Electricity Distribution Price Control Review

Policy document - Summary of DNO forecasts appendix

March 2004

Introduction

This appendix contains financial data for each DNO and a commentary on the factors underlying the level of costs forecast in the DPCR4 period. The data and commentaries are as provided to Ofgem by the DNOs and do not reflect Ofgem's view on DNO performance.

Data provided by the DNOs for consideration in DPCR4 has not been normalised as yet and should not be used for comparative analysis across DNOs. Further adjustments will be necessary before proper comparison can be made and any attempt to assess relative DNO efficiency using the information included in this appendix may be misleading.

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1. Aquila Networks plc (Aquila)

Commentary of DPCR4 forecasts

Base Case

Opex

Aquila has made significant cost savings in DPCR 3. Despite the increasing costs in achieving further efficiencies, underlying controllable operating costs are forecast to decline between 2005 and 2010 by 1.5% per annum. This will however be offset to some extent by increasing pressure on both labour and material costs as the demand for skilled operatives and equipment rises to deliver the higher levels of investment envisaged.

Notwithstanding the implementation of ongoing efficiency initiatives, total operating costs are rising. This is explained by increases in non-controllable costs and new or increasing obligations such as lane rentals, health and safety, the environment and pension liabilities.

Capex

Detailed long-term network analysis has highlighted the need for investment to be raised significantly and sustained at these increased levels in order to start to replace an ageing asset base. To do otherwise would impose unacceptable levels of network risk in the short term and store up an undeliverable future 'bow-wave' of investment in the longer term.

Consequently, the Base Case submission includes replacement capital expenditure averaging £100 million per annum over the period to 2010 compared with an existing level of £72 million. This strategy will maintain the underlying condition and reliability of assets, whilst only leading to a very modest impact on bills of £5 per annum by 2010 for a typical domestic customer on a £300 electricity bill.

QoS Performance

The Base Case was constructed to ensure that the company will continue to operate to current performance standards through the next price control period and in the longer term. There is, however, a resilience benefit to customers from some of the planned investment that will involve refurbishing and upgrading the overhead network to the modern industry standard (EATS 43-40).

Quality of Supply Scenario

Opex

The same opex assumptions have been made as in the Base Case.

Capex

Aquila has proposed an additional £40m of additional investment over the five years to improve network performance. This consists primarily of rural automation and the reconductoring of existing overhead lines.

QoS Performance

The replacement of 'small section' conductor on the overhead network, which was started in the base case, will improve reliability especially under severe weather conditions.

It is also proposed to improve the configuration of circuits to reduce their length and the number of customers per circuit. The main targets for improvement are the long mixed and overhead networks since these have the highest number of customer interruptions (CI) and customer minutes lost (CML) per circuit. This reconfiguration allows effective application of remote control and protection systems, providing value for money to customers.

The programme will reduce unplanned customer interruptions per 100 customers by 7.7 and unplanned customer minutes lost by 10.9 from the average performance for 2001/02 and 2002/03 by 2010.

DNOs Own Scenario

Opex

The opex assumptions are broadly consistent with the Base Case. However some restructuring costs, consisting mainly of severance costs to deliver the planned efficiencies, have also been included in the cost base.

Capex

There is a greater customer expectation for improving levels of service and network resilience as witnessed during the October 2002 storms. Aquila's preferred plan therefore includes a further increase in investment to meet these valid expectations, over and above the levels set in the base case of £26m per annum, which we believe offers the best value for money to customers.

The additional investment proposed consists of improving the configuration of circuits by reducing their length and the number of customers per circuit, completion of the small section overhead line reconductoring programme, and the installation of additional remote control devices in rural, urban and mixed circuits. Furthermore it is proposed to underground 2% of the overhead network to deliver fault rate, resilience and visual amenity benefits. There is also investment planned for reducing electrical losses and replacing a number of fluid filled cables, which both deliver environmental benefits.

QoS Performance

The improvements in CI and CML set out in the Quality of Supply scenario will also be delivered in our preferred case. In addition, significant improvement to the resilience of supplies to rural and semi-rural customers who suffer a disproportionate number of interruptions compared to those in urban areas is also planned. This is achieved by undergrounding 2% of the overhead network where customers are currently exposed to the impact of severe weather, or where a line supplies a large number of customers.

Summary financial information - Aquila

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - AQUILA

TURNOVER		4	— Actual —	•	4			— Forecast —			•	% change
real 2002/03	8 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	250.6	260.4	255.7	255.4	238.6	254.5	259.5	264.1	268.5	273.2	5%
Excluded Services	£m	20.6	24.1	25.3	27.2	29.0	28.1	28.1	26.3	26.2	26.3	7%
Deminimis	£m											
Other income	£m	27.3	26.1	25.6	25.0	24.3	19.0	17.7	16.5	16.8	17.3	-32%
Iotal Iurnover	£m	298.5	310.6	306.6	307.6	291.9	301.6	305.3	306.9	311.5	316.8	2%
OPEX		4	— Actual —		+			— Forecast —				% change
real 2002/03	8 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Cost of sales	fm	6.7	8.0	12.2	11.2	12.4	12.2	12.0	12.5	12.1	12.2	26%
Cost of sales	£111	0./	0.9	12.2	10.1	10.4	10.3	13.9	12.5	13.1	15.5	20 /0
Exit Charges (NGC and other)	£m	21.2	19.9	19.7	19.1	10.4	19.3	10.0	10.0	17.1	17.0	-10 /a
Employee Wages	£m	29.1	12.1	1.0	1.0	2.2	2.1	2.0	1.9 51.1	1.9	1.9	-/9/0
Direct Network Costs	£m	10.0	37.6	49.0	33.0	32.7	32.3	31.5	31.1	50.6	50.0	21/0
Depreciation	£m	43.6	41.5	38.0	38.5	40.9	43.1	45.5	48.1	51.0	53./	19%
Network Rates	£m	22.3	23.5	25.3	23.6	23.4	23.4	23.4	23.4	23.4	23.4	-170
Other costs	£m	48.1	29.6	11.6	13.3	11.7	15.4	15.5	15.5	15.4	15.4	-32%
Total Operating Costs	£m	187.6	173.1	158.4	161.4	162.7	168.9	169.8	169.3	172.5	175.3	1%
CAPEX		4	— Actual —	•	4			— Forecast —				% change
real 2002/03	s prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	£m	38.4	50.9	57.5	57.6	54.3	58.1	57.8	55.5	53.6	51.9	7%
Capital Contributions	£m	(19.5)	(23.4)	(32.2)	(32.3)	(30.9)	(30.4)	(30.5)	(30.5)	(29.0)	(28.8)	8%
•	£m	18.9	27.5	25.3	25.3	23.4	27.7	27.3	25.0	24.6	23.1	6%
Non Load Related	£m	55.5	65.3	72.3	74.4	79.9	98.3	102.3	102.0	104.6	102.9	47%
Non-operational capex	£m	7	4	-	-	-	-	-	-	-	-	-100%
Total Capital Expenditure	£m	80.9	96.9	97.6	99.7	103.3	126.0	129.6	127.0	129.2	126.0	33%
	1											
QoS PERFORMANCE		•	— Actual —	•	•			— Forecast –				% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected	m	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3%
Unplanned Customer Minutes Lost	mins			87.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	4%
Unplanned Customer interruptions per 100 customers				95.4	106.0	106.0	106.0	106.0	106.0	106.0	106.0	3%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - AQUILA

OPEX real 2002/03 price	real 2002/03 prices					2007/08	2008/09	2009/10
Total Opex	£m	161.4	162.7	168.9	169.8	169.3	172.5	175.3
Difference vs. Base Case	£m	-		-	-	-	-	-
	1	1	1					
CAPEX real 2002/03 price	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Total Capex	£m	99.7	103.3	131.5	136.9	135.9	138.4	134.9
Difference vs. Base Case	£m	-	-	5.5	7.3	8.9	9.2	8.9
				010				
QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins	97.9 106.0	96.1 105.1	94.2 103.6	92.4 102.4	90.4 101.1	88.4 99.7	86.6 98.4

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - AQUILA

OPEX	real 2002/03 prices			2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	161.4	162.7	172.7	174.0	174.1	178.0	181.6
Difference vs. Base Case	£m	-	-	3.8	4.2	4.8	5.5	6.3
CAPEX	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Total Capex	£m	99.7	103.3	142.2	151.1	153.5	159.8	159.9

Qo\$ PERFORMANCE	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Unplanned Customer Minutes Lost	mins	97.9	96.1	94.2	92.3	90.2	88.0	86.1
Unplanned Customer interruptions per 100 customers		106.0	105.1	103.6	102.4	100.9	99.4	97.9

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

Aquila has not included distributed generation in its own scenario.

2. East Midlands Electricity Distribution (EMED)

Commentary of DPCR4 forecasts

Base Case

Opex

EME has subjected its cost base to external scrutiny and benchmarking to confirm its efficiency. The forecast assumptions are consistent with EME's internal business plan which has an underlying efficiency assumption averaging 1.5% pa throughout the forecast period. This forecast is not therefore a simple roll forward of the current cost base but, consistent with our internal and challenging business plan seeks to extract continued efficiency savings wherever possible.

Operating costs rise in total over the period. This is primarily due to lane rental (a new obligation), increasing inspection and maintenance requirements and increased costs due to scarce technical skills, insurance and pension costs.

Capex

During the DPCR3 period use of a range of asset condition and risk assessment tools has enabled EME to keep spending within Ofgem's low capital allowances whilst maintaining network performance. However, this low level of spend is not sustainable as the assets deteriorate with age and load growth puts pressure on the capabilities of existing assets. EME's Base Case submission therefore contains a substantial increase in investment to maintain the underlying condition and reliability of assets.

The Base Case submission includes replacement capital expenditure averaging £62 million per annum over the period to 2010 compared with an existing level of £30 million. This increase in investment, to a level comparable to other similarly sized DNOs, is necessary to prevent asset deterioration and maintain network performance. This will lead to only a very modest impact on bills (of about £6.50 per domestic customer by 2010, or 2% of the average electricity bill over a 5 year period).

QoS Performance

The Base Case has been developed to maintain both network reliability and customer performance during the DPCR4 period and over the longer term. Improvements to customer network performance achieved in the DPCR3 period will be maintained in this scenario and deterioration in underlying network reliability will be prevented.

Quality of Supply Scenario

Opex

Operating expenditure in the Quality of Supply Scenario is the same as that in the Base Case.

Capex

EME have proposed £56m of additional investment over the five years to improve network performance. The investment builds on Base Case and comprises additional refurbishment and replacement of overhead lines as well as automation of the network. This is designed to reduce Customer Interruptions (CI) at minimum cost as well as providing consequential improvements to Customer Minutes Lost (CML) per circuit.

QoS Performance

In order to provide a sustainable improvement in quality of supply EME propose an increase in refurbishment and replacement of the 11 kV lines since they are the main contributor to CIs and CMLs. Network resilience will be improved through targeting both poor condition lines as well as the older design types that are more susceptible to faults during bad weather. The automation programme involves fitting protection on 11kV circuits to reduce the number of customers affected by a fault. This process will extend to more mixed circuits than work in the current period where protection has been fitted to predominantly overhead circuits. This work will meet Ofgem's targets for CI improvement and will also lead to consequential improvements in CMLs.

DNOs Own Scenario

Opex

EME believes that the DNOs Own Scenario (EME's Preferred Scenario) offers better value for money than the Base Case or Quality of Supply Scenario, with a balance of deliverables and outputs.

Operating expenditure in the Preferred Scenario is substantially the same as that in the Base Case.

Capex

EME's Preferred Scenario contains an additional £38m of investment on top of the Base Case. The additional investment reflects EME's understanding of customers wishes for improved network performance as well as improvements to environmental amenity. It has a value for money mix of performance and environmental improvements on top of the Base Case (which was defined as maintaining network performance).

EME propose a package of 11kV circuit work similar to that in the QoS Scenario but refocused more towards improved CMLs (enabling a significant reduction in the cost of this package). EME have also proposed a small amount of additional expenditure

to improve visual amenity in the most sensitive locations and to reduce environmental risks.

