

2005/06 Electricity Distribution Quality of Service Report

Document Type: Report

Ref: 204/06

Date of Publication: 1 December 2006

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

Overview:

This report sets out the quality of service performance in the period 1 April 2005 to 31 March 2006 for the 14 electricity distribution network operators (DNOs).

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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 keep their costs down and to encourage improvements in quality of service.

Associated Documents

- 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§ion=/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§ion=/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§ion=/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§ion=/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§ion=/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§ion=/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 2005 to 31 March 2006 for the 14 electricity distribution network operators (DNOs). 2005/06 was the fourth year that the DNOs faced financial incentives on their quality of service performance and it was the first year of the fourth distribution price control period.

Since the introduction of the incentive scheme in April 2002 the underlying average number of customer interruptions per 100 customers has fallen by 17 per cent and the number of customer minutes lost has reduced by 20 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 publishes an annual report on the overall performance of all 14 Distribution Network Operators (DNOs) and this report is the fifth 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 - 2005/06 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.

1.5. Data for 2005/06 was audited in respect of reporting accuracy in the summer of 2006, although no data required adjusting as all DNOs met the required accuracy thresholds. This was the fifth year of such audits as well as audits for exceptional events for which Ofgem made adjustments to 12 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. Data for CE NEDL and CE YEDL is included in this report. However, both companies are currently under investigation by Ofgem into their compliance with Standard Condition 49 of their Electricity Distribution Licences (Quality of Service Incentive Scheme and Associated Information)¹.

1.7. Ofgem intends to publish the 2006/07 Quality of Service Report before the end of 2007.

¹ www.ofgem.gov.uk-ofgem Investigations-Licence Breach, November 2006

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

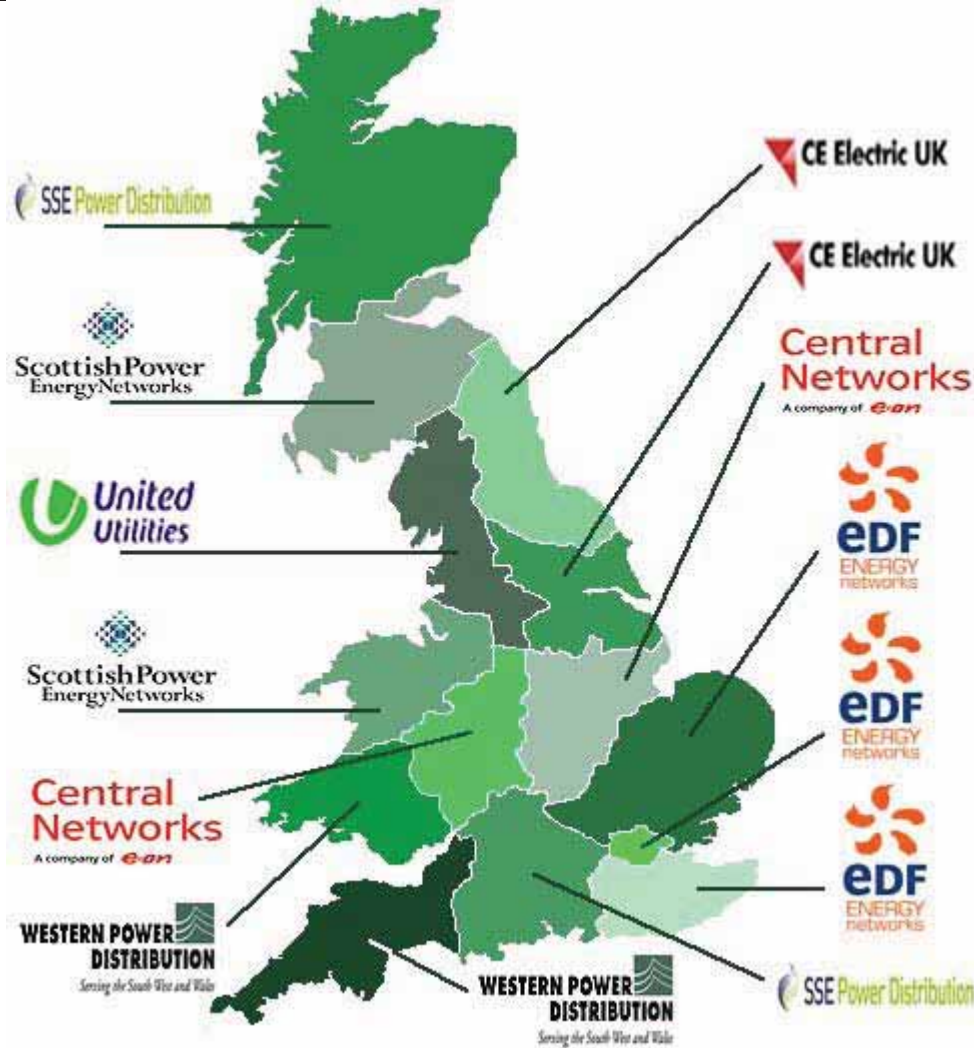
2.3. Distribution Network Operators are responsible for local distribution of electricity along overhead wires and through underground cables. This includes responsibility for ensuring that customers have a reliable electricity supply and restoring customers promptly in the event of an interruption to 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 2005/06 the 14 distribution licenses were owned by 7 separate companies (see Map on page 4).

How much does distribution cost the customer?

2.4. Electricity distribution charges account for around £3 billion annually and make up around 20 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 £60.

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)².

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 cut³. 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**

Guaranteed Standards of Performance

3.4. A summary of the standards of performance is set out in Appendix 2 of the 2004/05 QoS report and a Best Practice guidance document on the guaranteed standards of performance is available on the website (see Associated Documents).

² <http://www.energywatch.org.uk/>

³ 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 interruptions and customer minutes lost performance over the past five years. We set out the performance in 2005/06 of the 14 distribution companies against their 2005/06 incentive scheme targets, disaggregated performance against benchmarks and short interruptions in 2005/06.

Trends in GB Performance 2001/02 to 2005/06 with and without major storms

Figure 4.1 Average Customer Interruptions (CIs) per 100 customers

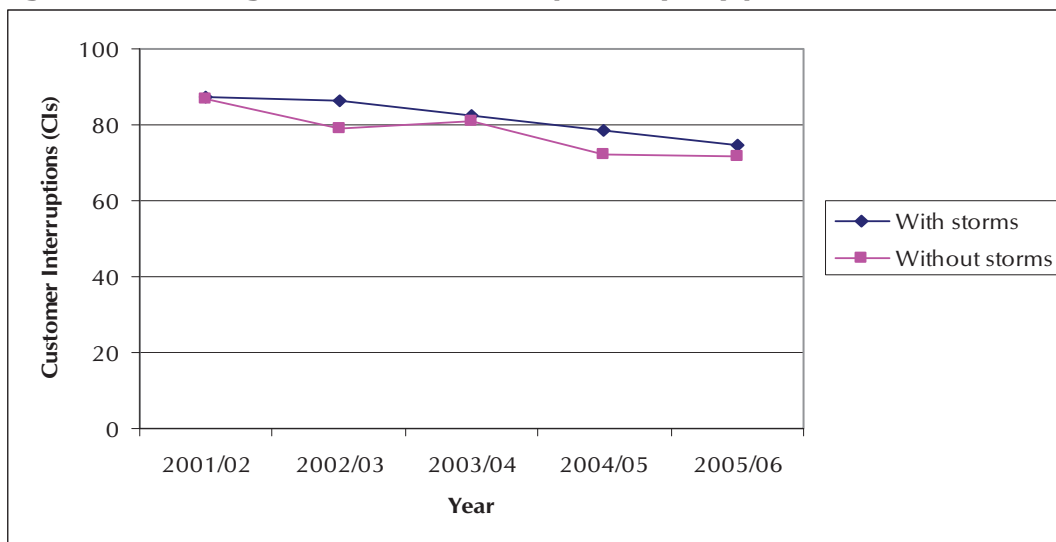
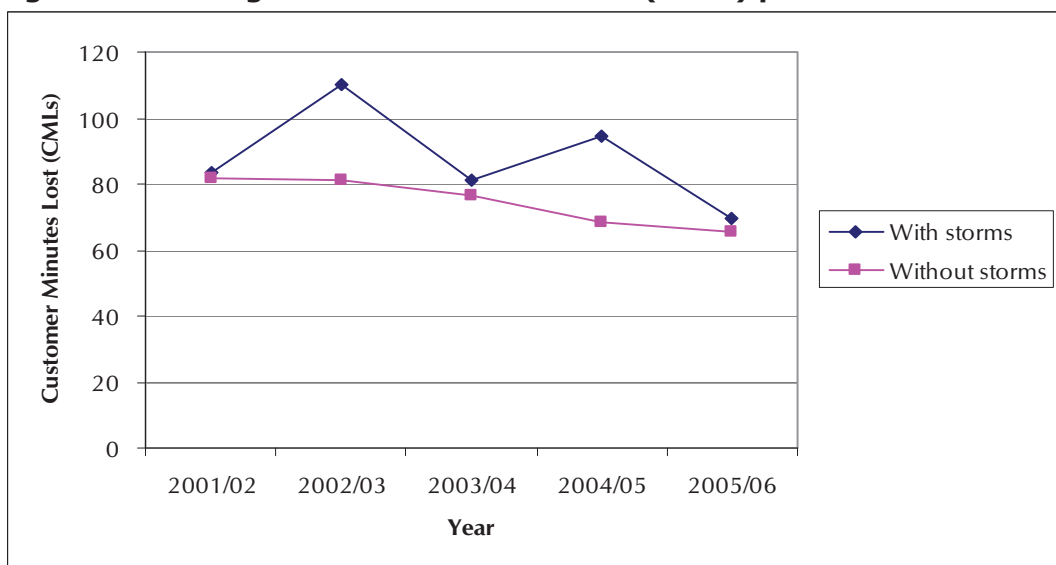


Figure 4.2 Average Customer Minutes Lost (CMLs) per 100 customers



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, although the October storms had a significant impact on the duration of interruptions in 2002/03 and similarly, storms in January 2005 had a significant impact on the duration of interruptions in 2004/05.

