	2.96	2.67

**Commentary provided by Southern**

Southern Electric Power Distribution [SEPD] delivers electricity supplies to customers in central southern England, ranging from remote rural communities in Dorset, Wiltshire, Gloucestershire and Oxfordshire to dense conurbations including West London, Slough, Reading, Portsmouth, Southampton, Bournemouth and Swindon.

The 'Southern' system performance in 2006/07 was again the best ever, with reductions in both the number of interruptions experienced by customers and the duration of those interruptions, despite an increase in the overall number of faults. This excellent performance was largely due to our effective operating procedures and the money we invested in the system.

There were three severe weather events during the year. The most notable of these was the storm which occurred on the 18th of January 2007 with winds gusting to 80mph across most of the area. This was the worst storm since 1990 but due to our effective contingency plans and tireless effort by our staff, all customers were restored in just over three days. These severe weather events are reflected in the increased level of overhead faults in 2006/07 compared with previous years.

During 2006/07 we continued to invest in our network, delivering improvements to our overhead lines, underground cables and plant. These actions have contributed to the reduction in customers interrupted and customer minutes lost. A high proportion of our network now also has the benefit of remotely controlled circuit breakers and switches, which enable blocks of customers to be restored more quickly. We are enhancing these schemes with the addition of automatic switching to further improve restoration times.

'Southern' has continued to deliver high levels of customer service on telephony. During the year we focused on engaging proactively with our customers, in particular calling customers back during supply outages to confirm progress and to provide additional support where possible. As part of our business processes, we also proactively contact customers after a loss of supply event to learn where we can further improve our service.

## Appendix 2 – Data Tables

- **Table A2.1: Reported & Revised 2006/07 Customer Interruptions and Customer Minutes Lost**
- **Table A2.2: Short Interruptions 2006/07**
- **Table A2.3: Revised 2006/07 Customer Interruptions and Customer Minutes Lost: Split by Source**
- **Table A2.4: Revised 2006/07 Customer Interruptions and Customer Minutes Lost: Split by Voltage Level**
- **Table A2.5: Incentive Scheme: 2006/07 Customer Interruptions and Customer Minutes Lost as a Percentage of Respective 2006/07 Targets**
- **Table A2.6: Distribution Network Operator Information 2006/07**

Only Table A2.5 is shown in this report, however, all of the above tables are available in excel format on the Ofgem Quality of Service website.

**Table A2.5 Incentive Scheme: 2006/07 Customer Interruptions & Customer Minutes Lost as a Percentage of Respective 2006/07 Targets**

DNO	2006/07 CI Target	2006/07 Incentive Scheme CIs	2006/07 Incentive Scheme CIs as % of 2005/06 Target		2006/07 CML Target	2006/07 Incentive Scheme CMLs	2006/07 Incentive Scheme CMLs as a % of 2006/07 Target
CN West*	107.8	119.3	111		98.5	110.7	112
CN East*	77.5	83.8	108		76.7	80.8	105
UU*	57.1	54.4	95		58.1	57.7	99
CE NEDL*	74.5	74.0	99		70.4	78.2	111
CE YEDL*	68.6	84.8	124		66.8	81.7	122
WPD S Wales*	98.2	83.4	85		72.2	47.6	66
WPD S West*	84.5	80.3	95		62.2	50.1	81
EDFE LPN	36.2	36.9	102		40.1	43.0	107
EDFE SPN*	88.5	85.9	97		77.0	88.7	115
EDFE EPN*	88.8	77.2	87		72.2	68.4	95
SP Distribution*	60.8	64.9	107		61.2	77.5	127
SP Manweb*	46.7	46.1	99		49.9	62.7	126
SSE Hydro*	95.8	78.6	82		94.9	76.8	81
SSE Southern*	90.1	75.3	84		80.5	70.9	88
<b>GB average</b>		<b>75.2</b>				<b>72.4</b>	