This will lead to only a very modest impact on bills (of about ± 6.90 per domestic customer by 2010, or 2% of the average electricity bill over a 5 year period).

QoS Performance

EME have sought to maximise the value for money obtained from investment in the 11kV circuits. Compared to Ofgem's QoS Scenario EME propose additional expenditure to provide a greater improvement in CMLs with a slower improvement in Cls, for significantly less expenditure than the QoS Scenario. This has been achieved by adjusting the automation programme to include more remote control in conjunction with a lesser number of protection devices.

Summary financial information - East Midlands Electricity

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - EME

TURNOVER			— Actual —		•			— Forecast —				% change
real 20	02/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	fm	248.6	252.1	257.6	263.2	249.6	244.1	254.1	262.1	270.7	279.1	3.9/-
Fueluded Seminer	 	240.0	17.5	2.57.0	205.2	245.0	244.1	10.5	10.4	10.4	10.4	10
Excluded Services	£III Cm	21.2	17.5	21.2	21.5	21.4	20.4	19.5	19.4	19.4	19.4	-4 %
Demininis	±111	0.2	1.1	1.9	0.6	1.0	1.9	2.2	2.3	2.3	2.3	96%
Other income	£m	27.5	26.5	24.6	23.2	22.3	16.9	16.1	15.3	15.7	14.9	-36%
Total Turnover	£m	297.5	297.2	305.3	308.4	295.0	283.4	292.0	299.2	308.1	315.7	0%
OPEX		+	— Actual —		•			— Forecast —				% change
real 20	02/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Cost of sales	£m	5.0	8.6	7.6	8.3	9.0	8.6	7.6	7.6	7.6	7.6	1%
Exit Charges (NCC and other)	fm	21.8	20.2	18.5	17.0	16.2	15.3	14.5	13.7	14.1	13.3	-24%
Employee Wages	fm	24.6	20.2	20.5	16.1	10.2	10.9	19.0	10.7	10.2	19.3	69
Direct Network Center	2111	24.0	20.9	20.3	10.1	10.3	15.0	10.5	10.7	10.5	10.3	-0 /0
Direct Network Costs	±ini C	22.4	25.5	23.2	22.3	21.7	23.0	23.2	22.9	23.0	23.1	0%
Depreciation	£m	39.5	36.5	35.9	36.8	37.7	39.7	41.1	43.5	46.3	49.2	18%
Network Kates	±m	23.3	23.9	24.6	24.3	24.6	24.9	25.2	25.5	25.8	26.1	6%
Other costs	£m	40.0	35.0	34.6	24.0	25.5	31.7	30.6	29.7	29.5	29.4	-5%
Total Operating Costs	£m	176.4	170.5	164.9	148.9	153.0	162.9	161.1	161.6	164.5	166.9	0%
CAPEX		4	- Actual -	*	4			- Forecast -	-	· ·	*	% change
real 20	02/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	fm	62.1	573	61.6	68.1	76.6	90.3	90.2	90.6	92.6	92.0	40%
Conital Contributions	fm	(24.6)	(42.1)	(20.1)	(28.6)	(42.7)	(49.5)	(47.2)	(46.7)	(46.0)	(46.9)	10%
Capital Contributions	 	(34.0)	(43.1)	(39.1)	(30.0)	(42.7)	(40.3)	(47.3)	(40.7)	(40.5)	(40.8)	739/
N. J. B. H. J	1111 C	27.5	14.2	22.3	29.3	33.9	41.0	42.5	43.9	40.7	4.3.2	72 /0
Non Load Related	£m	69.5	45.6	4/.1	52.5	46.8	/5.4	89.1	98.9	103.4	106.0	81%
Non-operational capex	±m	5.4	5.2	4.0	2.4	2.3	1.5	1.1	1.3	1.4	0.9	-68%
Total Capital Expenditure	£m	102.4	65.0	73.6	84.4	83.0	118.7	133.1	144.1	150.5	152.1	71%
								1		I		
QoS PERFORMANCE		+	— Actual —		•			— Forecast —				% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customer encoded					2.5	2.5	0.5	0.5	27	27		- 01
Customers connected	m.	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6	5%
Unplanned Customer Minutes Lost per Connected Customer	mins			79.3	78.5	72.3	66.1	66.2	66.3	66.4	66.5	-14%
Unplanned Customer interruptions per 100 customers				73.5	85.0	85.2	82.4	82.5	82.7	82.8	82.9	2%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - EME

OPEX real 2002/03 price	real 2002/03 prices			2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	148.9	153.0	162.9	161.1	161.6	164.5	166.9
Difference vs. Base Case	£m	-	-	-	-	-	-	-
CARTY				1		1		1
real 2002/03 prio	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Total Capex	£m	84.4	83.0	129.9	144.3	155.3	161.7	163.3
Difference vs. Base Case	£m	-	-	11.2	11.2	11.2	11.2	11.2
		1						
QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	78.5	72.3	66.1	65.1	64.2	63.3	62.3
Unplanned Customer interruptions per 100 customers		85.0	85.2	82.5	80.6	78.7	76.8	74.9
Unplanned Customer interruptions per 100 customers		85.0	85.2	82.5	80.6	78.7	76.8	74

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - EME

OPEX	real 2002/03 prices			2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	148.9	153.0	162.6	160.9	161.1	164.1	166.7
Difference vs. Base Case	£m	-	-	(0.3)	(0.3)	(0.5)	(0.4)	(0.2)
CAPEX	real 2002/03 prices	2003/04	2004/05	0005/05				
		#VV0/V	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	ical 2002/05 prices	2000/01	2004/03	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	fm	84.4	83.0	122.1	2006/07 136.8	2007/08 153.4	2008/09 161.1	2009/10 163.4
Total Capex	£m	84.4	83.0	122.1	2006/07 136.8	2007/08 153.4	2008/09 161.1	2009/10 163.4
Total Capex Difference vs. Base Case	fm fm	84.4	83.0	122.1	2006/07 136.8 3.7	2007/08 153.4 9.3	2008/09 161.1 10.6	2009/10 163.4 11.3

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	78.5	72.3	66.1	65.1	64.2	63.3	62.4
Unplanned Customer interruptions per 100 customers		85.0	85.2	82.5	81.5	80.5	79.5	78.5

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

EME has not included distributed generation in its own scenario.

3. EDF Energy Networks (EPN) plc (EPN)

Commentary on DPCR4 forecasts

Base Case

Opex

The first three electricity price control periods since vesting have been characterised by increasing efficiency and hence falling costs, latterly driven mostly by mergers. Further savings will be smaller, harder to achieve, and in some cases will require significant investment. There will also be a number of significant upward pressures on costs:

- The impact of skill shortages exacerbated by the special cost pressures that we face from operating in a dynamic growth area that also serves large parts of north and east London;
- The impact of new legislation (e.g. the full implementation of the Electricity Safety Quality and Continuity Regulations, and the introduction of new traffic management legislation);
- The impact of forecast pension deficits; and
- An increased need for proactive vegetation management.

In the next price control period, the focus of our efficiency initiatives will be on the achievement and consolidation of the EPN/LPN and SPN integration benefits. We have assumed that other savings will be in line with UK average total factor productivity growth. This is consistent with our view that, fifteen years out from privatisation, efficient companies should not be subject to efficiency predictions that exceed this.

Capex

In recent years, EPN has successfully extended the lives of its network assets, installed to a large extent in the 1950s and 1960s, well beyond those originally expected. At the same time, we have been able to increase utilisation by using advanced asset management techniques such as thermal modelling to understand the dynamic rating of plant. EDF Energy (EPN) will continue in these efforts, but both asset replacement and reinforcement requirements must now be addressed through increased levels of investment. The challenge for EDF Energy (EPN) is to renew and reinforce those assets necessary to prevent long-term adverse impacts on the security and quality of supply enjoyed by customers.

The East of England faces a period of unprecedented commercial activity, partly because of generally high levels of economic growth, but in particular as a result of government policy in promoting housing new-build growth areas. Major regeneration schemes at Milton Keynes, Stansted Corridor, and Thames Gateway all directly impact on EPN's licensed distribution area.

Distributed generators seeking connection in the EPN area are also set to increase in size and number if the government's targets for renewable energy production and CHP are to be met. In particular, the Norfolk, Suffolk, and Essex coasts offer major

opportunities for off-shore wind farm development following the recent first and second wave of Crown Estate licences to prospective developers. At the other end of the spectrum, the level of new-build in the housing sector offers great potential for growth in domestic CHP and, in the longer term, in photovoltaics.

EPN's key investment programmes during DPCR4 are detailed in the Summary of Forecasts.

QoS Performance

The Ofgem base case assumes that current levels of quality of supply performance will be maintained during a period of increased investment activity. We have attempted to replicate Ofgem's criteria of constant reliability, security, and availability. In practice, our assumptions here are that some assets will exhibit a small degradation in reliability, but that this will be balanced by small improvements in other areas. However, we do not believe that this is a practical investment scenario and would strongly encourage Ofgem to regard the DNO case as the minimum necessary to secure adequate levels of reliability, security, and availability – both in the short and the long term.

Quality of Supply Scenario

Opex

Given the scale of capital expenditure that is required for EPN to achieve the proposed 2020 benchmarks, we do not believe that this is a realistic basis on which to forecast the future levels of operating expenditure. The additional operating costs associated with any trial area schemes will be minimal.

Capex

In our DNO case we propose the cost-effective extension of remote control and automated restoration. This should deliver performance close to Ofgem's 2010 benchmarks with moderate confidence, given the year on year underlying variability of network performance. However, these proposals cannot be extended to deliver the necessary improvements required to meet Ofgem's 2020 benchmarks. To meet these, we have proposed innovative developments to existing networks that could radically improve their performance.

In particular, we have proposed that, rather than committing to unproven long-term quality of supply benchmarks, Ofgem should use the proposed Innovation Funding Initiative and small allowances for realistic trials of new technology networks while establishing a robust process for establishing long-term quality of supply targets.

QoS Performance

Ofgem's benchmarking process has enhanced the industry's ability to understand differences in network performance across the country. However, if this approach is used to set targets, Ofgem will need to ensure that:

- It produces stable results and meaningful trends;
- Material inherent and inherited differences in network performance are specifically addressed;

• The performance glide path to achieving the 2020 network performance levels is realistic.

Achieving Ofgem's current 2020 benchmark for EDF Energy Networks (EPN) is not feasible without a radically different approach to network design at all voltages. This strongly suggests to us that further work on the benchmarking process is required.

DNO's Own Scenario

Opex

The impact of the additional capital expenditure included in our DNO case will have only a minor impact on our Base Case operating expenditure. The main purpose of this additional expenditure is to enable us to meet Ofgem's 2010 QoS benchmarks. There will be an increase in costs because of the roll-out of more secondary remote control and automation, but this will be offset by reduced maintenance costs as certain age-expired assets are replaced.

Capex

The DNO case contains performance improvement programmes which aim to meet, with a reasonable level of confidence, Ofgem's 2010 QoS benchmark levels. In particular, additional investment is included for further network performance enhancement and additional performance based asset replacement. This should produce a level of resilience improvement work which will have minimal QoS impact during 'average weather' years, but will reduce the risk of widespread catastrophic damage during violent storm conditions.

QoS Performance

Our DNO case plans deliver QoS performance close to Ofgem's 2010 benchmark level, with moderate confidence given the year on year underlying variability of network performance. Greater certainty would require additional measures to be implemented, and associated higher levels of expenditure, which we do not believe are justified in terms of either incremental cost benefit or consumer demand.