2005/06 Performance against Targets

Figure 4.3 Customer Interruptions – 2005/06 Performance Relative to 2005/06 Target

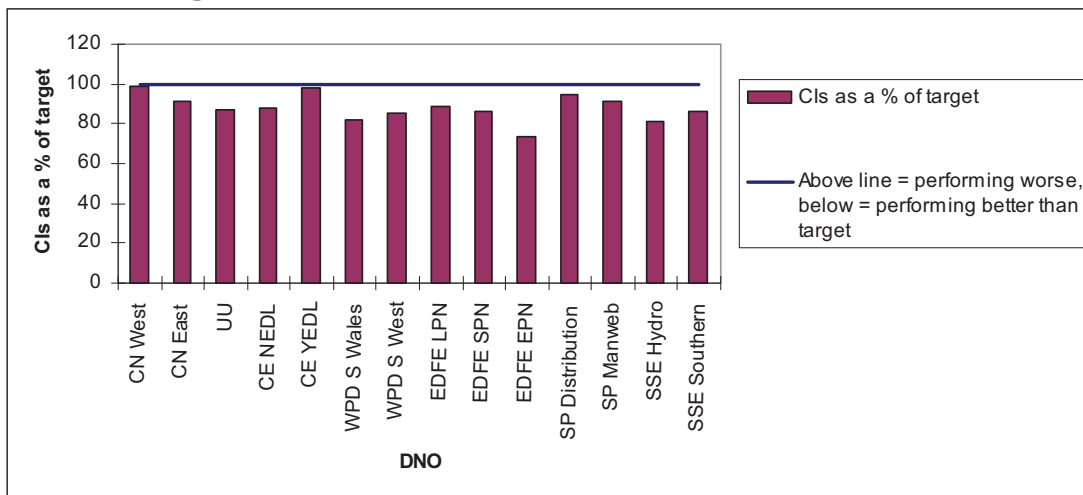
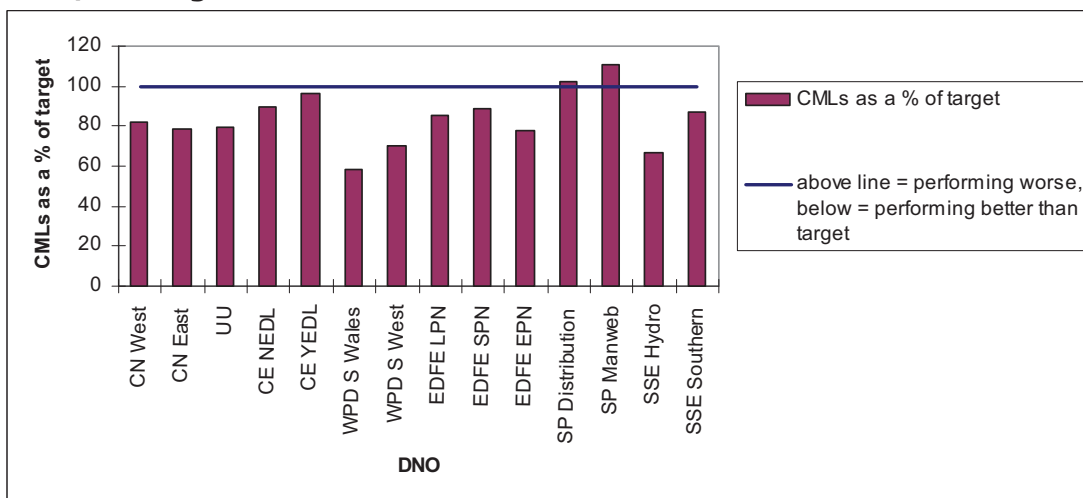


Figure 4.4 Customer Minutes Lost – 2005/06 Performance Relative to 2005/06 Targets



4.2. Figures 4.3 and 4.4 show DNOs' 2005/06 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.

2005/06 Performance against Average Benchmarks

Figure 4.5 Unplanned Customer Interruptions - 2005/06 Performance Relative to 2005/06 Benchmarks

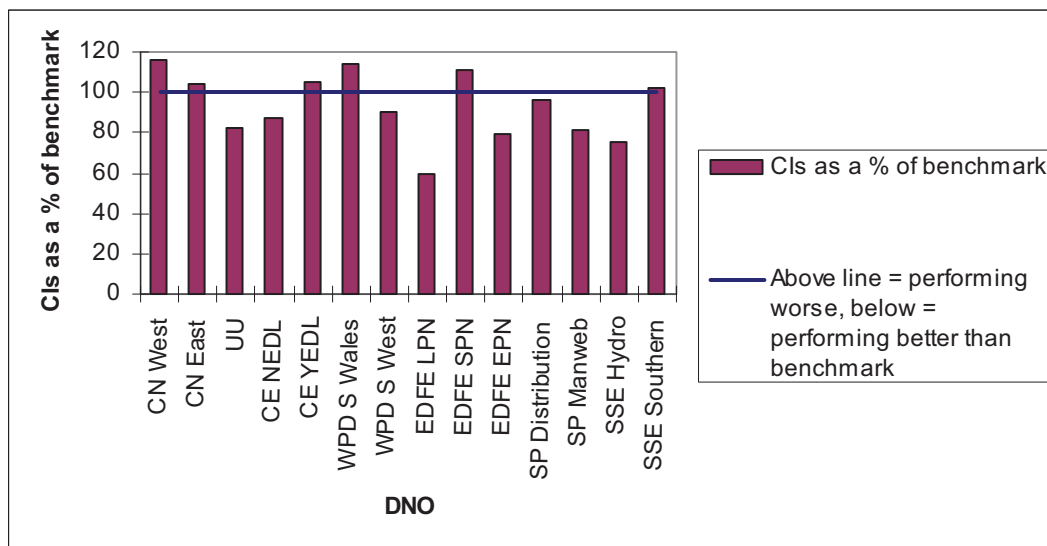
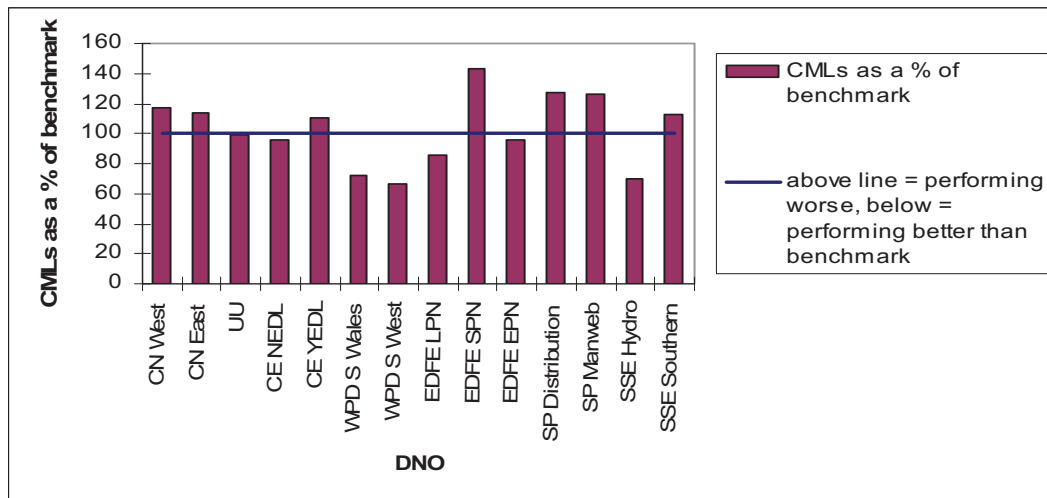


Figure 4.6 Unplanned Customer Minutes Lost - 2005/06 Performance Relative to 2005/06 Benchmarks



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 Supply 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.

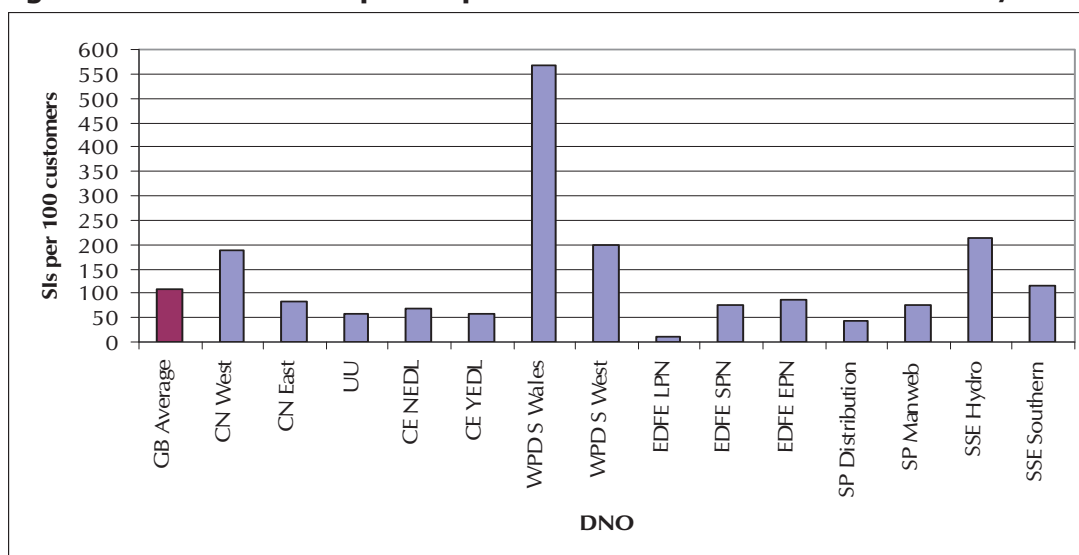
4.9. Each DNO's performance is compared to their benchmark (actual performance divided by benchmark, expressed as a percentage). As the benchmarks are calculated based on similar groups of circuits and take into account DNOs' own customer numbers per circuit and average circuit length, this method provides 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 QoS report contains a more detailed explanation of the process.

2005/06 Short Interruptions Performance

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.

Figure 4.7 Short Interruptions per 100 Connected Customers 2005/06



4.12. The average number of short interruptions per 100 connected customers across Great Britain was 110. Figure 4.7 shows the performance of each of the DNOs. CN West, WPD South Wales, WPD South West and SSE Hydro all reported significantly above the GB average with SSE Southern also above the average but not significantly so. The remaining nine DNOs, CN East, UU, CE NEDL, CE YEDL, EDFE LPN, EDFE SPN, EDFE EPN, SP Distribution and SP Manweb were all 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. 2005/06 Quality and Speed of Telephone Response Performance

2005/06 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 (being very dissatisfied) to 5 (being very satisfied) based on their individual experiences of the telephone conversation they had with the DNO. An overall performance score is calculated for each DNO.

5.3. Under the 2005-2010 Electricity Distribution Price Control, changes were made to the telephony incentive scheme to apply from 1 April 2005. Customers are now also surveyed on 'satisfaction with the speed of telephone response'. Performance on this was measured on a trial basis from April 2004 to March 2005.

5.4. As from 1 April 2005, 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 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.