\*Note: CN West's 2006/07 CI and CML figures were reduced as a result of 4 exceptional events  
 CN East's 2006/07 CI and CML figures were reduced as a result of 5 exceptional events  
 United Utilities' 2006/07 CI and CML figures were reduced as a result of 5 exceptional events  
 CE NEDL's 2006/07 CI and CML figures were reduced as a result of 5 exceptional events  
 CE YEDL's 2006/07 CI and CML figures were reduced as a result of 3 exceptional events  
 WPD S Wales 2006/07 CI and CML figures were reduced as a result of 4 exceptional events  
 WPD S West's 2006/07 CI and CML figures were reduced as a result of 5 exceptional events

EDF Energy SPN's 2006/07 CI figure was reduced as a result of 1 exceptional event  
 EDF Energy EPN's 2006/07 CI and CML figures were reduced as a result of 3 exceptional events  
 SP Distribution's 2006/07 CI and CML figures were reduced as a result of 3 exceptional events  
 SP Manweb's 2006/07 CI and CML figures were reduced as a result of 4 exceptional events  
 SSE Hydro's 2006/07 CI and CML figures were reduced as a result of 4 exceptional events  
 SSE Southern's 2006/07 CI and CML figures were reduced as a result of 3 exceptional events

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## Appendix 3 – 2006/07 Customer Interruptions (CIs) and Customer Minutes Lost (CMLs) by Source and by Voltage

**1.1.** The number and duration of interruptions to supply can be broken down into the following five categories:

- unplanned interruptions arising on the DNO's own network;
- pre-arranged interruptions on the DNO's network;
- interruptions arising on the National Grid Company's system or the Transmission Companies' systems (in Scotland);
- interruptions arising from generators connected to the distribution network; and
- interruptions on any other connected systems.

**1.2.** Unplanned interruptions are caused by many factors, such as;

- failure of equipment;
- lightning hitting lines and damaging equipment;
- high winds blowing over poles and bringing power lines down;
- strikes by large wildfowl; and
- third party activity such as workers accidentally severing power cables.

**1.3.** Planned interruptions relate to the temporary suspension of supply for reasons such as carrying out repairs, maintenance and construction. Customers are required to be given two days notice prior to the start of such work. Industry working practices and techniques, such as "hot-glove" working and the use of mobile generators are reducing the need to interrupt supplies to carry out repairs. Incidents on the National Grid Company or Transmission Companies are generally rare, but due to the voltages involved, when they do occur they affect large numbers of customers.

**1.4.** Unplanned interruptions account for the bulk of customer minutes lost, with 12 DNOs having over 80 per cent of their minutes lost being due to this source. Within the remaining categories, planned work can be seen to be more significant in terms of customer minutes lost than it was in terms of customers interrupted.

**1.5.** The number and duration of interruptions can also be disaggregated by the voltage level at which they occurred. The voltage levels are classified as follows:

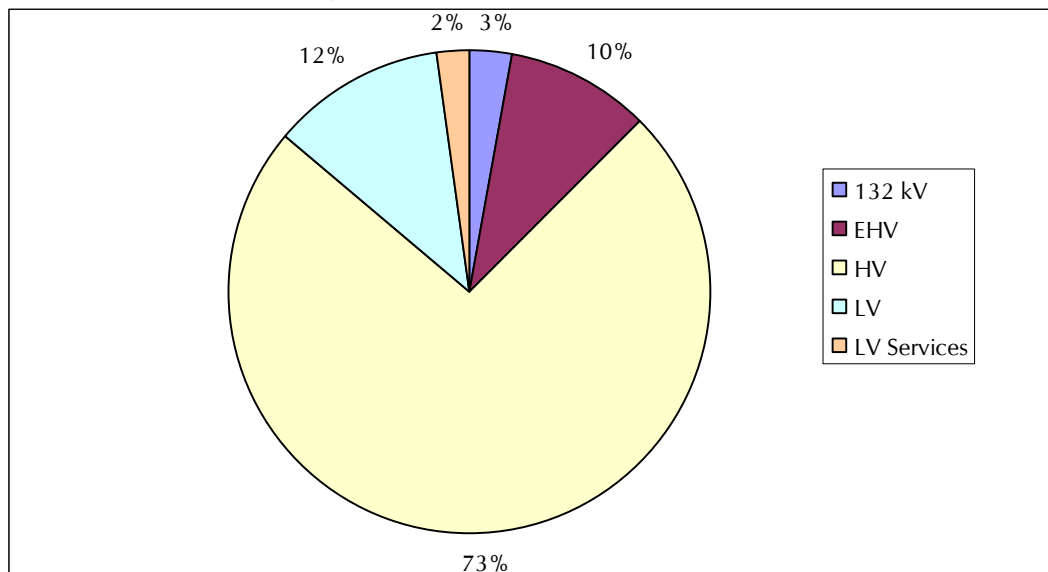
- 132kV;
- Extra High Voltage (EHV) – voltages greater than 20kV but less than 132kV;
- High Voltage (HV) – voltages from 1kV up to 20kV;