Summary financial information - EPN

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

All figures in REAL 2002/3 prices BASE CASE

TURNOVER		+	— Actual —	+	4		Forecast					
	real 2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	298	296	325	307	291	315	318	321	328	331	6%
Excluded Services	£m	22	13	14	12	12	12	12	12	11	11	-21%
Deminimis	£m	-	0	-	-	-	-	-	-	-	-	-100%
Other income	£m	30	29	25	24	23	25	23	23	25	27	-7%
Total Turnover	£m	350	339	363	343	326	351	352	356	364	370	4%

OPEX		+	— Actual —		•			— Forecast —				% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Cost of sales	£m	(11)	0	-	-	-	-	-	-	-	-	-100%
Exit Charges (NGC and other)	£m	(23)	(23)	(18)	(16)	(16)	(25)	(23)	(23)	(25)	(27)	27%
Employee Wages	£m	(19)	(19)	(19)	(19)	(20)	(23)	(23)	(24)	(24)	(24)	24%
Direct Network Costs	£m	(18)	(13)	(38)	(32)	(37)	(40)	(40)	(40)	(40)	(38)	44%
Depreciation	£m	(24)	(32)	(42)	(40)	(44)	(48)	(53)	(58)	(65)	(69)	62%
Network Rates	£m	(27)	(27)	(25)	(25)	(25)	(25)	(25)	(25)	(25)	(25)	-2%
Other costs	£m	(22)	(16)	(20)	(32)	(29)	(27)	(28)	(28)	(28)	(28)	17%
Total Operating Costs	£m	(143)	(129)	(162)	(165)	(171)	(189)	(192)	(198)	(207)	(212)	30%

CAPEX		4	Actual —	•	•			- Forecast -			•	% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	£m	(57)	(79)	(92)	(95)	(100)	(111)	(116)	(118)	(121)	(121)	39%
Capital Contributions	£m	36	43	64	60	58	49	47	47	45	45	-10%
Non Load Related	£m	(90)	(74)	(88)	(99)	(108)	(122)	(131)	(141)	(147)	(147)	50%
Non-operational capex	2111	(0)	(0)	(2)	(10)	(7)	(6)	(10)	(13)	(11)	(10)	100 %
Total Capital Expenditure	£m	(112)	(111)	(118)	(143)	(157)	(192)	(210)	(226)	(234)	(233)	71%
QoS		•	— Actual —	>	•			— Forecast —				% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected (# as at 30th September) Unplanned Customer Minutes Lost per Connected Customer Unplanned Customer interruptions per 100 customers	m mins	3.4	3.4	3.4 78 86	3.3 78 90	3.4 80 91	3.4 81 91	3.4 81 92	3.5 82 93	3.5 82 94	3.5 82 94	2.6% 4.1% 4.7%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

The costs for 2002/3 actuals and all forecast years have been adjusted to remove margins included in charges from 24Seven, a related-company service provider.

Salary Costs included in charges from 24Seven have been reclassified to the Employee Wages line from the Direct Network Costs line.

QUALITY OF SUPPLY CASE

OPEX real 2002/03 price	\$	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	fm	(165.2)	(170.5)	(188.5)	(191.9)	(198.9)	(207.9)	(213.9)
		(10012)	(11 010)	(10010)	()	(10010)	(= 01 15)	(= : 0:0)
Difference vs. Base Case	£m	-	-	-	(0.1)	(0.5)	(1.0)	(1.9)
CADEV								
real 2002/03 price:	3	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	(143.3)	(157.1)	(198.7)	(226.1)	(254.1)	(275.0)	(287.9)
Difference vs. Rase Case	fm			(6.5)	(16.5)	(28.5)	(41.5)	(54.5)
Difference vs. base case	2111			(0.5)	(10.5)	(20.5)	(+1.5)	(34.3)
QoS PERFORMANCE								
		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	77	80	81	81	81	81	81
Unplanned Customer interruptions per 100 customers		90	91	91	92	92	92	91

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO's OWN SCENARIO

OPEX real 2002/03 price	es	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	(165.2)	(170.5)	(188.6)	(192.1)	(199.0)	(208.2)	(214.0)
Difference vs. Base Case	£m	-	-	(0.1)	(0.3)	(0.6)	(1.3)	(2.0)
CAPEX								
CAPEX real 2002/03 pric	es	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX real 2002/03 pric	es £m	2003/04	2004/05 (162.7)	2005/06 (202.3)	2006/07 (218.4)	2007/08 (238.1)	2008/09 (245.9)	2009/10 (243.4)

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	78	78	77	76	76	76	76
Unplanned Customer interruptions per 100 customers		90	90	89	87	84	82	81

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

LPN has not included distributed generation in its own scenario.

The costs for 2002/3 actuals and all forecast years have been adjusted to remove margins included in charges from 24Seven, a related-company service provider.

Salary Costs included in charges from 24Seven have been reclassified to the Employee Wages line from the Direct Network Costs line.

4. EDF Energy Networks (LPN) plc (LPN)

Commentary on DPCR4 forecasts

Base Case

Opex

The first three electricity price control periods since vesting have been characterised by increasing efficiency and hence falling costs, latterly driven mostly by mergers. Further savings will be smaller, harder to achieve, and in some cases will require significant investment. There will also be a number of significant upward pressures on costs:

- The impact of skill shortages further exacerbated by the unique cost pressures that we face from operating in London;
- The impact of new legislation (e.g. the full implementation of the Electricity Safety Quality and Continuity Regulations) and the introduction of new traffic management legislation; and
- The impact of forecast pension deficits.

During the next price control period, the focus of our efficiency initiatives will be on the achievement and consolidation of the EPN/LPN and SPN integration benefits. We have assumed that other savings will be in line with UK average total factor productivity growth. This is consistent with our view that, fifteen years out from privatisation, efficient companies should not be subject to efficiency predictions that exceed this.

Capex

In recent years, LPN has successfully extended the lives of its network assets, installed to a large extent in the 1950s and 1960s, well beyond those originally expected. At the same time, we have been able to increase utilisation by using advanced asset management techniques such as thermal modelling to understand the dynamic rating of plant. EDF Energy (LPN) will continue in these efforts, but both asset replacement and reinforcement requirements must now be addressed through increased levels of investment. The challenge for EDF Energy (LPN) is to prevent long-term adverse impacts on the security and quality of supply enjoyed by customers in the capital city.

London faces a period of unprecedented commercial activity, partly because of generally high levels of economic growth in the City, but in particular as a result of government policy in promoting housing new-build growth areas. Europe's largest regeneration scheme at Thames Gateway directly impacts on LPN's licensed distribution area. Other key developments include further development of the Docklands region – including an extended rail system, the Crossrail project, and the potential redevelopment associated with London's Olympic Bid – much of which will materialise even if the bid is unsuccessful.

In terms of distributed generation, the potential for CHP in the extensive commercial area of the City remains high (subject to gas/electricity price differentials and/or direct incentives) and the level of new-build in the housing sector offers great potential for growth in domestic CHP and, in the longer term, in photovoltaics.

LPN's key investment programmes during DPCR4 are detailed in the Summary of Forecasts.

QoS Performance

Ofgem's base case assumes that current levels of quality of supply performance will be maintained. Our base case plans maintain the integrity of the network during a period of increased investment activity.

Quality of Supply Scenario

Opex

Given that LPN has already achieved its 2020 benchmarks, there are no additional operating costs included in our forecasts.

Capex

In accordance with Ofgem's guidance, no additional capex above the DNO case is included, as EDF Energy (LPN) already meets or exceeds the Ofgem benchmarks for 2020.

QoS Performance

QoS performance in EDF Energy (LPN) already meets or exceeds the Ofgem benchmarks for 2020. However, we believe that a meaningful dialogue between ourselves, Ofgem, and relevant community stakeholders is required in order to establish QoS performance and expectations and the appropriate long-term investment strategy for such an important centre of economic activity.

DNO's Own Scenario

Opex

The impact of the additional capital expenditure (generally less than £1m a year) included in our DNO case will have only a minor impact on our base case operating expenditure.

Capex

LPN's network performance already meets Ofgem's 2010 QoS bench- mark levels. The small additional level of capex included in the DNO case is designed to secure minor overall performance improvements – for example by addressing cost-effective opportunities to extend the scope of our already extensive remote control and automation infra- structure. The effect will be to improve performance to small pockets of the network, rather than to materially improve the overall QoS performance of the network.

QoS Performance

Our DNO case plans deliver QoS performance close to Ofgem's 2010 benchmark level with moderate confidence, given the year on year underlying variability of network performance. Greater certainty would require additional measures to be implemented, and this in turn would require associated higher levels of expenditure.

Summary financial information - LPN

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

All figures in REAL 2002/3 prices BASE CASE

TURNOVER		+	— Actual —	+	4			— Forecast —			÷	% change
	real 2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	231	228	231	220	217	254	258	262	268	272	16%
Excluded Services	£m	23	22	14	12	12	12	12	12	11	11	-32%
Deminimis	£m	-	-	-	-	-	-	-	-	-	-	-
Other income		25	24	23	25	24	20	22	22	22	24	-8%
Total Turnover	£m	279	274	268	257	253	286	291	295	301	307	11%

OPEX		+	— Actual —	*	•			— Forecast —			+	% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Cost of sales	£m	(3)	(2)	(1)	-	-	-	-	-	-	-	-100%
Exit Charges (NGC and other)	£m	(19)	(19)	(17)	(19)	(17)	(20)	(22)	(22)	(22)	(24)	21%
Employee Wages	£m	(13)	(14)	(14)	(14)	(14)	(41)	(42)	(42)	(42)	(42)	205%
Direct Network Costs	£m	(29)	(19)	(23)	(22)	(21)	(19)	(19)	(19)	(19)	(19)	-18%
Depreciation	£m	(49)	(51)	(48)	(30)	(33)	(35)	(39)	(44)	(48)	(52)	4%
Network Rates	£m	(22)	(22)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	-3%
Other costs	£m	(16)	(22)	(18)	(24)	(21)	(20)	(20)	(20)	(20)	(21)	1%
Total Operating Costs	£m	(151)	(149)	(140)	(128)	(127)	(157)	(162)	(167)	(172)	(179)	20%

CAPEX		4	Actual —	*	•			- Forecast -			*	% change
real 200	2/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	£m	(41)	(42)	(59.0)	(68.6)	(67.1)	(66.8)	(71.7)	(74.7)	(75.6)	(75.3)	31%
Capital Contributions	£m	28	50	38	47	43	35	35	34	33	32	-18%
Non Load Related Non-operational capex	£m £m	(64) (1)	(67)	(67) (2)	(70) (6)	(71) (5)	(82) (8)	(109) (7)	(124) (9)	(139) (8)	(142) (8)	75% 194%
Total Capital Expenditure	£m	(79)	(60)	(90)	(97)	(100)	(121)	(153)	(174)	(190)	(193)	95%
QoS		4	— Actual —		•			— Forecast —				% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected (# as at 30th September)	m	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	3.8%
Unplanned Customer Minutes Lost per Connected Customer	mins			43	42	43	44	45	46	48	48	8.5%
Unplanned Customer interruptions per 100 customers				36	30	32	33	34	36	37	37	7.4%
											1 /	1

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

The costs for 2002/3 actuals and all forecast years have been adjusted to remove margins included in charges from 24Seven, a related-company service provider.

Salary Costs included in charges from 24Seven have been reclassified to the Employee Wages line from the Direct Network Costs line.

QUALITY OF SUPPLY CASE

OBEY		1	I	1			1	
real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	1							
Total Onex	fm							
Total Opex	2111							
Difference vs. Base Case	fm	n/a	n/a	n/a	n/2	n/a	n/a	n/2
Difference vs. Dase case	2111	104	104	iva	1//4	1/4	iva	11/4
CADEV		1	1				1	
real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m							
Difference vs. Base Case	£m	n/a						
OoS PERFORMANCE			1					
		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
		1	1	1			1	
Unplanned Customer Minutes Lost per Connected Customer	mins	n/a						
Unplanned Customer interruptions per 100 customers		n/a						

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO's OWN SCENARIO

OPEX real 2002/03 price	25	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	(128.3)	(127.2)	(157.2)	(163.3)	(168.5)	(174.1)	(181.9)
Difference vs. Base Case	£m	-	(0.1)	(0.7)	(1.2)	(1.9)	(2.6)	(2.9)
CAPEX real 2002/03 price	25	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	±m	(98.6)	(105.5)	(126.1)	(156.2)	(177.4)	(193.7)	(196.1)
Difference vs. Base Case	£m	(1.6)	(5.5)	(5.2)	(3.5)	(3.9)	(3.5)	(3.3)

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	39	38	38	37	37	37	37
Unplanned Customer interruptions per 100 customers		34	34	33	33	33	34	34

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

LPN has not included distributed generation in its own scenario.