5.5. Table 5.1 below shows the combined mean scores for the period from 1 April 2005 until 31 March 2006 for each DNO for the five assessed attributes listed above. The performance scores and rankings reported here are based on the mean annual scores whilst under the scheme in DPCR3 they were reported at the upper 95% confidence interval limit, which was the 'deemed' performance score for each DNO.

5.6. SSE Hydro was the only DNO with an annual mean score greater than 4.5 for 2005/06 resulting in a reward. WPD S Wales, WPD S West, CE NEDL and SSE Southern performed statistically above the overall mean for 2005/06 but below the reward threshold of 4.5. The annual mean scores for CN East and CN West were not statistically significantly different from the industry mean. The remaining seven

DNOs performed below the overall mean for 2005/06 but above the penalty threshold of 4.1.

Table 5.1 2005/06 Overall Performance Scores (All Assessed Attributes)

Ranking 05/06 (04/05)	DNO	05/06 Scores	Rewards/Penalties
1 (1)	SSE Hydro	4.57	£ 90,000
2 (2)	WPD S Wales	4.49	£ -
3 (3)	CE NEDL	4.43	£ -
4 (5)	WPD S West	4.43	£ -
5 (4)	SSE Southern	4.42	£ -
6 (10)	CN West	4.38	£ -
7 (8)	CN East	4.36	£ -
8 (9)	EDFE EPN	4.33	£ -
9 (7)	CE YEDL	4.33	£ -
10 (6)	UU	4.29	£ -
11 (13)	EDFE SPN	4.26	£ -
12 (12)	SP Manweb	4.24	£ -
13 (14)	EDFE LPN	4.19	£ -
14 (11)	SP Distribution	4.11	£ -
	Industry Mean	4.34	

2005/06 Speed of Telephone Response Performance

5.7. 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).

5.8. Table 5.2 below shows the average speed of response (in seconds) for the period from 1 April 2005 until 31 March 2006 for each DNO split by telephony system.

Table 5.2 2005/06 Average Speed of Telephone Response by Telephony System

Hold telephony system		Redial telephony system	
DNO	Response time (s)	DNO	Response time (s)
WPD S West	2.3	CE YEDL	23.0
WPD S Wales	2.4	CN East	28.7
SSE Hydro	10.3	EDFE SPN	31.1
SSE Southern	10.5	CN West	32.1
SP Manweb	19.6	UU	73.7
SP Distribution	20.0	EDFE EPN	74.5
CE NEDL	26.1	EDFE LPN	79.8
Average	13.0	Average	49

6. Customer Reward Scheme

2005/06 was the first 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 2005/06 covered the following three areas:

1.	Priority Customer Care Initiatives:	£600,000
2.	Initiatives relating to Corporate Social Responsibility (CSR):	£200,000
3.	Wider Communication Strategies implemented by DNOs:	£200,000

6.4. For 2005/06, a greater focus has been given to the 'priority customer care initiatives' category as this has been identified as an area with many challenges and where much improvement can 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 2005/06

Priority Customer Care Initiatives (£600,000)

6.5. EDF Energy and Western Power Distribution jointly shared this award, receiving £300,000 each. Both DNOs were recognised for their work with suppliers and Energywatch respectively to improve data quality on their Priority Services Register and raise awareness of the free services available. EDF Energy was also praised for proactively undertaking customer research and incorporating this into its staff training to improve its services. The Panel commended EDF Energy and WPD for the support they offer priority customers during interruptions, such as contacting them to provide regular updates and offering additional assistance.

Initiatives relating to Corporate Social Responsibility (£200,000)

6.6. Western Power Distribution received this award. It was recognised for the breadth and depth of its CSR initiatives, good governance procedures and its holistic approach.

Wider Communication Strategies implemented by DNOs (£200,000)

6.7. The Panel considered that while the entries submitted contained a number of good initiatives, there was no overall entry which could be considered an example of best practice. The Panel therefore, decided not to award a reward for this category.

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 working on a number of additional areas that are not currently incentivised, such as storms telephony.

7.1. Ofgem holds regular Quality of Service Working Group meetings with the DNOs, DTI and energywatch discussing topics such as quality of service benchmarking, customer service reward scheme and the interruptions audits. Information on these meetings can be found on the Ofgem website at the following link:

<http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/qualityservice/qualityofsupply02>

7.2. Work is currently ongoing to determine the form and scope of the customer service reward scheme for 2006/07, with Ofgem pleased to note that the panel members from 2005/06 have agreed to take part for another year. A decision letter on the scheme for 2006/07 will be posted on the Ofgem website before Christmas 2006.

7.3. As part of the work towards a possible storms telephony incentive, additional telephony surveys for periods covered by exceptional events were conducted from April 2005. This approach has not proved to be viable for setting a storms telephony incentive and the Quality of Service Working Group is now looking at alternative options. We do not intend to introduce a storms telephony incentive from April 2007.

7.4. DPCR4 final proposals set out an entitlement for DNOs to log up actual capital expenditure on network undergrounding in national parks and areas of outstanding natural beauty. Entitlement to log up costs is subject to the DNO demonstrating that it has taken account of advice from local environmental groups and/or planning bodies in deciding how best to prioritise any expenditure on network undergrounding. Ofgem is aware that a number of DNOs are engaged with local environmental groups and is keeping abreast of continuing developments in this area.

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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:

- 2005/06 performance for the number and duration of interruptions;
- 2005/06 targets;
- 2005/06 quality of telephone response performance;
- 2005/06 rewards/penalties;
- 2005/06 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 2004/05 with the 2005/06 data submissions. The fault rate charts in this report therefore, cover the years from 2001/02 onwards.

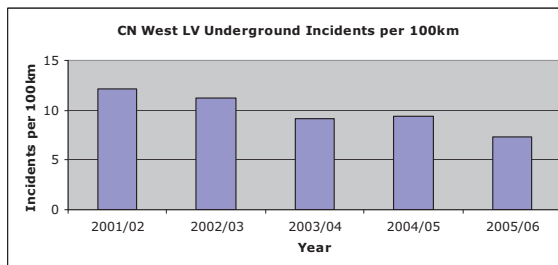
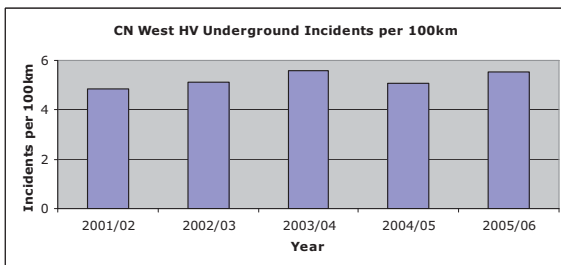
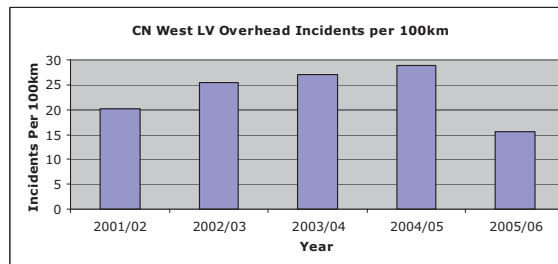
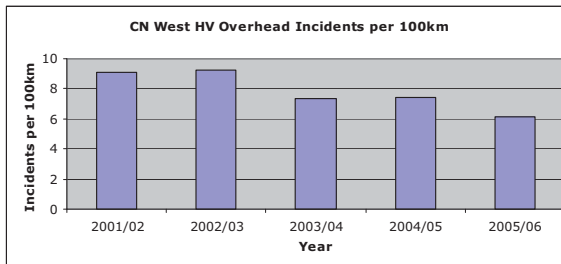
1.3. In addition each DNO has provided commentary on its 2005/06 performance.

1.4. Whilst data for CE NEDL and CE YEDL is included, both companies are currently under investigation by Ofgem into their compliance with Standard Condition 49 of their Electricity Distribution Licences (Quality of Service Incentive Scheme and Associated Information).

CN West – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	107.8	83.6	101	76
Target/benchmark	109.4	102.3	87	64

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.29	4.34	0	0.17	2.84

**Commentary provided by CN West**

Central Networks West continues to improve quality of supply for its customers.

During 2005/06 CI and CML targets were outperformed by 1.5% and 18% respectively. This also represents an improvement over the previous year, particularly CMLs, which were reduced by over 6%. The adoption of enhanced operational response techniques was reflected in the improvement in average fault duration (CML/CI), which reduced from 82 minutes in 2004/5 to 78 minutes in 2005/6.

The good performance results are, in part, due to general benign weather conditions resulting in lower fault rates on overhead lines. The network was affected by lightning during August 2005. However the company's emergency plans were activated to minimise disruption and ensure supplies were restored as quickly as possible.

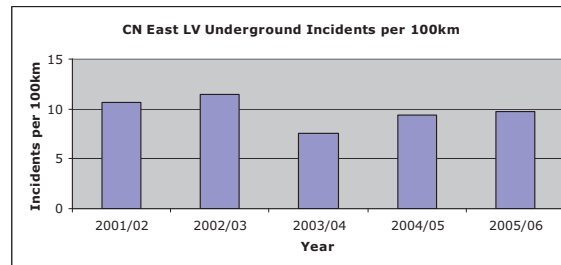
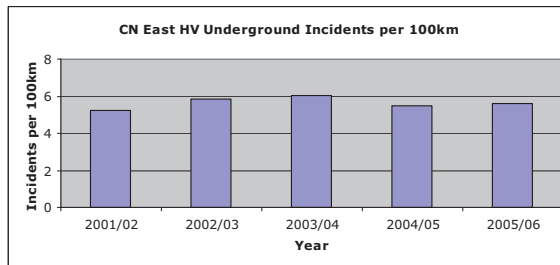
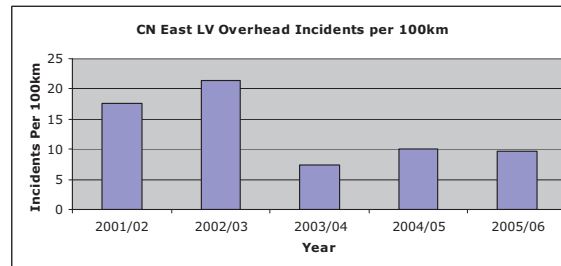
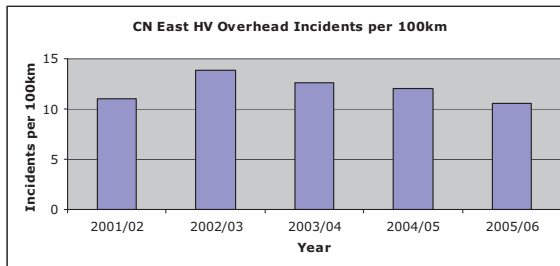
Throughout the year the company continued to invest in network replacement and refurbishment programmes to reduce fault rates, including the replacement of less reliable 'small cross-section' overhead lines and the targeted replacement of 'Consac' underground cable. This activity was supplemented by the installation of technology which reduces the numbers of customers affected by faults or restores them more quickly through remote control operations. Work programmes were prioritised to address worst performing circuits and therefore improve the quality of supply for customers experiencing most faults.