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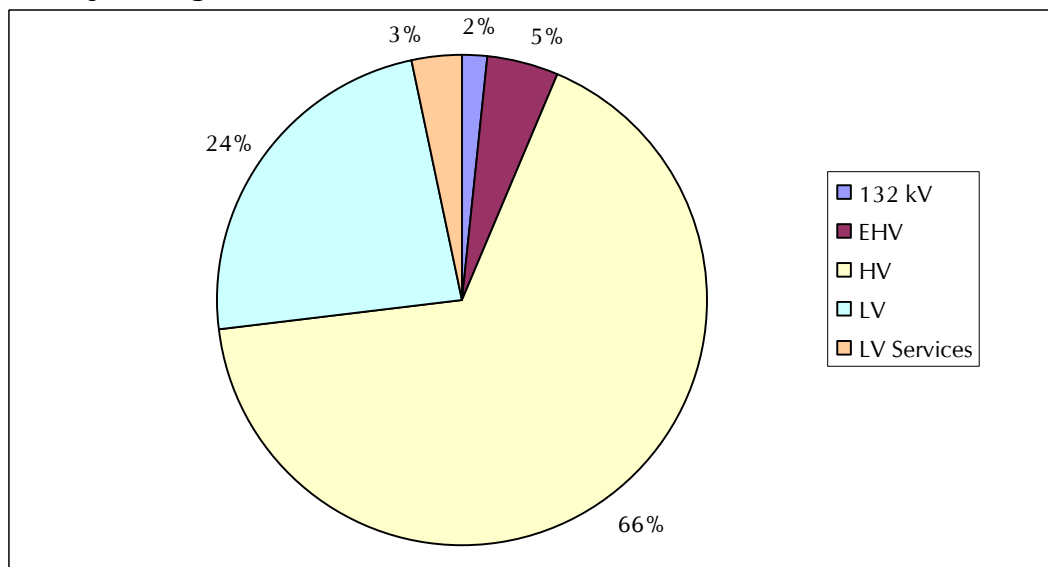
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- Low voltage (LV) voltages less than 1kV; and
- LV Services – the service line connecting the electricity main to the distribution company’s protection device situated upon the customer’s premises.

**Figure A3.1 Great Britain Average: 2006/07 Proportion of Customer Interruptions by Voltage**



**Figure A3.2 Great Britain Average: 2006/07 Proportion of Customer Minutes Lost by Voltage**



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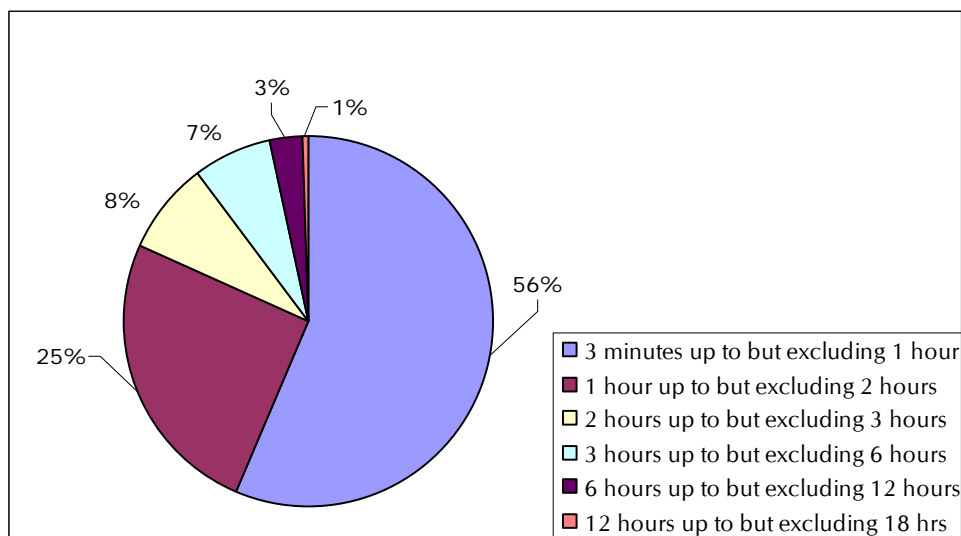
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## Appendix 4 - Disaggregation by Duration and Frequency Bands