The costs for 2002/3 actuals and all forecast years have been adjusted to remove margins included in charges from 24Seven, a related-company service provider. Salary Costs included in charges from 24Seven have been reclassified to the Employee Wages line from the Direct Network Costs line.

5. EDF Energy Networks (SPN) plc (SPN)

Commentary on DPCR4 forecasts

Base Case

Opex

The first three electricity price control periods since vesting have been characterised by increasing efficiency and hence falling costs, latterly driven mostly by mergers. Further savings will be smaller, harder to achieve, and in some cases will require significant investment. There will also be a number of significant upward pressures on costs:

- The impact of skill shortages exacerbated by the special cost pressures that we face from operating in South East England;
- The impact of new legislation (e.g. the full implementation of the Electricity Safety Quality and Continuity Regulations) and the introduction of new traffic management legislation;
- The impact of forecast pension deficits; and
- An increased need for proactive vegetation management.

In the next price control period, the focus of our efficiency initiatives will be on the achievement and consolidation of the EPN/LPN and SPN integration benefits. We have assumed that other savings will be in line with UK average total factor productivity growth. This is consistent with our view that, fifteen years out from privatisation, efficient companies should not be subject to efficiency predictions that exceed this.

Capex

In recent years, SPN has successfully extended the lives of its network assets, installed to a large extent in the 1950s and 1960s, well beyond those originally expected. At the same time, we have been able to increase utilisation by using advanced asset management techniques such as system-wide reliability centred maintenance. EDF Energy (SPN) will continue in these efforts, but both asset replacement and reinforcement requirements must now be addressed through increased levels of investment. The challenge for EDF Energy (SPN) is to renew and reinforce those assets necessary to prevent long-term adverse impacts on the security and quality of supply enjoyed by customers.

The south-east of England faces a period of unprecedented commercial activity, partly because of generally high levels of economic growth, but in particular as a result of government policy in promoting housing new-build growth areas. Major regeneration schemes at Ashford and Thames Gateway directly impact on SPN's licensed distribution area.

Distributed generators seeking connection in the SPN area are also set to increase in size and number if the government's targets for renewable energy production and CHP are to be met. In particular, the Thames Estuary and Kent coast offer major opportunities for off-shore wind farm development following the recent first and second wave of Crown Estate licences to prospective developers. At the other end

of the spectrum, the level of new-build in the housing sector offers great potential for growth in domestic DCHP and, in the longer term, in photovoltaics.

SPN's key investment programmes during DPCR4 are detailed in the Summary of Forecasts.

QoS Performance

The Ofgem base case assumes that current levels of quality of supply performance will be maintained during a period of increased investment activity.

Quality of Supply Scenario

Opex

Given the scale of capital expenditure that is required for SPN to achieve the proposed 2020 benchmarks, we do not believe that this is a realistic basis on which to forecast the future levels of operating expenditure. The additional operating costs associated with any trial area schemes, will be minimal.

Capex

In our DNO case, we propose an extensive, but cost-effective, programme to provide remote control and automated restoration facilities to selected parts of the HV distribution network. This will build on the expertise that we have gained from installing similar infrastructure for both LPN and EPN. Our modelling suggests that this project should deliver performance close to Ofgem's 2010 benchmarks with moderate confidence, given the year on year underlying variability of network performance.

However, these proposals cannot be extended to deliver the necessary improvements required to meet Ofgem's 2020 Benchmarks. To meet these, we have proposed innovative developments to the existing networks that could radically improve their performance. Such developments would not provide the relative 'quick-wins' that we envisage through the above-mentioned automation programme, but would certainly secure longer-term benefits in terms of increased reliability, security, and availability of supply.

We have proposed that, rather than committing to unproven long term quality of supply benchmarks, Ofgem should use the proposed Innovation Funding Initiative and small allowances for realistic trials of new technology networks, while establishing a robust process for establishing long-term quality of supply targets.

QoS Performance

Ofgem's benchmarking process has enhanced the industry's ability to understand differences in network performance across the country. However, if this approach is used to set targets, Ofgem will need to ensure that:

- It produces stable results and meaningful trends;
- Material inherent and inherited differences in network performance are specifically addressed;

• The performance glide path to achieving the 2020 network performance levels is realistic.

Achieving Ofgem's current 2020 benchmark for EDF Energy Networks (SPN) is not feasible without a radically different approach to network design at all voltages.

DNO's Own Scenario

Opex

The impact of the additional capital expenditure included in our DNO case will have only a minor impact on our base case operating expenditure. The main purpose of this additional expenditure is to enable us to meet Ofgem's 2010 QoS benchmarks. There will be an increase in costs because of the roll-out of secondary remote control and automation, but this will be offset by reduced fault costs, as the reliability of the overhead line network is further improved.

Capex

The DNO case contains performance improvement programmes which aim to meet, with a reasonable level of confidence, Ofgem's 2010 QoS benchmark levels. In particular, additional investment is included for further network performance enhancement (in particular through remote control and automation) and additional performance based asset replacement. This should produce a level of resilience improvement work which will have minimal QoS impact during 'average weather' years, but will reduce the risk of widespread catastrophic damage during violent storm conditions.

QoS Performance

Our DNO case plans deliver QoS performance close to Ofgem's 2010 benchmark level with moderate confidence, given the year on year underlying variability of network performance. Greater certainty would require additional measures to be implemented, and associated higher levels of expenditure, which we do not believe are justified in terms of either incremental cost benefit or consumer demand.

Summary financial information - SPN

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

All figures in REAL 2002/3 prices BASE CASE - SPN

TURNOVER		•	— Actual —	>	4			— Forecast —			>	% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover	Í											
											1	
Price Controlled	fm	165	162	169	159	148	216	218	219	223	225	37%
Fueluded Services	£m	105	102	22	17	17	17	17	17	16	16	37 10
Excluded Services	žini c	23	23	22	17	17	17	17	17	10	10	-22 %
Deminimis	±m	2	10	(0)	-	-	-	-	-	-	-	-100%
Other income		24	25	23	23	23	16	18	17	18	20	-25%
Total Turnover	£m	215	222	214	199	189	248	252	253	258	261	23%
											1	
								•	•			•
OPEX		•	— Actual —		•			— Forecast —				% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Operating costs											1	
Cast (also	C	(0)	(5)	(4)	(2)	(3)	(2)	(2)	(2)	(2)	(3)	210
Cost of sales	±m	(6)	(5)	(4)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	-21%
Exit Charges (NGC and other)	£m	(18)	(19)	(17)	(17)	(17)	(16)	(18)	(17)	(18)	(20)	1%
Employee Wages	£m	(24)	(17)	(20)	(18)	(18)	(42)	(42)	(43)	(43)	(43)	119%
Direct Network Costs	£m	(18)	(19)	(21)	(24)	(25)	(25)	(25)	(24)	(24)	(24)	16%
Depreciation	£m	(31)	(28)	(27)	(27)	(28)	(31)	(35)	(38)	(42)	(44)	35%
Network Rates	£m	(16)	(16)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	-2%
Other costs	fm	(17)	(25)	(32)	(27)	(23)	(20)	(20)	(20)	(21)	(21)	-18%
Onici cosis	2.00	(17)	(2.3)	(32)	(27)	(23)	(20)	(20)	(20)	(21)	(21)	-10 /0
Total Operating Costs	fm	(128)	(129)	(136)	(131)	(130)	(152)	(157)	(161)	(166)	(171)	24%
Total Operating Costs	2.00	(120)	(125)	(150)	(151)	(150)	(132)	(157)	(101)	(100)	(17.1)	24 /0
CAPEY		4	A stual		4			Economia -				0/ shange
CAFEA		2000/01	- Actual -	2002/02	2002/04	2004/05	2005/06	- Forecast -	2007/09	2008/00	2000/10	% change
Carital Encoditant	prices	2000/01	2001/02	2002/03	2003/04	2004/03	2003/00	2000/07	2007/00	2000/09	2009/10	2003-2010
Capital Expenditure											1	
Load Related	£m	(33)	(36)	(37)	(50)	(48)	(53)	(51)	(52)	(46)	(41)	19%
Capital Contributions	£m	23	26	25	32	26	20	20	19	19	18	-28%
Non Load Related	£m	(52)	(72)	(66)	(68)	(91)	(104)	(98)	(94)	(95)	(100)	41%
Non-operational capex	£m	(10)	(7)	(4)	(6)	(8)	(7)	(7)	(6)	(6)	(6)	-8%
Total Canital Expenditure	fm	(71)	(89)	(82)	(92)	(122)	(145)	(136)	(133)	(129)	(128)	47%
Total capital experiatore	2.00	(7.1)	(05)	(02)	(52)	(122)	(143)	(150)	(155)	(123)	(120)	47 /0
		r .										~ 1
Qos		•	— Actual —	•	•	2004/05	2005/05	Forecast -	0005/00	0000/00		% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
	1											
Customers connected (# as at 30th September)	m	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	5.6%
Unplanned Customer Minutes Lost per Connected Customer	mins			81	79	81	82	84	85	87	87	5.8%
				÷ ·						÷.		
Unplanned Customer Interruptions per 100 customers				90	94	95	97	98	100	101	101	6.6%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - SPN

OPEX real 2002/03 prices	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	(131.3)	(129.7)	(152.4)	(157.5)	(161.6)	(166.9)	(172.6)
Difference vs. Base Case	£m	-	-	-	(0.1)	(0.5)	(1.1)	(1.9)
CAPEX real 2002/03 prices			2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	fm	(92.1)	(122.0)	(151.0)	(153.9)	(162.6)	(172.5)	(184.9)
Difference vs. Base Case	fm			(6.5)	(17.5)	(29.5)	(43.5)	(56.5)
				(010)	((2010)	(1010)	(3 515)
QoS PERFORMANCE			2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer Unplanned Customer interruptions per 100 customers	mins	79 94	81 95	82 97	84 98	85 98	85 99	84 98

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO's OWN SCENARIO - SPN

OPEX real 2002/03 pr	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	(131.3)	(129.7)	(152.4)	(157.6)	(161.4)	(166.7)	(172.0)
Difference vs. Base Case	£m	-	-	-	(0.2)	(0.3)	(0.9)	(1.3)
CAPEX real 2002/03 pr	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	(92.1)	(122.0)	(152.8)	(144.8)	(143.2)	(138.2)	(136.3)
	6			(8.3)	(8.4)	(10.1)	(0.2)	(7.0)

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost per Connected Customer	mins	80	79	78	74	71	67	64
Unplanned Customer interruptions per 100 customers		94	93	92	89	82	80	77

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

SPN has not included distributed generation in its own scenario.

6. United Utilities Electricity (UUE)

Commentary on DPCR4 forecasts

Over the past decade, real prices for electricity distribution have reduced by around 50%, and the level of service to customers has improved substantially. Our plans for 2005-2010 aim to maintain those core levels of service and respond to new challenges ahead. These forecasts anticipate a relatively small increase in charges across the period, reflecting an increasing level of investment and other cost pressures arising out of our statutory and licence obligations, offset by further improvements in our operational efficiency.

There remain significant areas of cost uncertainty that we have identified in our detailed plans. It will be necessary to keep under review the cost projections we have used and to establish means of dealing with the uncertainties that remain after price controls have been set.

Base Case

Our base case is designed to maintain current (2002/3) levels of service (as required by Ofgem). It assumes no new distributed generation and also excludes planned expenditure of £22m in 2003/4 and 2004/5, intended to improve CI and CML performance in the current price control period. The key parameters within our planning assumptions to preserve our currently high quality of service are:

- maintaining the level of network risk and long-term security resulting in a stable probability of failure;
- a resulting continuation of the stable fault rate of the network;
- ensuring all demands can be met by sustaining an adequate and efficient capacity margin.