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 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	71.0	62.9	68	57
Target/benchmark	77.9	80.1	65	50

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.36	4.34	0	1.12	3.35

**Commentary provided by CN East**

Central Networks East continues to improve quality of supply for its customers.

During 2005/6 CI and CML targets were outperformed by 9% and 21.5% respectively. There were significant reductions in both measures with CIs and CMLs improving by over 3.5% and 14.6% on the previous year. The adoption of enhanced operational response techniques was reflected in the improvement in average fault duration (CML/CI), which reduced from 100 minutes in 2004/5 to 89 minutes in 2005/6.

The good performance results are, in part, due to general benign weather conditions resulting in lower fault rates on overhead lines. The network was affected by lightning during August 2005. However the company's emergency plans were activated to minimise disruption and ensure supplies were restored as quickly as possible.

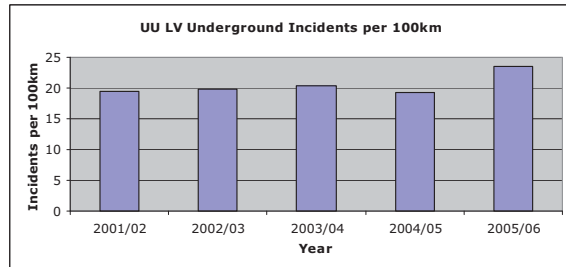
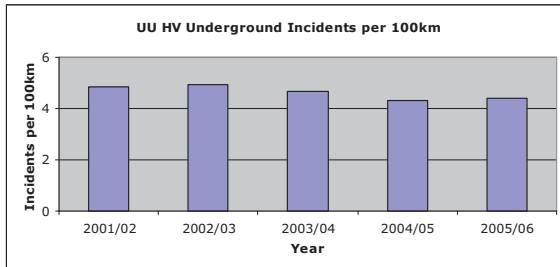
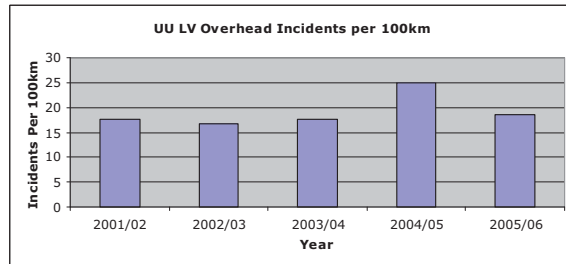
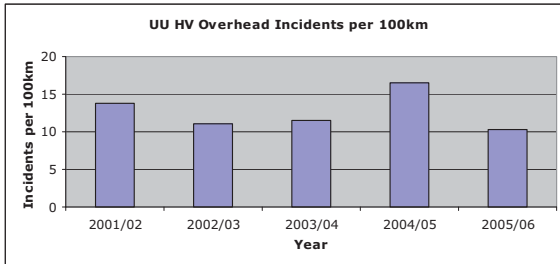
Throughout the year the company continued to invest in network replacement and refurbishment programmes to reduce fault rates. This activity was supplemented by the installation of technology which reduces the numbers of customers affected by faults or restores them more quickly through remote control operations. Work programmes were prioritised to address worst performing circuits and therefore improve the quality of supply for customers experiencing most faults.

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 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	49.8	47.5	45	44
Target/benchmark	57.2	59.8	54	44

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.29	4.34	0	1.44	2.93

**Commentary provided by United Utilities**

A primary objective of our asset management strategy is to maintain stability of asset fault rates despite an aging 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. The rise in fault rates for overhead lines in 2004/05 reflects the severe winds and flooding experienced in Cumbria and North Lancashire in January 2005.

Whilst aiming to maintain stable asset fault rates we have also focussed on minimising the resultant customer service impact by seeking to reduce the number and duration of interruptions of supply to our customers. We have undertaken an extensive programme of installing additional switching devices on high risk circuits and extending remote control and automation. Operational practices have been reviewed including the despatching of key personnel to affected parts of the network and increased use of mobile generation.

It should be noted that 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 2005/06 average customer interruptions were slightly higher than the previous year. However, the average length of time customers were off supply was shorter. The underlying performance trends on these measures over the past five years are of steady overall improvement.

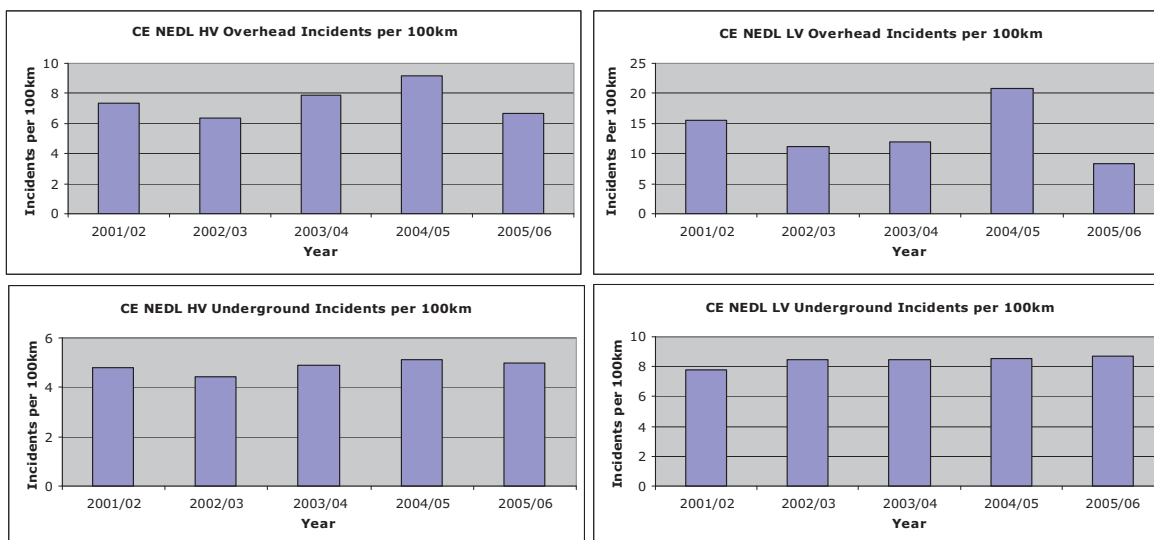
United Utilities is committed to providing a high quality and efficient service to its customers. Future investment will continue to be focussed on meeting growing customer supply demands whilst maintaining a high level of network reliability.

CE NEDL – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	65.7	64.1	60	54
Target/benchmark	74.5	71.4	69	56

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.43	4.34	0	0.95	1.03

Note: NEDL's reported 2005/06 figures for CI increased by 0.77 and CML by 2.21 due to under reporting

**Commentary provided by CE NEDL**

The NEDL network continues to improve quality of supply for its customers. We are particularly pleased that the average restoration time has improved as a result of both operational and investment initiatives introduced by the company.

Severe storms continue to have an adverse effect on customers' supplies. Although the winter of 2005/06 was relatively benign compared with previous years, a lightning storm on 31 August 2005 affected the supplies to nearly 50,000 customers. We regret the disruption such interruptions cause customers and we will look to continue to improve our ability to restore customers following severe weather.

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 but less favourably against the restoration (CML) benchmark.

As a result of the output of the disaggregation process we have 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 the supplies of 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 2005/06 the results of this work started to show through a reduction in overall average restoration time.

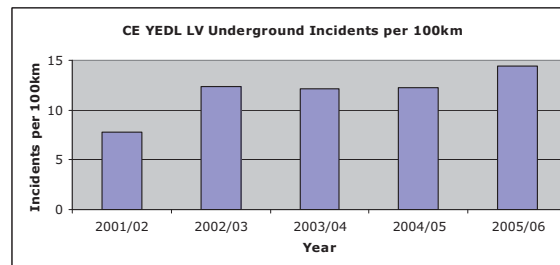
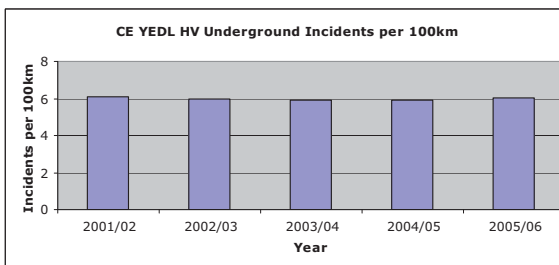
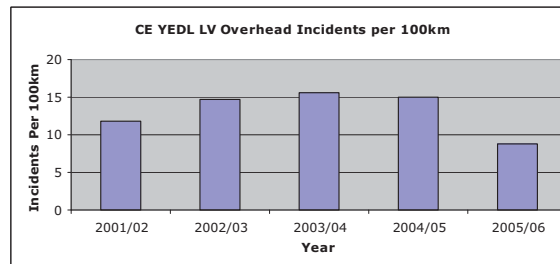
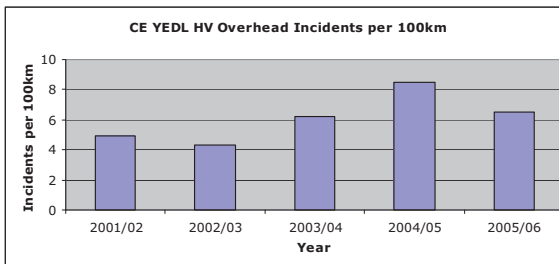
NEDL has put a great deal of effort into improving both the speed and usefulness of the information provided to customers through its call centre. This is reflected in the figures on telephony performance. NEDL aims to maintain this performance going forward.

CE YEDL – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	67.2	67.6	65	60
Target/benchmark	68.7	68.5	61	54

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.33	4.34	0.00	0.21	0.17

Note: YEDL's reported 2005/06 figures for CI increased by 1.55 and CML by 2.64 due to under reporting

**Commentary provided by CE YEDL**

The YEDL network continues to improve quality of supply for its customers. We are particularly pleased that the average restoration time has improved as a result of both operational and investment initiatives introduced by the company.

Severe storms continue to have an adverse effect on customers' supplies. Although the winter of 2005/06 was relatively benign compared with previous years, lightning storms on 19 June and 31 August 2005 affected the supplies to nearly 60,000 customers. We regret the disruption such interruptions cause customers and we will look to continue to improve our ability to restore customers following severe weather.