**1.1.** Under the new price control, DNOs are required to separately disaggregate both the pre-arranged and unplanned number of customers interrupted (including all voltage levels) by duration band. This information is intended to provide a better understanding of how customer minutes lost are made up and of DNOs' effectiveness in restoring customers' supplies following an interruption.

**1.2.** DNOs are also now required to report the unplanned number of customers interrupted (excluding re-interruptions) by frequency band starting with customers experiencing zero higher voltage interruptions and rising in single increment up to customers experiencing 10 higher voltage interruptions. DNOs are also required to report the total number of customers experiencing more than 10 higher voltage interruptions and the largest number of higher voltage interruptions experienced by any customer.

**Figure A4.1 Disaggregation by duration band - 2006/07 customers interrupted (excluding exceptional events)**

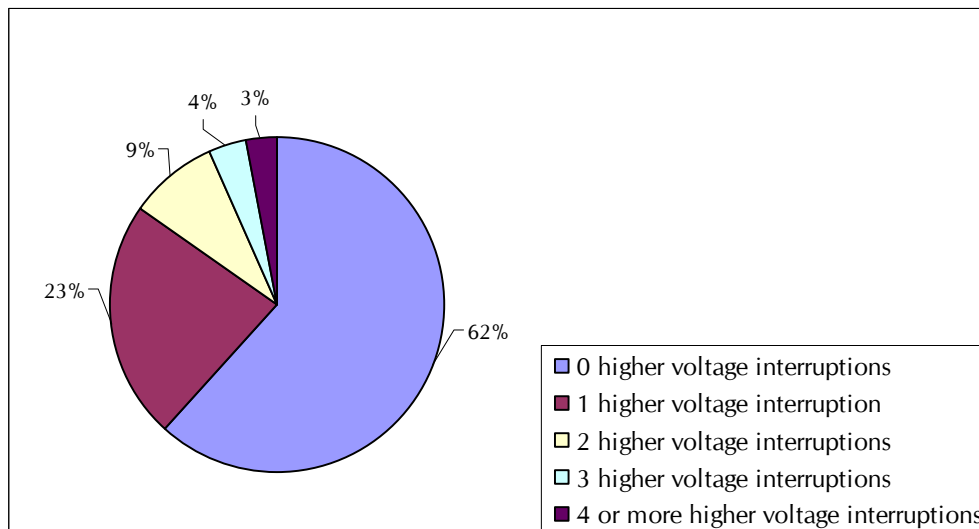


**1.3.** The above graph shows the proportion of customers interrupted by duration band (excluding exceptional events). Over half of all customers that were interrupted during 2006/07 under normal conditions were restored within one hour of being interrupted. A quarter of customers interrupted during normal conditions in 2006/07 were restored within two hours of being interrupted. Eight per cent of customers who were interrupted during normal condition in 2006/07 were restored within two hours up to and excluding three hours, seven per cent were restored within three to six hours and three per cent restored within six to twelve hours. Less than one per cent of customers interrupted during normal conditions were restored after twelve hours or longer.

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**Figure A4.2 Disaggregation by frequency band – 2006/07 customers interrupted (excluding exceptional events)**



**1.4.** The above graph shows the proportion of customer interruptions by frequency band (excluding exceptional events). Around 62 per cent of customers were reported as experiencing zero higher voltage interruptions. 23 per cent experienced one higher voltage interruption; nine per cent experienced two higher voltage interruptions while only four per cent experienced three higher voltage interruptions. Three per cent of customers were reported as experiencing four or more, higher voltage interruptions in the period 1st April 2006 to 31st March 2007.