Opex

The challenge of the current price control period, with its requirement for cost reductions of 7.9% per annum, has driven most potential efficiency gains from the business. We expect to continue to find further opportunities, but the rate of cost improvement will be lower, at around 1.3% per year resulting from:

- productivity improvements;
- re-organisation and location rationalisation;
- improvements in procurement;
- implementation of new IT systems; and
- optimisation of inspection regimes.

The reduction in costs will help to offset cost increases driven by a range of external pressures, such as:

- new legislation;
- pension obligations;
- increasing contractor costs;
- additional safety inspections and maintenance;
- more frequent tree trimming; and

• the need to address skills shortages.

Capex

We forecast that a net capital investment programme of £643m over five years is required to achieve the above targets and meet anticipated statutory obligations (excluding the impact of distributed generation). This programme has been costed using current competitive market rates, adjusted as necessary for efficiencies and future cost pressures.

Non-load related capex is predicted to slowly increase during the next price control period as a result of the ageing and gradual deterioration of our asset base. Our Base Case projections of asset replacement result from a Risk Management approach to the existing asset base. This involves selecting intervention strategies that produce the lowest whole-life cost solution to maintain failure rates at their current levels.

Certain sections of our network are experiencing exceptionally high load growth which requires localised large-scale reinforcement. Customer churn is also expected to continue across the network. In addition, we have identified a number of large sites which require reinforcing for fault level or security of supply considerations. Our load-related capex is therefore forecast to increase despite a relatively static forecast for customer growth. We assume that customer contributions will broadly continue at their current levels.

Quality of Supply Performance

The quality of supply performance implied by our Base Case is worse than we anticipate, as the Base Case excludes quality of supply related expenditure planned for 2003/4 and 2004/5. Without this investment we are not confident of meeting IIP performance targets in 2004/5.

Quality of Supply Scenario

Our planned programme is designed to achieve Ofgem's hypothetical 2010 targets for CIs and CMLs. The scenario illustrated here is just one of a range of sensitivities costed at Ofgem's request. The unit costs used to develop these scenarios and sensitivities are consistent with those we have used in FBPQ Base Case.

In general our customers tell us they are satisfied with the quality of service they receive from us, in terms of both network reliability and our response to incidents. Without clear evidence from Ofgem's customer survey we would not propose to undertake the additional investments implied by this scenario.

Opex

There are no significant variations in operating expenditure between the Base Case and the Quality of Supply scenario.

Capex

The programme for Quality of Supply includes a series of planned initiatives designed to achieve Ofgem's hypothetical 2010 targets, predominantly through the

increased installation of remote control and automation technologies on our HV network. This process has used cost/benefit prioritisation of detailed potential improvement initiatives. A programme of £39M is estimated as being required. However £22m of this is expected to be spent by March 2005. This represents our remaining DPCR3 Quality of Supply investment. This investment is designed to significantly increase confidence in meeting 2004/05 IIP levels of performance.

Quality of Supply Performance

Our planned programme is designed to achieve Ofgem's specific targets for CIs and CMLs in 2010 with a high degree of confidence. In order to model achievement of this single year target, we have taken into account the potential volatility in year-onyear performance by adjusting current performance and have then assessed the cost of improving from this level to 2010 target levels.

DNO's Own Scenario

In the Alternative Scenario, we have addressed a further key challenge excluded from Ofgem's specifications of the Base Case. This is our response to the likely growth in distributed generation, reflecting Government policy objectives on renewables and CHP. We believe this scenario best describes the likely requirements on us, and strikes an appropriate balance between the needs of our stakeholders.

Given the renewed commitment demonstrated by the Government's recent announcement of an extension to the Renewables Order to 2015, we have assumed that Government will implement any policy measures necessary to ensure the achievement of 2010 targets for Renewable Energy Generation. We also assume that a significant proportion of that energy will come from distributed generators connected to our network.

Opex

There is a relatively small effect on operating costs from increasing volumes of Distributed Generation. However the Base Case operating costs, as described above, form the overwhelming majority of the DNO's Own Scenario opex forecasts.

Capex

We have added the impact of our current best view on the likely outcome for Distributed Generation to our Base Case plans to construct the Alternative Scenario. The main effect is to increase forecast capital expenditure by around £106m, with an assumption that £44m will be funded by connection charges from generators connecting to our network.

Quality of Supply Performance

The tables show performance in line with the Base Case, since the only change in our assumptions relates to Distributed Generation. As described above, actual performance is expected to be better than is shown, since \pounds 22m of quality related capex is expected in 2003/4 and 2004/5.

Summary financial information - UUE

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - UUE

TURNOVER	/ER Actual Actual Forecast						•	% change				
real	2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	215.2	220.0	217.9	221.8	203.0	213.0	225.3	235.1	247.8	258.1	9%
Excluded Services	£m	38.1	46.3	43.7	27.0	23.3	26.0	24.9	24.4	23.6	23.0	-32%
Deminimis	£m	-	7.1	29.0	-	-	-	-	-	-	-	-100%
Other income	£m	22.9	21.8	19.8	20.0	12.0	8.3	10.3	10.4	11.5	11.1	-47%
Total Turnover	£m	276.2	295.2	310.4	268.8	238.3	247.3	260.5	269.9	282.9	292.2	-3%
OPEY		4	Actual					- Forecast -				% change
OFEX real '	2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	% change 2005-2010
Operating Costs	.002/05 prices	2000/01	2001/02	2002/05	2003/04	2004/05	2003/00	2000/07	200//00	2000/05	2005/10	2003-2010
Operating Costs												
Cost of sales	fm	(13.1)	(21.6)	(36.6)	(5.5)	(5.9)	(5.9)	(5.8)	(5.8)	(5.8)	(5.9)	-65%
Exit Charges (NGC and other)	fm	(17.4)	(16.3)	(14.3)	(14.2)	(5.7)	(5.7)	(7.8)	(8.0)	(9.0)	(8.7)	-42%
Employee Wages	fm	(26.8)	(18.0)	(23.4)	(25.9)	(30.2)	(35.4)	(35.6)	(35.6)	(35.7)	(35.7)	43%
Direct Network Costs	fm	(20.0)	(13.0)	(15.9)	(23.3)	(5.3)	(6.0)	(6.8)	(7.0)	(6.9)	(6.9)	-32%
Depreciation	fm	(50.7)	(47.8)	(48.8)	(46.3)	(49.2)	(48.9)	(50.2)	(50.3)	(51.7)	(53.2)	5%
Network Rates	fm	(20.6)	(20.5)	(20.1)	(17.8)	(16.1)	(18.0)	(19.5)	(19.9)	(20.3)	(20.7)	3%
Other costs	fm	(20.5)	(10.2)	(20.1)	(13.9)	(26.6)	(24.4)	(22.6)	(23.3)	(23.4)	(23.5)	77%
Ontel costs		(2013)	(10.2)	5.1	(13.5)	(2010)	(2)	(2210)	(2010)	(20.1)	(2010)	
Total Operating Costs	£m	(156.7)	(147.4)	(154.0)	(131.3)	(139.0)	(144.3)	(148.3)	(149.9)	(152.8)	(154.6)	3%
								-				
CAPEX	2002/02	Actual Actual •			Actual Forecast Forecast		Forecast					
real .	2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	fm	(35.3)	(36.7)	(35.1)	(37.1)	(40.3)	(50.2)	(47.7)	(51.9)	(49.5)	(40.5)	30%
Capital Contributions	fm	19.5	21.4	15.4	15.4	15.5	15.6	15.8	15.8	15.9	16.0	-99
cupital contributions	fm	15.5	2		13.1	15.5	15.0	15.0	15.0	10.0	10.0	
Non Load Related	fm	(72.7)	(67.2)	(78.1)	(83.6)	(75.3)	(89.4)	(97.6)	(88.6)	(87.3)	(86.5)	199
Non-operational capex	fm	(6.8)	(14.9)	(9.1)	(10.9)	(7.3)	(6.7)	(6.2)	(5.6)	(6.7)	(7.2)	-349
aboratoria orbou		(0.0)	(,	(011)	(,	(,	(011)	(=)	(010)	(011)	()	
Total Capital Expenditure	£m	(95.3)	(97.4)	(106.9)	(116.2)	(107.4)	(130.7)	(135.7)	(130.3)	(127.6)	(118.2)	23%
QoS PERFORMANCE		•	— Actual —	•	4	Forecast						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected	m	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	4%
Unplanned Customer Minutes Lost	mins			63.4	51.7	61.7	61.7	61.7	61.7	61.7	61.7	5%
Unplanned Customer interruptions per 100 customer	5			64.9	51.4	61.4	61.4	61.4	61.4	61.4	61.4	4%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - UUE

OPEX real 2002/03 price	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	(131.3)	(139.0)	(145.1)	(149.3)	(151.0)	(153.9)	(155.7)
Difference vs. Base Case	£m	-	-	(0.8)	(1.0)	(1.1)	(1.1)	(1.1)
CAPEX real 2002/03 prices			2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	(127.9)	(117.4)	(136.9)	(140.9)	(133.6)	(128.9)	(119.4)
Difference vs. Base Case	£m	(11.7)	(10.0)	(6.2)	(5.2)	(3.3)	(1.3)	(1.2)
QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins	51.7 51.4	61.7 61.4	59.5 58.8	57.9 56.8	57.3 55.6	57.0 54.7	56.8 54.0

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO's OWN SCENARIO - UUE

real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
£m	(131.3)	(139.0)	(145.2)	(149.6)	(151.6)	(155.0)	(157.4)
£m	-	-	(0.9)	(1.3)	(1.7)	(2.2)	(2.8)
CAPEX real 2003/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
For	(116.3)	(107.4)	(145.7)	(141.2)	(129.5)	(156 5)	(122.2)
Σ111	(116.2)	(107.4)	(143.7)	(141.2)	(130.3)	(156.5)	(122.3)
£m		-	(15.0)	(5.5)	(8.2)	(28.9)	(4.1)
-	real 2002/03 prices £m £m real 2002/03 prices £m £m	real 2002/03 prices 2003/04 fm (131.3) fm - real 2002/03 prices 2003/04 fm (116.2) fm - fm - fm - fm - fm - -	real 2002/03 prices 2003/04 2004/05 Ém (131.3) (139.0) Ém (131.3) (139.0) Ém - - real 2002/03 prices 2003/04 2004/05 Ém (116.2) (107.4) Ém - -	real 2002/03 prices 2003/04 2004/05 2005/06 Ém (131.3) (139.0) (145.2) Ém - - (0.9) real 2002/03 prices 2003/04 2004/05 2005/06 Em - - (0.9) real 2002/03 prices 2003/04 2004/05 2005/06 Ém (116.2) (107.4) (145.7) Ém - - (15.0)	real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 Ém (131.3) (139.0) (145.2) (149.6) Ém - - (0.9) (1.3) fm - - (0.9) (1.3) real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 fm - - (107.4) (145.7) (141.2) fm - - (13.0) (5.5)	real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 2007/08 fm (131.3) (139.0) (145.2) (149.6) (151.6) fm - - (0.9) (1.3) (17.7) fm 2003/04 2004/05 2005/06 2006/07 2007/08 real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 2007/08 fm (116.2) (107.4) (145.7) (141.2) (138.5) fm - - (15.0) (5.5) (8.2)	real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 2007/08 2008/09 fm (131.3) (139.0) (145.2) (149.6) (151.6) (155.0) fm - - (0.9) (1.3) (125.2) (149.6) (151.6) (155.0) fm - - (0.9) (1.3) (12.2) (149.6) (1.7) (2.2) real 2002/03 prices 2003/04 2004/05 2005/06 2006/07 2007/08 2008/09 fm (116.2) (1107.4) (145.7) (141.2) (138.5) (156.5) fm - - - - - - - fm - - - - - - - - - fm -

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	51.7	61.7	61.7	61.7	61.7	61.7	61.7
Unplanned Customer interruptions per 100 customers		51.4	61.4	61.4	61.4	61.4	61.4	61.4

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

United Utilities has included distributed generation in its own scenario.