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 of the performances of DNOs. YEDL's performance is dominated by underground networks and the current method of disaggregation does not fully take into account the differences in such networks. As a result of this YEDL's network appears to perform below average in both the interruption (CI) benchmark and the restoration (CML) benchmark.

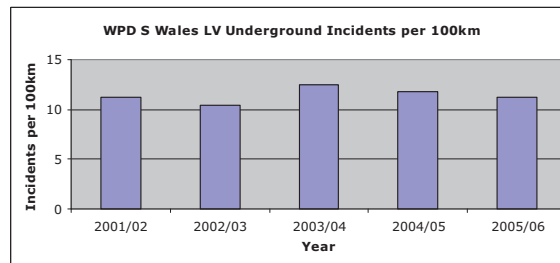
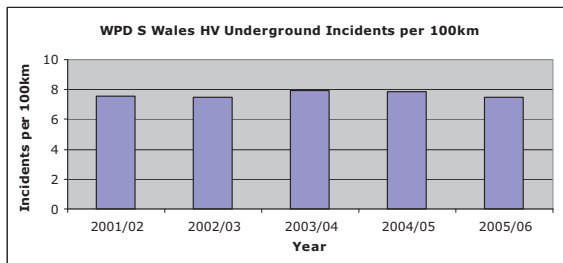
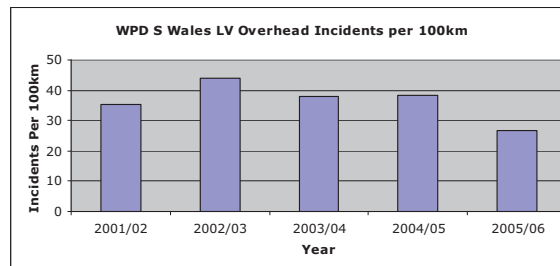
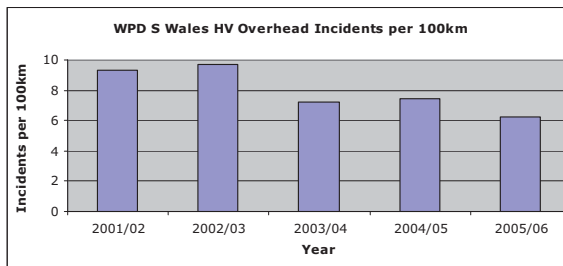
As a result of the output of the disaggregation process we have moved the focus of our improvement initiatives towards restoration time. In particular we have already introduced a "Power in an hour" initiative, which aims to restore the supplies of as many customers as possible within an hour of the start of an interruption and we 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 2005/06 the results of this work started to show through a reduction in overall average restoration time.

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 performance going forward.

WPD South Wales – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	81.3	42.2	78	38
Target/benchmark	99.7	72.2	68	53

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.49	4.34	0	1.39	2.80



Commentary provided by WPD S Wales

Western Power Distribution (WPD) South Wales delivers electricity supplies to over 1million customers in South and West Wales. The area comprises contrasting environments from the heavily populated areas of Cardiff and Swansea to the exposed, sparsely populated areas of the Brecon Beacons.

The South Wales network continues to demonstrate a strong underlying improvement trend and we have out-performed the service targets set by Ofgem for both customer interruptions (CIs) and customer minutes lost (CMLs) by a significant margin.

There was one period of exceptional weather during the year caused by lightning occurring during June 2005. In total 16,000 customers were affected predominately in Swansea and West Wales. Almost 70% of customers were restored within one hour with no customer being off more than 30 hours. This period of exceptional weather is excluded from our IIS performance.

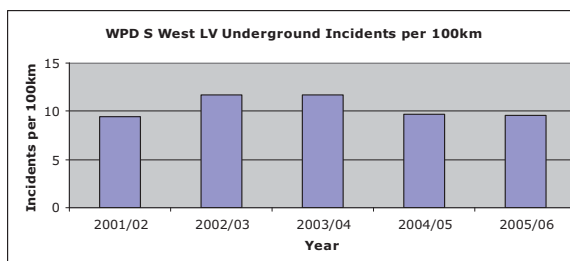
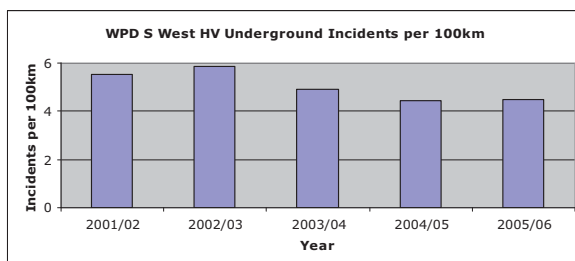
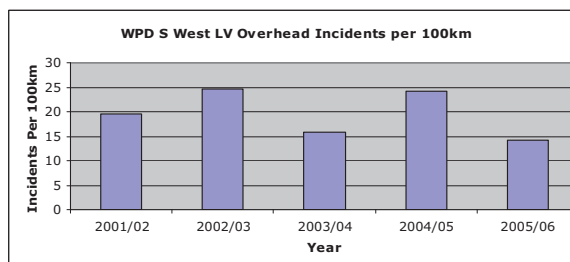
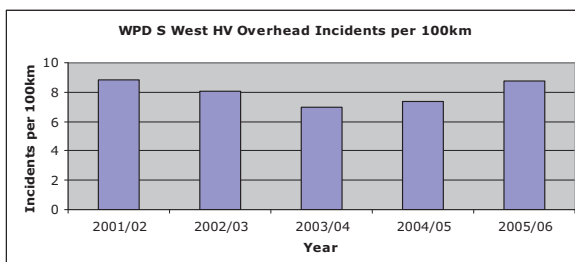
During 2006/07, the WPD group will continue with those initiatives that have clearly demonstrated good improvements to quality of supply to date, and will seek new opportunities and initiatives for the future. Our focus for 2006/07 and beyond will be to further reduce interruptions by instigating a programme to increase the automation on the high voltage network. This will ensure that, when an HV fault occurs, the maximum number of customers have their supplies restored within three minutes through automated sequence switching logic.

The disaggregation and benchmarking processes have enabled us to identify and compare, on an equitable basis, parts of our network which perform better or worse than similar types of networks in other parts of the country. We continue to support its further development.

WPD South West – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	72.1	43.5	68	39
Target/benchmark	84.5	62.2	76	59

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.43	4.34	0	1.34	3.42

**Commentary provided by WPD S West**

Western Power Distribution (WPD) South West delivers electricity supplies to over 1.4 million customers in the South West of England. The area comprises contrasting environments from the heavily populated areas of Bristol and Plymouth to the exposed, sparsely populated areas of Dartmoor and Exmoor.

The South West network continues to perform extremely well and we have out-performed the service targets set by Ofgem for both customer interruptions (CIs) and customer minutes lost (CMLs) by a significant margin.

There were three periods of exceptional weather during the year caused by lightning occurring during June and August 2005. In total over 130,000 customers were affected by these three events. For each event, a minimum of 55% of customers were restored within one hour with no customer being without supply more than 30 hours. These periods of exceptional weather are excluded from our IIS performance.

In addition to the lightning, a one-off exceptional event in Bristol was caused by a flashover resulting from a bird strike on a 33kV circuit breaker. This resulted in almost 30,000 customers losing their supply for a period of up to 45 minutes.

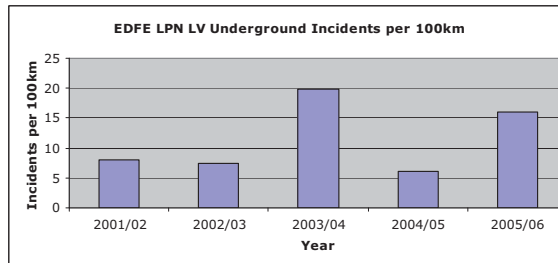
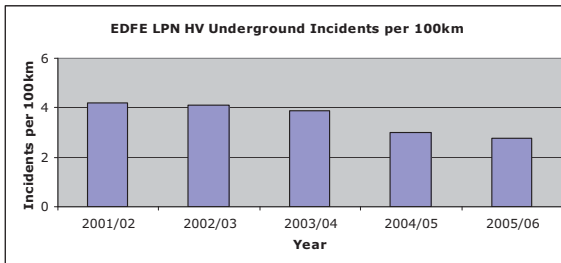
During 2006/07, the WPD group will continue with those initiatives that have clearly demonstrated good improvements to quality of supply to date, and will seek new opportunities and initiatives for the future. Our focus for 2006/07 and beyond will be to further reduce interruptions by instigating a programme to increase the automation on the high voltage network. This will ensure that, when an HV fault occurs, the maximum number of customers have their supplies restored within three minutes through automated sequence switching logic.

The disaggregation and benchmarking processes have enabled us to identify and compare, on an equitable basis, parts of our network which perform better or worse than similar types of networks in other parts of the country. We continue to support its further development.

EDFE LPN – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	32.0	34.4	28	32
Target/benchmark	36.2	40.2	46	37

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.19	4.34	0	1.32	2.07



Commentary provided by EDFE LPN

Customers in EDF Energy (LPN) plc’s distribution area continue to enjoy the most secure electricity supplies in the country. In 2005/06 our performance was 32.0 interruptions per 100 connected customers (CI) and 34.4 customer minutes lost (CML). The company met Ofgem’s 2005/06 targets for both customer interruption and customer minutes lost.

In 2005/06 we continued with our highly successful HV automation programme. Currently we have around 950 11kV feeders automated resulting in a saving of 10 CI.

In 2005/06 EDF Energy continued its work to improve the service it provides to vulnerable customers. The quality of the work in this area was recognised by Ofgem when EDF Energy was rewarded under Ofgem’s 2005/06 discretionary reward scheme.