7. Northern Electricity Distribution Limited (NEDL)

Commentary on DPCR4 forecasts

Base Case

Opex

The significant savings in operating costs made since privatisation and since the merger of NEDL and YEDL make further reductions harder to achieve without compromising quality of supply. Indeed, effort is required to maintain the value of gains that have been secured to date. Nevertheless, the base case business plans sets a tough target of eleven per cent reductions in real terms in controllable operating costs between 2002/03 and 2009/10 (based on Ofgem's current definition of DPCR4 standardised controllable operating costs).

Where we know enough about the level of new costs that are likely to arise in the next regulatory period we have factored these into our FBPQ submissions. Some costs are too uncertain for us to predict with much confidence at this stage in the review process and we believe that Ofgem will need to reach its own view about the best way to deal with these uncertainties consistently across all the DNOs.

In completing the FBPQ tables we have, consistently with our understanding of the purpose of the FBPQ base case scenario, included only those costs that we have confidence will arise in the DPCR4 period and that we know enough about to make a reasonable estimate of the costs. However, we have, in the narrative responses to Ofgem's questions, done our best to identify and to assess the less certain, or less quantifiable, pressures, for example, lane rental charges. We have treated potential efficiency initiatives consistently with this approach. Where we have sufficient confidence that we shall be able to secure the efficiency this is reflected in the FBPQ tables. Other potential efficiencies, about which we have less confidence, are not anticipated in the tables. This transparent approach should enable Ofgem to make comparisons with other DNOs and to reach an informed judgement about the magnitude of these costs and potential savings without it corrupting the integrity and the consistency of the underlying business plans. It will also be necessary for Ofgem to consider the barriers to implementation (including the associated costs). For example, potential efficiencies that would result in staff redundancies have significant associated costs, especially with respect to pension deficiency costs and severance payments.

DNOs are in discussion with Ofgem about the principles that should govern the recovery of pension deficits in the pension schemes associated with the DNOs. Since these discussions have yet to reach a conclusion we have not included in the FBPQ any assessment of the costs that are likely to be borne by the licensee companies that relate to the making good of any pension deficit that may arise as a result of the March 2004 actuarial valuation. This is another example of a likely cost increase that we have not included in our FBPQ base case and DNO alternative scenarios because it is still subject to considerable uncertainty.

Capex

Our base case projections provide for the maintenance of the current performance levels and network integrity / resilience until 31 March 2010, as requested by the FBPQ guidance notes. There is no provision for accelerating investment to address issues that might arise after that date, nor to meet uncertain future needs such as ESQCR, resilience, or facilitating DG.

The base case gross capital submission for the DPCR4 period is 5 per cent higher than the equivalent expenditure during the DPCR3 period. We are satisfied that there is sufficient investment (but no more than that) to provide efficient stewardship of the system over the period, and we look forward to an informed debate with customers and customer representatives, based on the results of the Ofgem customer survey, to determine what further targets are appropriate.

QoS Performance

Our projections provide for continuation of our current QoS investment programmes until the end of the current price control period on 31 March 2005. These include measures such as remote control, intended more to accelerate restoration after faults than to rebuild the system to reduce the number of faults.

Those programmes are focussed upon meeting the current headline (IIP) targets for performance. As the investment continues through 2004/05, we expect to see some improvements in 2005/06, as the benefit of that later investment is felt for its first full year.

Quality of Supply Scenario

Opex

There is a modest rise in opex, of a few hundred thousand pounds each year above the base case, to meet the increased needs of the more complex equipment installed to enhance quality of supply. As the programme again focuses on reducing the numbers of customers affected per fault and on improving restoration performance rather than on eliminating faults, there is no compensating reduction in opex, as there will still be the same number of repairs to undertake.

Capex

For Ofgem's central improvement case, we anticipate continuing our current QoS enhancement programmes at a rate that would incur an additional capital investment of ± 11.5 m (above base case) over the period.

It should be noted that other scenarios raised in the FBPQ would incur significantly greater costs, for example:

- eliminating all small-section conductor HV overhead lines would require a programme of around £165m;
- placing all HV overhead lines located in visually-sensitive areas (Areas of outstanding natural beauty, etc.) under ground would require a programme in the region of £900m; and

• meeting an Overall Standard of not more than 1% of customers experiencing more than three interruptions each year would require a programme of at least £865m.

These figures also explain our emphasis why we focus upon improving restoration rather than eliminating faults. Investing £11.5m in remote control etc. will have a greater impact on headline performance than investing £1650m in overhead line rebuild.

QoS Performance

In line with the targets proposed by Ofgem, this £11.5m would improve headline performance from 74.6 CI/ 74.8 CML (base case) to 69.7 CI/ 67.7 CML.

DNOs Own Scenario

Opex

There is a modest rise in opex, of a few hundred thousand pounds each year, above the base case to meet the increased needs of the more complex equipment installed to enhance QoS. As the programme again focuses on reducing the numbers of customers affected per fault and on improving restoration performance rather than on eliminating faults, there is no compensating reduction in opex, as there are still the same number of repairs to undertake.

Where we know enough about the level of new costs that are likely to arise in the next regulatory period we have factored these into our own scenario. Some costs are too uncertain for us to predict with much confidence at this stage in the review process so are excluded from the base case and the DNO alternative scenario.

Capex

Our response to the Ofgem central QoS case was based on the minimum cost approach to meet the headline targets. This necessarily includes substantial urban remote control. Our preferred option is to address the performance seen by rural customers instead, which significantly increases costs from £11.5m to £19.8m (above the base case) over the period.

We also propose a further £23.0m of capital expenditure (above the base case) over the period to begin enhancing the infrastructure behind the 20 kV rural network to give performance closer to that which might be expected from 11 kV systems.

QoS Performance

For an increased investment of only £134 per NEDL customer over the DPCR4 period (above the base case) we would deliver a headline performance that is broadly the same as for the Ofgem quality case central improvement scenario, but we would bias the improvements towards the rural system, giving overall figures of 70.46 Cl/ 67.46 CML as against 69.7 Cl/ 67.7 CML, but reducing the current discrepancy in performance as seen by urban and rural customers.
In addition, for a further improvement of ± 15 per customer over the DPCR4 period the enhanced infrastructure behind the rural 20 kV network would bring advantages under extremes of performance, particularly in reducing multiple interruptions.

Summary financial information - NEDL

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - NEDL

TURNOVER		•	— Actual —		4			— Forecast —				% change
real 2002	/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	159.7	168.1	160.8	165.5	151.0	138.4	138.1	137.9	137.6	137.9	-14%
Excluded Services	£m	13.9	14.1	13.2	12.8	12.6	9.8	9.6	9.3	9.2	8.9	-30%
Deminimis	£m	-	2.0	4.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	41%
Other income	£m	17.8	16.5	15.2	10.9	15.2	15.4	15.0	14.6	14.2	13.9	-3%
Total Turnover	£m	191.4	200.7	193.6	193.4	183.0	167.8	166.9	166.0	165.2	164.9	-14%
AB5V												or 1
OPEX mail 2002	/02 maisons	3000/01	— Actual —	2002/02	9 2002/04	2004/05	2005/06	- Forecast -	2007/09	2009/00	2000/10	% change
Describer Costs	/05 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2003/06	2006/07	2007/08	2006/09	2009/10	2003-2010
Operating Costs												
Cost of sales	fm	(0.5)	(0.8)	(0.2)								-100%
Evit Charges (NICC and other)	fm	(0.5)	12.4	12.2	6.4	11.7	16.1	15.6	15.2	14.7	14.2	-100%
Employee Wages	fm	14.0	15.4	12.5	12.4	12.0	11.0	12.0	11.0	14.7	14.5	J1/8
Direct Network Costs	fm	28.4	9.7	14.5	14.7	12.0	15.2	15.3	14.8	14.6	14.5	-9%
Depreciation	fm	28.7	34.1	19.0	20.3	21.3	22.5	23.4	24.1	24.4	24.7	-3%
Network Bates	fm	16.2	16.0	15.4	13.8	12.8	12.5	12.8	12.8	12.8	12.8	-14%
Other costs	fm	8.7	19.7	18.8	19.1	18.0	17.7	17.5	17.4	17.2	17.1	3%
outer costs		0.7		10.0		10.0						5 10
Total Operating Costs	£m	108.1	108.0	92.5	86.7	90.7	96.1	96.6	96.2	95.5	95.2	-1%
CAPEX		•	— Actual —	`	•			— Forecast —			→	% change
real 2002	/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	£m	35.1	33.3	31.8	33.7	36.1	37.6	35.8	36.2	33.2	32.7	3%
Capital Contributions	£m	(22.0)	(24.2)	(21.9)	(21.8)	(23.8)	(23.8)	(24.1)	(24.1)	(24.1)	(24.1)	6%
	±m	13.1	9.1	9.9	11.9	12.3	13.8	11./	12.1	9.1	8.6	-2%
Non Load Related	£m	43.6	52.8	46.4	43.3	46.3	45.3	47.8	47.3	52.4	54.7	6%
Non-operational capex	±m	1.1	3.0	3.4	3.2	4.2	3.0	2.7	3.4	3.0	2.4	5 %
Total Canital Europediture	6.00	57.0	64.0	F0 7	EQ 4	63.9	63.1	63.3	62.9	64 5	65.7	E 9/
Total Capital Experioliture	2111	57.0	64.9	59.7	50.4	02.0	02.1	02.2	02.0	04.5	05.7	o/ C
		4	Actual		4			— Eorocaet —			•	% change
QUITERIORMANCE		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected	m	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	5%
Unplanned Customer Minutes Lost	mins	1.4	1.5	62.2	86.3	77.4	74.8	74.8	74.8	74.8	74.8	-1%
Unplanned Customer interruptions per 100 customers				73.9	83.7	77.6	74.6	74.6	74.6	74.6	74.6	-5%
	1											

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - NEDL

OPEX real 2002/03 prices	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	fm	86.7	90.7	96.3	97.0	96.9	96.3	96.1
		00.7	50.7	50.5	57.0	50.5	50.5	50.1
Difference vs. Base Case	£m	-	-	0.2	0.4	0.7	0.8	0.9
CADEX								
real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	58.4	62.8	64.4	64.5	65.1	66.8	68.0
Difference vs. Rase Case	fm			2.3	23	2.3	23	23
Difference for blace clase				215	2.0	2.0	2.0	215
QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins	86.3 83.7	77.4 77.6	74.8 74.6	72.9 73.3	71.1 72.0	69.4 70.8	67.7 69.7

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - NEDL

OPEX	real 2002/03 prices			2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	m	86.7	90.7	96.3	97.4	97.2	96.9	97.0
Difference vs. Base Case	£m	m	-	-	0.2	0.8	1.0	1.4	1.8
		•							
CAPEX			2002/04	2004/05	2005/04	2006/07	2007/00	2008/00	2000/10
САРЕХ	real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX Total Capex	real 2002/03 prices £m	m	2003/04 58.4	2004/05 62.8	2005/06 70.2	2006/07 70.5	2007/08 71.3	2008/09 73.0	2009/10 75.1
CAPEX Total Capex Difference on Reco Case	real 2002/03 prices	m	2003/04 58.4	2004/05 62.8	2005/06	2006/07 70.5	2007/08 71.3	2008/09 73.0	2009/10 75.1
CAPEX Total Capex	real 2002/03 prices £m	m	2003/04 58.4	2004/05 62.8	2005/06 70.2	2006/07 70.5	2007/08 71.3	2008/09 73.0	2(

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	86.3	77.4	74.8	73.0	71.0	69.2	67.6
Unplanned Customer interruptions per 100 customers		83.7	77.6	74.6	73.6	72.6	71.6	70.6

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors

These figures do not include Distributed Generation.

8. Yorkshire Electricity Distribution Limited (YEDL)

Commentary on DPCR4 forecasts

Base Case

Opex

The significant savings in operating costs made since privatisation and since the merger of NEDL and YEDL make further reductions harder to achieve without compromising quality of supply. Indeed, effort is required to maintain the value of gains that have been secured to date. Nevertheless, the base case business plans sets a tough target of ten per cent reductions in real terms in controllable operating costs between 2002/03 and 2009/10 (based on Ofgem's current definition of DPCR4 standardised controllable operating costs).

Where we know enough about the level of new costs that are likely to arise in the next regulatory period we have factored these into our FBPQ submissions. Some costs are too uncertain for us to predict with much confidence at this stage in the review process and we believe that Ofgem will need to reach its own view about the best way to deal with these uncertainties consistently across all the DNOs. In completing the FBPQ tables we have, consistently with our understanding of the purpose of the FBPQ base case scenario, included only those costs that we have confidence will arise in the DPCR4 period and that we know enough about to make a reasonable estimate of the costs. However, we have, in the narrative responses to Ofgem's questions, done our best to identify and to assess the less certain, or less quantifiable, pressures, for example, lane rental charges.

We have treated potential efficiency initiatives consistently with this approach. Where we have sufficient confidence that we shall be able to secure the efficiency this is reflected in the FBPQ tables. Other potential efficiencies, about which we have less confidence, are not anticipated in the tables. This transparent approach should enable Ofgem to make comparisons with other DNOs and to reach an informed judgement about the magnitude of these costs and potential savings without it corrupting the integrity and the consistency of the underlying business plans. It will also be necessary for Ofgem to consider the barriers to implementation (including the associated costs). For example, potential efficiencies that would result in staff redundancies have significant associated costs, especially with respect to pension deficiency costs and severance payments.

DNOs are in discussion with Ofgem about the principles that should govern the recovery of pension deficits in the pension schemes associated with the DNOs. Since these discussions have yet to reach a conclusion we have not included in the FBPQ any assessment of the costs that are likely to be borne by the licensee companies that relate to the making good of any pension deficit that may arise as a result of the March 2004 actuarial valuation. This is another example of a likely cost increase that we have not included in our FBPQ base case and DNO alternative scenarios because it is still subject to considerable uncertainty.

Capex

Our base case projections provide for the maintenance of the current system performance levels and network integrity / resilience until 31 March 2010, as requested by the FBPQ guidance notes. There is no provision for accelerating investment to address issues that might arise after that date, or to meet uncertain future needs such as ESQCR, resilience, or facilitating DG.

The base case gross capital submission for the DPCR4 period is 13 per cent higher than the equivalent expenditure during the DPCR3 period. We are satisfied that there is sufficient investment (but no more than that) to provide efficient stewardship of the system over the period, and we look forward to an informed debate with customers and customer representatives, based on the results of the Ofgem customer survey, to determine what further targets are appropriate.

QoS Performance

Our projections provide for continuation of our current QoS investment programmes until the end of the current price control period on 31 March 2005. These include measures, such as remote control, intended more to accelerate restoration after faults than to rebuild the system to reduce the number of faults.

Those programmes are focussed upon meeting the current headline (IIP) targets for performance. As the investment continues through 2004/05, we expect to see some improvements in 2005/06, as the benefit of that later investment is felt for its first full year.

Quality of Supply Scenario

Opex

There is a modest rise in opex, of a few hundred thousand pounds each year, above the base case to meet the increased needs of the more complex equipment installed to enhance quality of supply. As the programme again focuses on reducing the number of customers affected per fault and on improving restoration performance, rather than on eliminating faults, there is no compensating reduction in opex, as there will still be the same number of repairs to undertake.

Capex

For Ofgem's central improvement case, we anticipate continuing our current QoS enhancement programmes at a rate that would incur an additional capital investment of £25.6m (above base case) over the period.

It should be noted that other scenarios raised in the FBPQ would incur significantly greater costs, for example:

- eliminating all small-section conductor HV overhead lines would require a programme of around £36m;
- placing all HV overhead lines located in visually-sensitive areas (areas of outstanding natural beauty, etc.) underground would require a programme in the region of £160m; and

• meeting a Guaranteed Standard of not more than one interruption exceeding three hours each year would require a programme of at least £275m.

These figures also explain our emphasis why we focus upon improving restoration rather than eliminating faults. Investing ± 25.6 m in remote control etc. will have a significantly greater impact on headline performance than investing ± 36 m in overhead line rebuild.

QoS Performance

In line with the targets proposed by Ofgem, this ± 25.6 m would improve headline performance from 74.5 Cl/64.5 CML (base case) to 66.5 Cl/ 56.3 CML.

DNO's Own Scenario

Opex

There is a modest rise in opex above the base case, of a few hundred thousand pounds each year, to meet the increased needs of the more complex equipment installed to enhance QoS. As the programme again focuses on reducing the number of customers affected per fault and on improving restoration performance, rather than on eliminating faults, there is no compensating reduction in opex, as there are still the same number of repairs to undertake.

Where we know enough about the level of new costs that are likely to arise in the next regulatory period we have factored these into our own scenario. Some costs are too uncertain for us to predict with much confidence at this stage in the review process so are excluded from the base case and the DNO alternative scenario.

Capex

Our response to the Ofgem central QoS case was based on the minimum-cost approach to meet the headline targets. This necessarily includes substantial urban remote control. Our preferred option is to address the performance seen by rural customers instead, which significantly increases costs by from £25.6m to £35.6m (above the base case) over the period.

QoS Performance

For an increased investment of only £16 per YEDL customer over the DPCR4 period (above the base case) we would deliver a headline performance is that is broadly the same as for the Ofgem quality case central improvement scenario, but we would bias the improvements towards the rural system, giving overall figures of 67.3 Cl/ 55.6 CML as against 66.5 Cl/ 56.3 CML, but reducing the current discrepancy in performance as seen by urban and rural customers.

Summary financial information - YEDL

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - YEDL

OPEX real 2002/03 price	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	fm	119.5	124.5	123.0	123.0	121.7	122.9	122.7
Total open			12113	125.0	125.0	1210	122.0	
Difference vs. Base Case	£m	-	-	0.4	0.6	0.8	1.2	1.4
CAREY								
real 2002/03 price	5	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	91.0	101.8	104.9	85.9	88.7	94.0	94.0
Difference us Rese Case	fm			10	E 1	E 1	5.2	5.2
Difference vs. base case	2111			4.9	5.1	5.1	5.2	5.5
QoS PERFORMANCE								
		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	70.2	65.8	64.5	62.4	60.2	57.9	56.3
Unplanned Customer interruptions per 100 customers		77.4	75.1	74.5	72.5	70.5	68.5	66.5

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - YEDL

OPEX real 2002/0	real 2002/03 prices			2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	119.5	124.5	123.0	123.1	122.1	123.1	123.2
D''' D. C	c				0.7	4.0		1.0
Difference vs. base Case	zm	-	-	0.4	0.7	1.2	1.4	1.9
CAPEX							1	
CAPEX real 2002//	03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX real 2002/0	03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX real 2002/0 Total Capex	03 prices	2003/04 91.0	2004/05	2005/06	2006/07 87.9	2007/08 90.7	2008/09 95.9	2009/10 95.9
CAPEX real 2002/0 Total Capex	03 prices £m	2003/04 91.0	2004/05	2005/06	2006/07 87.9	2007/08 90.7	2008/09 95.9	2009/10 95.9
CAPEX real 2002/0 Total Capex Difference vs. Base Case	93 prices £m £m	2003/04 91.0	2004/05	2005/06 107.1 7.1	2006/07 87.9 7.1	2007/08 90.7 7.1	2008/09 95.9 7.1	2009/10 95.9 7.2

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	70.2	65.8	64.5	62.3	60.0	57.8	55.6
Unplanned Customer interruptions per 100 customers		77.4	75.1	74.5	72.7	70.9	69.2	67.3

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors.

These figures do not include Distributed Generation.

9. Western Power Distribution (South Wales)

Commentary on DPCR4 forecasts

Base Case

Opex

During the forthcoming period our overall business objective will continue to be the delivery of quality of service excellence through:

- Focused operational management;
- Implementation of leading edge IT systems and processes; and
- Lean support services and corporate structure.

The key assumptions associated with forecast operating costs for the forthcoming period are that:

- Operating efficiency will be maintained at current levels;
- Increased funding for pensions will be required.

Capex

Gross load related capital expenditure is driven by economic activity. In line with economic forecasts, the activity level for the forthcoming period is forecast to be marginally higher that the expected out turn for the current period.

Capital contributions are associated with the provision of new and augmented connections. The increased level of capital contributions during the forthcoming period is attributable to the policy changes proposed by Ofgem.

Non load related capital expenditure is predominantly associated with the replacement of assets that are either in poor condition or are poorly performing (in terms of safety or quality of supply). Forecast non load related capital expenditure for the forthcoming period is lower than the expected out turn for the current period. The reduction is attributable to the completion, in 2004/05, of a 10 year programme to replace a type of suspect 11kV switchgear.

Non operational capital expenditure during the forthcoming period caters for the upgrading of IT system hardware and software enhancements. No major system developments are currently planned.

Quality of Supply Performance

The underlying quality of supply performance is a mid point forecast that has been determined by consideration of up to ten years of actual performance data for each voltage level of the distribution network. The use of long run data has enabled the year on year volatility associated with the number of unplanned incidents to be smoothed.

The underlying quality of supply performance shall be maintained during the forthcoming period by a continuation of tree cutting and maintenance programmes and the targeted replacement of assets.

Quality of Supply Scenario

Opex

Relative to the base case, the central quality of supply improvement scenario does not cater for any additional operating activities. However, we forecast that by 2007/08 there will be an incremental reduction in fault repair costs as a consequence of a targeted reduction in the quantity of HV overhead line faults.

Capex

In order to achieve the targeted improvement in quality of supply, this improvement scenario caters for two capital expenditure work streams:

- The installation of additional automatic switchgear on the HV overhead network with the objective of reducing the average number of customers affected by an HV fault; and
- The refurbishment of additional quantity of HV overhead line, relative to base case, with the objective of reducing the number of HV overhead line faults that occur.

The aggregate additional non load related capital expenditure associated with this central quality of supply improvement scenario is ± 39.3 m, which is marginally offset by an aggregate reduction of ± 0.2 m in capitalised fault repair costs.

Quality of Supply Performance

The targeted reductions are 9.8 Customer Minutes Lost per Customer (14% reduction) and 27.3 Customers Interrupted per 100 Customers (24% reduction).

DNOs Own Scenario

Opex

Relative to the base case, our preferred scenario caters for increased activity associated with tree cutting only. We propose to implement a three year tree cutting cycle instead of the existing five year cycle. The increased operating cost is ± 1.2 m per year.

The objective of this increased tree cutting is to improve the resilience of the overhead distribution network during severe weather conditions. We do not anticipate that this increased tree cutting activity will result in quality of supply improvements during normal weather conditions.

Capex

Relative to the base case, our preferred case caters for additional capital expenditure associated with:

- Improving quality of supply;
- Connecting distributed generation; and
- Accommodating the likely imposition of lane rental charges.

Improving Quality of Supply

In order to achieve the desired improvement in quality of supply, this improvement scenario caters for two capital expenditure work streams:

- The installation of additional automatic switchgear on the HV overhead network with the objective of reducing the average number of customers affected by an HV fault; and
- The refurbishment of additional quantity of HV overhead line, relative to base case, with the objective of reducing the number of HV overhead line faults that occur.

The aggregate additional non load related capital expenditure associated with this central quality of supply improvement scenario is £16.2m.

Distributed Generation

Our preferred scenario caters for the connection of approximately 250 MW of additional distributed generation during the forthcoming period at an aggregate gross load related capital expenditure of ± 17.2 m.

Lane Rental Charges

Impending changes in legislation are likely to result in the imposition of charges on all utilities when excavation works are carried out in the public highway. It is estimated that a mid point value for the annual charge is ± 12.0 m. This overall increase would be apportioned ± 4.8 m to load related capital expenditure and ± 7.2 m to non load related capital expenditure. There would be an associated ± 3.4 m increase in capital contributions.