Over the 2005 -10 periods we will be:

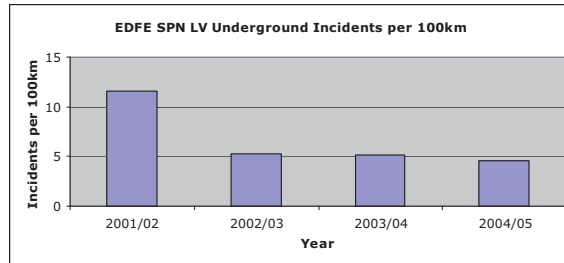
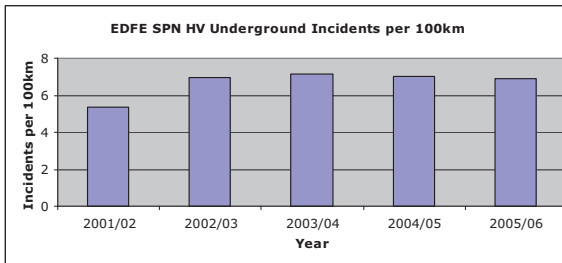
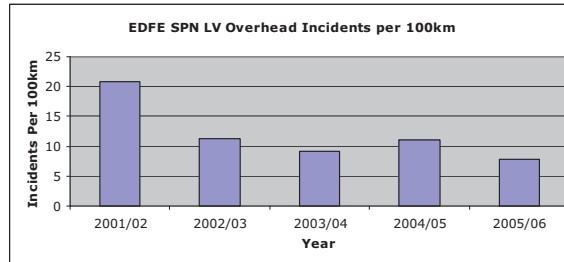
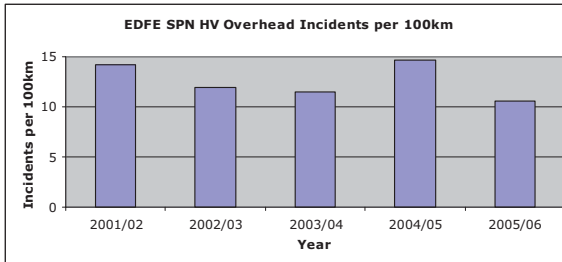
Investing in further improvements to the HV automation; and

Removing poorly performing low voltage circuit breakers to improve reliability on the low voltage network.

EDFE SPN – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	77.8	72.5	74	68
Target/benchmark	90.5	81.4	66	47

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.26	4.34	0	1.24	1.16

**Commentary provided by EDFE SPN**

We are pleased to report that customers in EDF Energy (SPN) plc's distribution area continue to enjoy quality of supply improvements with performance for 2005/06 being 77.8 interruptions per 100 connected customer (CI) and 72.5 customer minutes lost – achieving both Ofgem's CML and CI targets.

In order to achieve our 2005/06 targets we invested in a range of initiatives to improve network performance. These included refurbishment of underperforming high and low voltage overhead line networks and the application of HV circuit automation, along with improved operational response techniques.

In 2005/06 EDF Energy continued its work to improve the service it provides to vulnerable customers. The quality of the work in this area was recognised by Ofgem when EDF Energy was rewarded under Ofgem's 2005/06 discretionary reward scheme.

SPN has been set challenging quality of supply target for 2005-10, particularly with respect to CMLs. In order to achieve these targets we will be implementing a number of additional performance improvement initiatives, including:

Automation of the HV network supported by the introduction of a new control system;

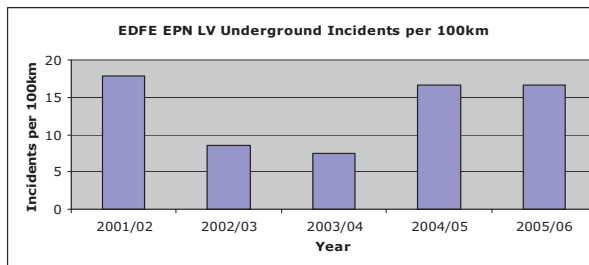
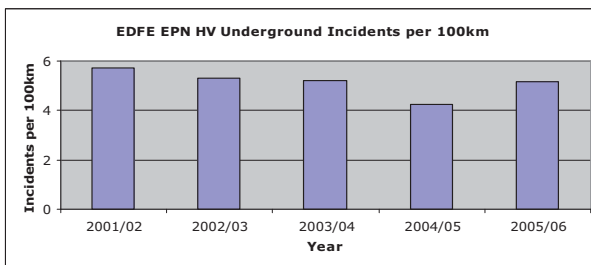
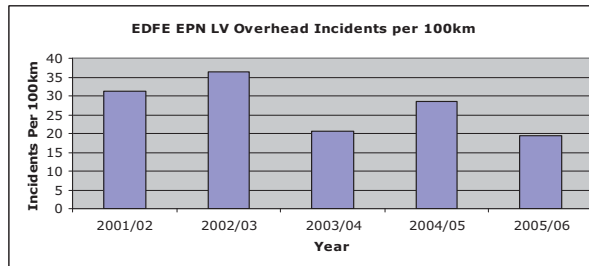
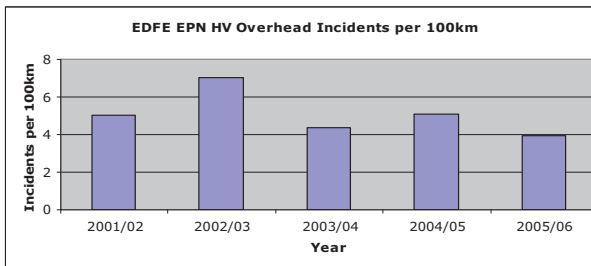
Introduction of remotely monitored fault passage indicators; and

Improved earth fault protection.

EDFE EPN – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	66.2	57.2	57	52
Target/benchmark	90.3	73.7	72	54

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.33	4.34	0	3.73	4.11

**Commentary provided by EDFE EPN**

We are pleased to report that customers in EDF Energy (EPN) plc's distribution area continue to enjoy quality of supply improvements with performance for 2005/06 being 66.2 interruptions per 100 connected customer (CI) and 57.2 customer minutes lost – achieving both Ofgem's CML and CI targets.

In 2005/06 we continued with our highly successful High Voltage (HV) automation programme and currently we have around 1750 11kV feeders automated resulting in a saving of 10 CI. The installation of HV automation has also improved restoration performance during severe weather events. With customer experiencing a restoration performance during severe weather events of 90% of customers restored within three hours compared with 60% restoration rate before the installation of automation.

In 2005/06 EDF Energy continued its work to improve the service it provides to vulnerable customers. The quality of the work in this area was recognised by Ofgem when EDF Energy was rewarded under Ofgem's 2005/06 discretionary reward scheme.

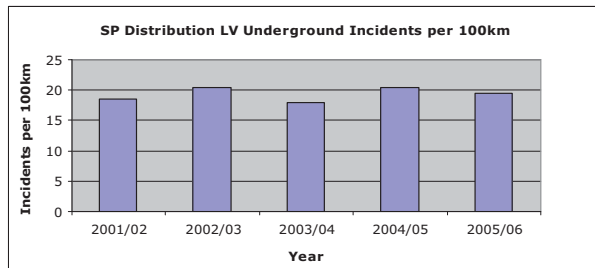
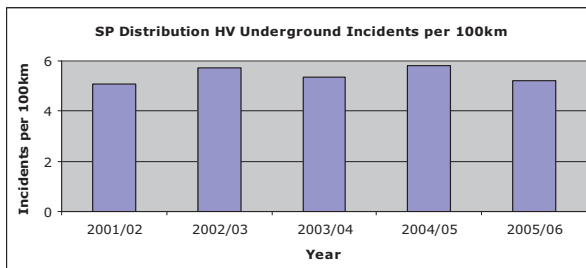
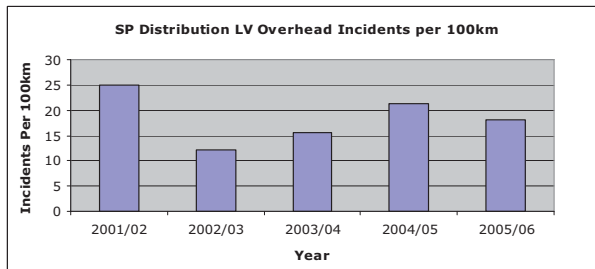
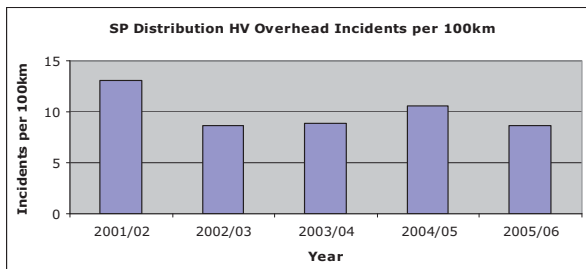
In order to achieve the quality of supply targets set for 2005-10 we will be implementing a number of performance improvement initiatives, including:

- Replacement of drop out expulsion fuses with auto-sectionalisers on the HV overhead line network;
- Introduction of remotely monitored fault passage indicators; and
- Further automation on the HV network.

SP Distribution – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and Benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	57.6	66.6	56	65
Target/benchmark	60.9	64.9	58	51

Quality of telephone response Performance		Rewards/Penalties (£ million)		
DNO Score	Industry Mean	Telephony	CI	CML
4.11	4.34	0	0.82	-0.50

**Commentary provided by SP Distribution**

SP Distribution Ltd, part of the ScottishPower Group, owns the distribution network, which supplies electricity to over 2,000,000 customers in Southern Scotland. The area comprises contrasting environments from the heavily populated areas of the Clyde and Forth valley to the exposed, sparsely populated areas of the Borders and Dumfries and Galloway.

The system performance for SP Distribution in 2005/06 showed a reduction in the customers interrupted and the duration of interruptions from the previous year. This performance has been achieved through effective operating procedures and system investment. We experienced a snow storm, which caused widespread network disruption in the South West of Scotland between 12 & 13 March 2006 disrupting supplies to over 28,972 customers. Timely activation of our emergency plans ensured that our repair teams restored supplies to over 95% of our customers within the first 12 hours of the event.

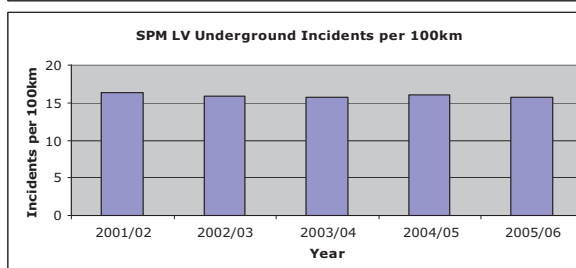
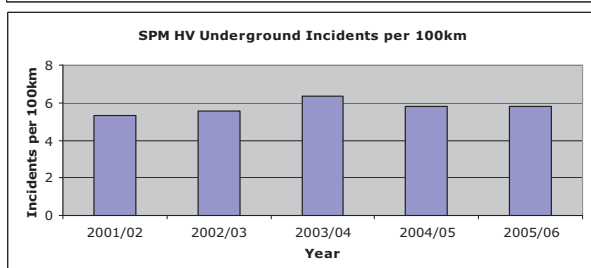
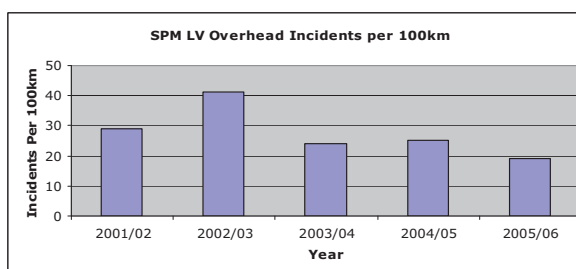
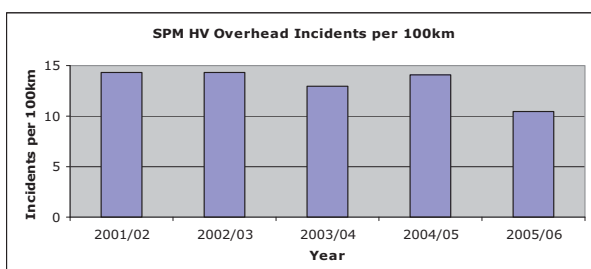
SP Distribution Ltd remains committed to providing high levels of customer service, and throughout 2005/06 we continued to look for innovative ways of improving the quality of service to our customers. During the year we completed targeted programmes of work aimed at preventing faults from happening on our overhead and underground networks, and also further work aimed at minimising the disruption caused by faults when they occur. Customer feedback plays a vital part in our investment decisions, and during the year we improved the way in which this vital information is used to target our work programmes.

SP Distribution is committed to delivering the highest quality of telephony response. We continue to focus on both speed of telephony response and the quality of information a customer receives when they phone our contact centre. A number of system and procedural changes have been initiated for the coming year and it is hoped that these will deliver improved results.

SP Manweb – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	42.7	57.4	41	53
Target/benchmark	46.7	51.8	50	42

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.24	4.34	0	0.78	-1.21

**Commentary provided by SP Manweb**

SP Manweb, part of the ScottishPower Group, owns the distribution network which supplies electricity to over 1,500,000 customers in the 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.

The system performance for SP Manweb in 2005/06 showed a reduction in the customers interrupted and the duration of interruptions from the previous year. This performance has been achieved through effective operating procedures and system investment.

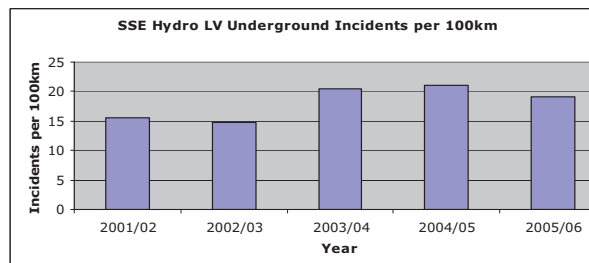
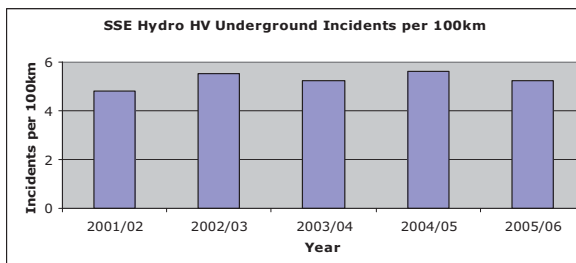
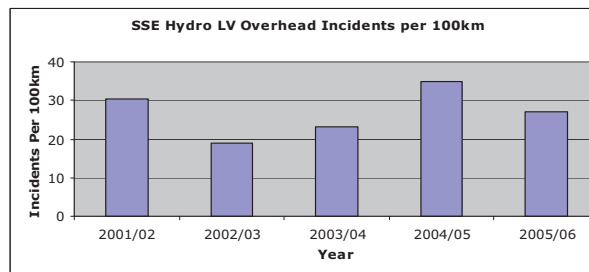
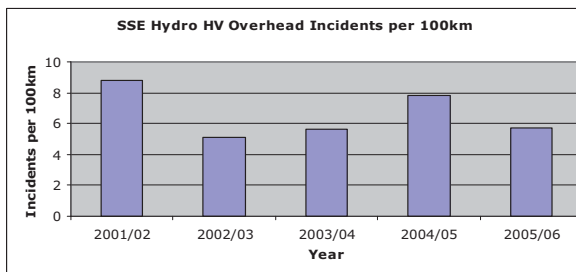
SP Manweb remains committed to providing high levels of customer service, and throughout 2005/06 we continued to look for innovative ways of improving the quality of service to our customers. During the year we completed targeted programmes of work aimed at preventing faults from happening on our overhead and underground networks, and also further work aimed at minimising the disruption caused by faults when they occur. Customer feedback plays a vital part in our investment decisions, and during the year we improved the way in which this vital information is used to target our work programmes.

SP Manweb is committed to delivering the highest quality of telephony response. We continue to focus on both speed of telephony response and the quality of information a customer receives when they phone our contact centre. A number of system and procedural changes have been initiated for the coming year and it is hoped that these will deliver improved results.

SSE Hydro – Quality of service and network performance for 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	77.9	64.4	68	57
Target/benchmark	96.2	95.9	91	81

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.57	4.34	0.09	1.59	3.26

**Commentary provided by SSE 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 and our system performance in 2005/6 was yet again the best ever with reductions in both the number of interruptions and the duration of those interruptions. The comparatively benign weather throughout the year was a factor in this excellent performance but our effective operating procedures and the money we invested in the system significantly contributed to the success.

Notwithstanding the generally quiet weather, there were still four severe weather events in the year caused by severe gales and / or blizzards. In one event snow drifts greater than 1 metre deep were recorded and even snowploughs became stuck. In another severe weather event, winds were recorded at 88 mph at sea level and 126 mph in the Cairngorms.

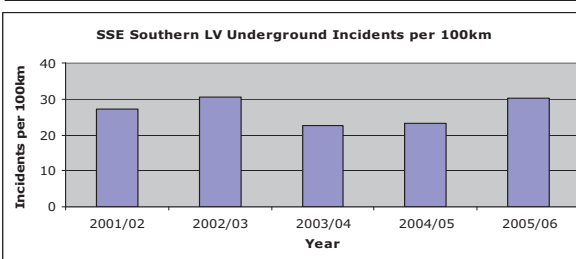
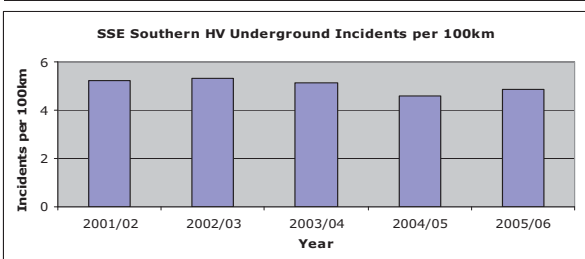
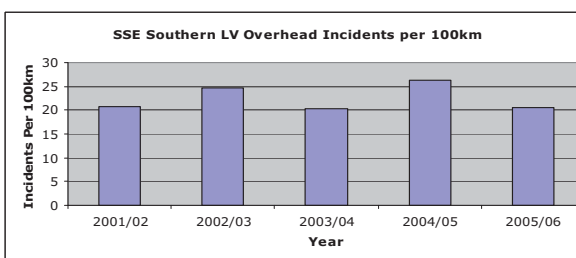
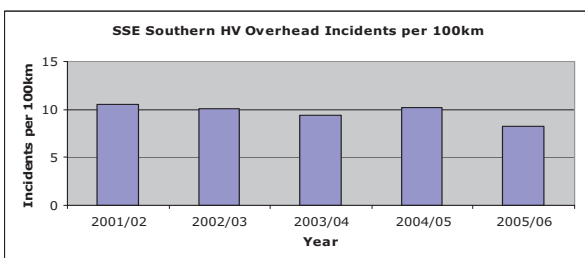
We increased investment in our network during 2005/6. In the year we continued to refurbish our overhead line network and installed more system automation. These actions improve general network resilience, reduce the number of customers affected by faults, and also reduce the duration of supply loss. 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 the only company to receive a reward for the quality of the telephony service. Our teams are pleased 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 2005/06

	Incentive Scheme		Disaggregation and benchmarking	
	CI	CML	Unplanned CI	Unplanned CML
Performance	78.2	71.3	75	67
Target/benchmark	91.0	82.0	73	59

Quality of telephone response performance		Rewards/Penalties (£ million)		
DNO score	Industry mean	Telephony	CI	CML
4.42	4.34	0	2.50	2.78

**Commentary provided by SSE 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 continues to perform well and our system performance in 2005/6 was the best ever, with reductions in both the number of interruptions and the duration of those interruptions. The comparatively benign weather throughout the year was a factor in this excellent performance but our effective operating procedures and the money we invested in the system also contributed to the success. Notwithstanding the generally quiet weather, there were still two severe lightning storms in the summer.

There was also one significant event in November when a substantial fire in a scrap yard damaged the main electricity supply overhead cables feeding Bournemouth. The fire developed to such severity that it melted the overhead conductors which were situated at a height of about 15 metres above the ground. Our contingency plans were immediately brought into action and we undertook the repairs and reconnected supplies very much more quickly than was anticipated. An independent examiner was satisfied that we managed to minimise the impact of this event on customers "very effectively".

During 2005/6 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 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.

'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 2005/06 Customer Interruptions and Customer Minutes Lost**
- **Table A2.2: Short Interruptions 2005/06**
- **Table A2.3: Revised 2005/06 Customer Interruptions and Customer Minutes Lost: Split by Source**
- **Table A2.4: Revised 2005/06 Customer Interruptions and Customer Minutes Lost: Split by Voltage Level**
- **Table A2.5: Incentive Scheme: 2005/06 Customer Interruptions and Customer Minutes Lost as a Percentage of Respective 2005/06 Targets**
- **Table A2.6: Distribution Network Operator Information 2005/06**

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: 2005/06 Customer Interruptions & Customer Minutes Lost as a Percentage of Respective 2005/06 Targets

DNO	2005/06 CI Target	2005/06 Incentive Scheme CIs	2005/06 Incentive Scheme CIs as % of 2005/06 Target		2005/06 CML Target	2005/06 Incentive Scheme CMLs	2005/06 Incentive Scheme CMLs as a % of 2005/06 Target
CN West*	109.4	107.8	99		102.3	83.6	82
CN East*	77.9	71.0	91		80.1	62.9	79
UU	57.2	49.8	87		59.8	47.5	79
CE NEDL*	74.5	65.7	88		71.4	64.1	90
CE YEDL*	68.7	67.2	98		68.5	67.6	99
WPD S Wales*	99.7	81.3	82		72.2	42.2	58
WPD S West*	84.5	72.1	85		62.2	43.5	70
EDFE LPN*	36.2	32.0	88		40.2	34.4	86
EDFE SPN*	90.5	77.8	86		81.4	72.5	89
EDFE EPN*	90.3	66.2	73		73.7	57.2	78
SP Distribution*	60.9	57.6	95		64.9	66.6	103
SP Manweb	46.7	42.7	91		51.8	57.4	111
SSE Hydro*	96.2	77.9	81		95.9	64.4	67
SSE Southern*	91.0	78.2	86		82.0	71.3	87
GB average		67.6				60.7	

*Note: CN West's 2005/06 CI and CML figures were reduced as a result of 1 exceptional event
 CN East's 2005/06 CI and CML figures were reduced as a result of 2 exceptional events
 CE NEDL's 2005/06 CI and CML figures were reduced as a result of 3 exceptional events
 CE YEDL's 2005/06 CI and CML figures were reduced as a result of 2 exceptional events
 WPD S Wales 2005/06 CI and CML figures were reduced as a result of 1 exceptional event
 WPD S West's 2005/06 CI and CML figures were reduced as a result of 4 exceptional events

EDF Energy LPN's 2005/06 CI figure was reduced as a result of 1 exceptional event
 EDF Energy SPN's 2005/06 CI figure was reduced as a result of 1 exceptional event
 EDF Energy EPN's 2005/06 CI and CML figures were reduced as a result of 1 exceptional event
 SP Distribution's 2005/06 CI and CML figures were reduced as a result of 1 exceptional event
 SSE Hydro's 2005/06 CI and CML figures were reduced as a result of 4 exceptional events
 SSE Southern's 2005/06 CI and CML figures were reduced as a result of 4 exceptional events

Appendix 3 – 2005/06 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 twelve 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;
- 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: 2005/06 Proportion of Customer Interruptions by Voltage

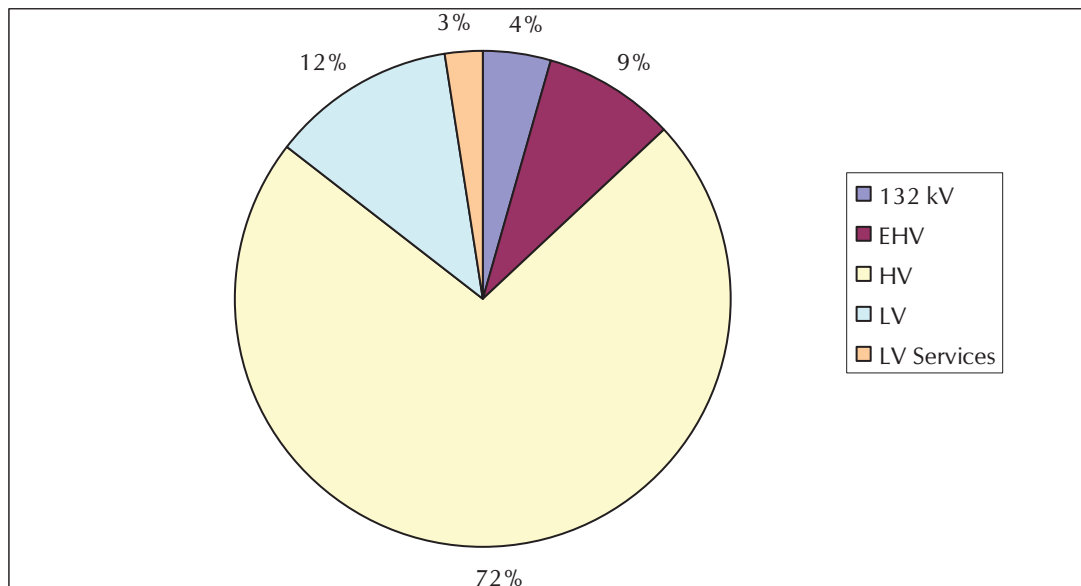
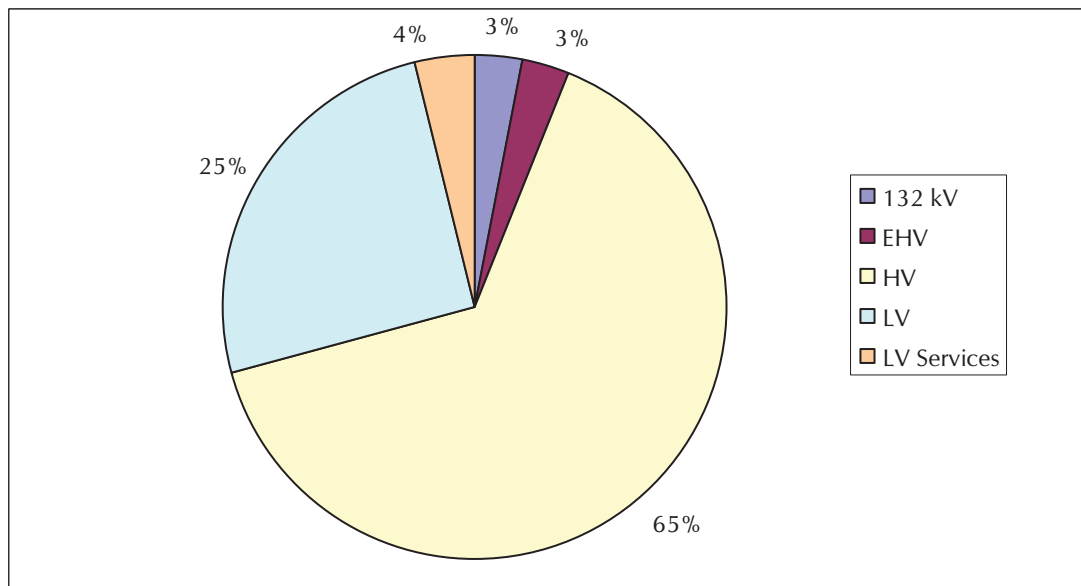


Figure A3.2 Great Britain Average: 2005/06 Proportion of Customer Minutes Lost by Voltage

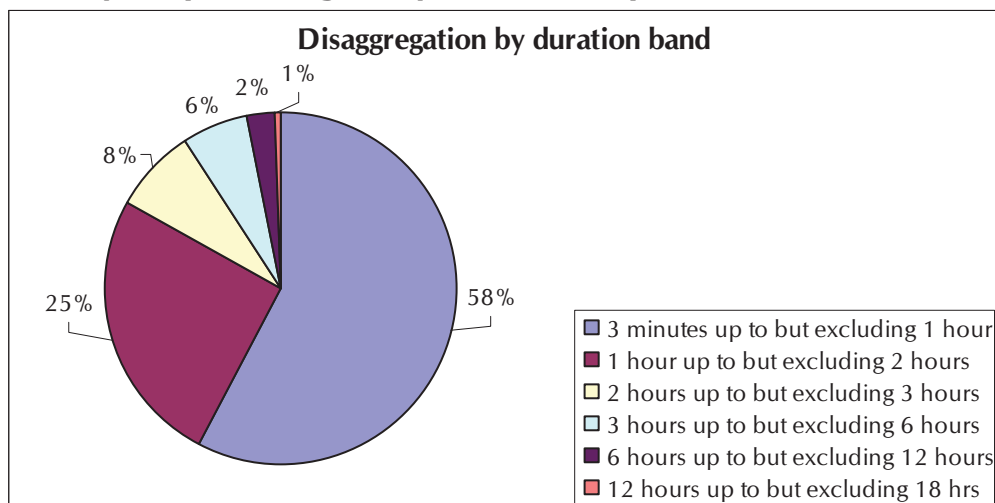


Appendix 4 - Disaggregation by Duration and Frequency Bands

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.

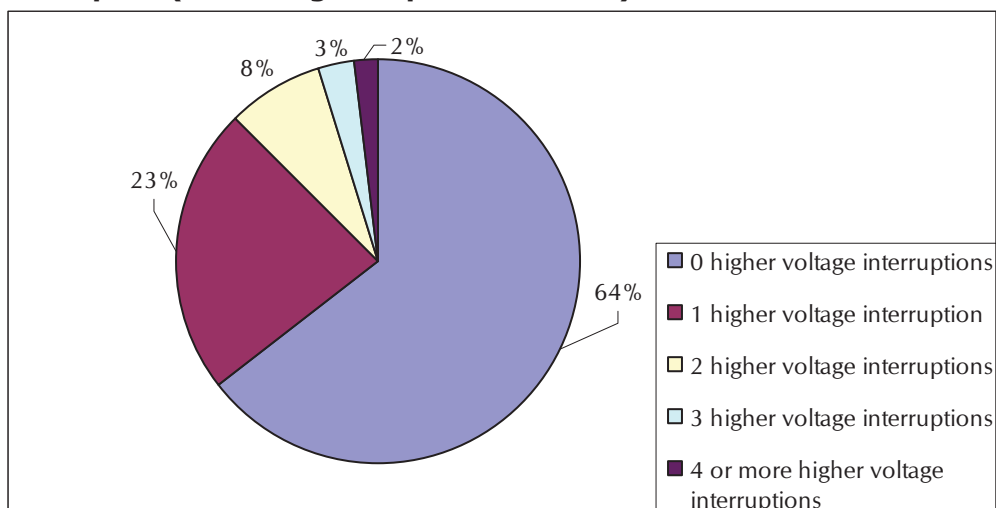
1.2. DNOs are also now required to report the unplanned number of customers interrupted (excluding re-interruptions) by frequency band starting with customers experiencing zero higher voltage interruptions and rising in single increment up to customers experiencing 10 higher voltage interruptions. DNOs 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 - 2005/06 customers interrupted (excluding exceptional events)



1.3. The above graph shows the proportion of customers interrupted by duration band (excluding exceptional events). Well over half of all customers that were interrupted during 2005/06 under normal conditions were restored within 1 hour of being interrupted. A quarter of customers interrupted during normal conditions in 2005/06 were restored within 2 hours of being interrupted. Eight per cent of customers who were interrupted during normal condition in 2005/06 were restored within 2 hours up to and excluding 3 hours. Only one per cent of customers interrupted during normal conditions were restored after 18 hours.

Figure A4.2 Disaggregation by frequency band – 2005/06 customers interrupted (excluding exceptional events)



1.4. The above graph shows the proportion of customer interruptions by frequency band (excluding exceptional events). Around 64 per cent customers were reported as experiencing zero higher voltage interruptions. 23 per cent experienced 1 higher voltage interruption, 8 per cent experienced 2 higher voltage interruptions while only 5 per cent experienced 3 higher voltage interruptions. Fewer than two per cent of customers were reported as experiencing four or more, higher voltage interruptions.