Quality of Supply Performance

The targeted reductions are 6.7 Customer Minutes Lost per Customer (9% reduction) and 10.2 Customers Interrupted per 100 Customers (9% reduction).

Summary financial information - WPD South Wales

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - WPD SOUTH WALES

TURNOVER		+	— Actual —		•			— Forecast —			*	% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover												
Price Controlled	£m	136.3	132.3	134.8	136.5	132.3	144.7	145.0	145.5	145.7	146.0	8%
Excluded Services	£m	18.9	16.4	19.1	13.7	11.7	11.7	11.7	12.0	12.0	12.1	-25%
Deminimis	£m	4.0	2.6	-	-	-	-	-	-	-	-	-100%
Other income	£m	25.8	16.8	21.3	15.9	10.9	7.1	7.3	8.2	8.1	8.7	-57%
								-	-	-	-	
Total Turnover	fm	185.0	168 1	175.2	166.1	154.9	163.5	164.0	165.7	165.8	166.8	_3%
		105.0	100.1	17.5.2	100.1	15115	105.5	101.0	105.7	105.0	100.0	5 10
OPEX			Actual		4			— Forecast —				% change
real 2002/03	nrices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs	prices	2000/01	2001/02	2002/03	2003/04	2004/03	2005/00	2000/07	2007/00	2000/05	2005/10	2003-2010
Operating Costs												
Cost of color	6.00	(2.0)	(2.9)	(5.2)	(2.9)	(2.9)	(2.9)	(2.9)	(2.0)	(2.0)	(2.9)	0.0/
Cost of sales	žini c	(3.9)	(0.6)	(5.5)	(3.6)	(3.0)	(3.0)	(3.0)	(5.0)	(3.0)	(3.0)	-0 /0
Exit Charges (NGC and other)	£m	(10.2)	(10.1)	(9.3)	(8.9)	(3.2)	(3.1)	(3.3)	(4.5)	(4.4)	(5.1)	-51%
Employee Wages	£m	(13.9)	(16.0)	(10.9)	(10.9)	(12.2)	(11.3)	(11.4)	(11.5)	(11.6)	(11.7)	-10%
Direct Network Costs	£m	(28.1)	(15.6)	(15.2)	(11.1)	(13.1)	(11.6)	(11.6)	(11.6)	(11.6)	(11.6)	-30%
Depreciation	£m	(27.5)	(26.8)	(26.9)	(28.4)	(28.8)	(29.4)	(30.8)	(31.3)	(32.0)	(32.4)	13%
Network Rates	£m	(11.6)	(11.9)	(12.2)	(12.2)	(12.4)	(12.5)	(12.7)	(12.9)	(13.1)	(13.3)	7%
Other costs	£m	(24.8)	(8.0)	(8.7)	(8.0)	(8.2)	(20.2)	(20.4)	(20.4)	(20.5)	(20.8)	77%
Total Operating Costs	±m	(120.0)	(92.2)	(88.5)	(83.3)	(81.7)	(91.9)	(94.0)	(96.0)	(97.0)	(98.7)	3%
CAPEY		[4	Actual					— Forecast —			•	% change
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	fm	(16.1)	(21.0)	(17.1)	(23.1)	(24.3)	(22.8)	(21.2)	(19.5)	(19.8)	(19.8)	1%
Capital Contributions	fm	8.9	8.4	10.8	12.1	12.6	10.4	10.2	10.1	10.1	10.2	-3%
capital contributions	fm	(7.2)	(12.6)	(6.3)	(11.0)	(11.7)	(12.4)	(11.0)	(9.4)	(9.7)	(9.6)	7%
Non Load Related	fm	(40.0)	(32.4)	(43.2)	(34.2)	(31.9)	(30.8)	(11.0)	(33.0)	(34.0)	(34.8)	-9%
Non-operational capey	fm	(40.0)	(5.8)	(43.2)	(3.4)	(31.5)	(30.0)	(32.4)	(4.8)	(34.6)	(34.0)	-5%
Non-opciational capex	2.00	(3.7)	(3.0)	(3.2)	(3.4)	(4.5)	(4.0)	(3.3)	(4.0)	(4.0)	(4.1)	4 /0
Total Capital Exponditure	fm	(50.0)	(50.9)	(52.7)	(49.6)	(49.1)	(47.9)	(46.7)	(47.2)	(49.2)	(49.5)	E 9/
	2.00	(50.5)	(50.0)	(32.7)	(40.0)	(40.1)	(47.0)	(40.7)	(47.2)	(40.5)	(40.5)	-5.10
OoS PERFORMANCE		•	— Actual —		4			— Forecast —				% change
4		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
	1											
Customers connected	m	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	4%
Unplanned Customer Minutes Lost	mins	1.0	1.0	51.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	11%
Unplanned Customer interruptions per 100 customers				86.7	115.0	115.0	115.0	115.0	115.0	115.0	115.0	9%
englishes customer menuptions per roo customers	1			30.7					115.0			5.10

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - WPD SOUTH WALES

OPEX	real 2002/03 prices			2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
		_							
Total Opex		±m	(83.3)	(81.7)	(91.9)	(94.0)	(95.9)	(96.9)	(98.6
Difference vs. Base Case		fm	_	-		-	0.1	0.1	0.1
	·								
CAPEX									
	real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
- 10		_							
Total Capex		£m	(48.6)	(48.1)	(55.8)	(54.6)	(55.1)	(56.0)	(56.1
Difference vs. Base Case		£m	-	-	(8.0)	(7.9)	(7.9)	(7.7)	(7.6
								1	
QoS PERFORMANCE			2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	1	mins	72.0	72.0	72.0	70.7	68.0	65.2	62.2
Unplanned Customer interruptions per 100 customers			115.1	115.1	115.1	111.5	103.6	95.7	87.8
1									1

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - WPD SOUTH WALES

OPEX	real 2002/03 prices				2005/06	2006/07	2007/08	2008/09	2009/10
Base Case OPEX Additional Tree Cutting to improve resilience			(83.3)	(81.7)	(91.9) (1.2)	(94.0) (1.2)	(96.0) (1.2)	(97.0) (1.2)	(98.7) (1.2)
Additional depreciation resulting from the new Capex profile		_			(0.1)	(0.3)	(0.6)	(0.9)	(1.3)
Total Opex		£m	(83.3)	(81.7)	(93.2)	(95.5)	(97.8)	(99.1)	(101.2)
Difference vs. Base Case		£m	-	-	(1.3)	(1.5)	(1.8)	(2.1)	(2.5)
CAPEX									
CAPEX	real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX Base Case Capex Quality of Supply	real 2002/03 prices		2003/04 (48.6)	2004/05 (48.1)	2005/06 (47.8)	2006/07 (46.7)	2007/08 (47.2) (1.3)	2008/09 (48.3) (5.3)	2009/10 (48.5) (9.6)
CAPEX Base Case Capex Quality of Supply Distributed generation (gross) prop Benet Harrison	real 2002/03 prices		2003/04 (48.6)	2004/05 (48.1)	2005/06 (47.8) (2.6)	2006/07 (46.7) (2.9)	2007/08 (47.2) (1.3) (3.3) (12.0)	2008/09 (48.3) (5.3) (3.8) (13.0)	2009/10 (48.5) (9.6) (4.6) (1.2 0)
CAPEX Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross) Additional Capital Contributions	real 2002/03 prices		2003/04 (48.6)	2004/05 (48.1)	2005/06 (47.8) (2.6) (12.0) 4.4	2006/07 (46.7) (2.9) (12.0) 4.5	2007/08 (47.2) (1.3) (3.3) (12.0) 4.6	2008/09 (48.3) (5.3) (3.8) (12.0) 4.8	2009/10 (48.5) (9.6) (4.6) (12.0) 5.1
CAPEX Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross) Additional Capital Contributions Total Capex	real 2002/03 prices	£m	2003/04 (48.6) (48.6)	2004/05 (48.1) (48.1)	2005/06 (47.8) (2.6) (12.0) 4.4 (58.0)	2006/07 (46.7) (2.9) (12.0) 4.5 (57.1)	2007/08 (47.2) (1.3) (3.3) (12.0) 4.6 (59.2)	2008/09 (48.3) (5.3) (12.0) 4.8 (64.6)	2009/10 (48.5) (9.6) (4.6) (12.0) 5.1 (69.6)
CAPEX Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross) Additional Capital Contributions Total Capex Difference vs. Base Case	real 2002/03 prices	£m	2003/04 (48.6) (48.6)	2004/05 (48.1) (48.1)	2005/06 (47.8) (2.6) (12.0) 4.4 (58.0) (10.2)	2006/07 (46.7) (2.9) (12.0) 4.5 (57.1) (10.4)	2007/08 (47.2) (1.3) (12.0) 4.6 (59.2) (12.0)	2008/09 (48.3) (5.3) (12.0) 4.8 (64.6) (16.3)	2009/10 (48.5) (9.6) (4.6) (12.0) 5.1 (69.6) (21.1)

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	72.0	72.0	72.0	72.0	72.0	70.3	65.3
Unplanned Customer interruptions per 100 customers		115.1	115.1	115.1	115.1	115.1	112.5	104.9

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

WPD South Wales has included distributed generation in its own scenario.

10. Western Power Distribution (South West)

Commentary on DPCR4 forecasts

Base Case

Opex

During the forthcoming period our overall business objective will continue to be the delivery of quality of service excellence through:

- Focused operational management;
- Implementation of leading edge IT systems and processes; and
- Lean support services and corporate structure.

The key assumptions associated with forecast operating costs for the forthcoming period are that:

- Operating efficiency will be maintained at current levels;
- Increased funding for pensions will be required.

Capex

Gross load related capital expenditure is driven by economic activity. In line with economic forecasts, the activity level for the forthcoming period is forecast to be marginally higher that the expected out turn for the current period.

Capital contributions are associated with the provision of new and augmented connections. The increased level of capital contributions during the forthcoming period is attributable to the policy changes proposed by Ofgem.

Non load related capital expenditure is predominantly associated with the replacement of assets that are either in poor condition or are poorly performing (in terms of safety or quality of supply). Forecast non load related capital expenditure for the forthcoming period is higher than the expected out turn for the current period. This increase is attributable to the:

- Need to carry out remedial works on open wire LV overhead lines that are in close proximity to buildings, as required by Electricity Supply Quality and Continuity Regulations; and.
- General ageing of the distribution network assets.

Non operational capital expenditure during the forthcoming period caters predominantly for the upgrading of IT system hardware, software enhancements and purchase of vehicles. No major system developments are currently planned.

Quality of Supply Performance

The underlying quality of supply performance is a mid point forecast that has been determined by consideration of up to ten years of actual performance data for each

voltage level of the distribution network. The use of long run data has enabled the year on year volatility associated with the number of unplanned incidents to be smoothed.

The underlying quality of supply performance shall be maintained during the forthcoming period by a continuation of tree cutting and maintenance programmes and the targeted replacement of assets.

Quality of Supply Scenario

Opex

Relative to the base case, the central quality of supply improvement scenario does not cater for any additional operating activities.

Capex

In order to achieve the targeted improvement in quality of supply, this improvement scenario caters for the refurbishment of additional quantity of HV overhead line, relative to base case, with the objective of reducing the number of HV overhead line faults that occur.

The aggregate additional non load related capital expenditure associated with this central quality of supply improvement scenario is £15.3m.

Quality of Supply Performance

The targeted reductions are nil Customer Minutes Lost per Customer and 0.7 Customers Interrupted per 100 Customers (0.8% reduction).

DNOs Own Scenario

Opex

Relative to the base case, our preferred scenario caters for increased activity associated with tree cutting only. We propose to implement a three year tree cutting cycle instead of the existing five year cycle. The increased operating cost is ± 1.7 m per year.

The objective of this increased tree cutting is to improve the resilience of the overhead distribution network during severe weather conditions. We do not anticipate that this increased tree cutting activity will result in quality of supply improvements during normal weather conditions.

Capex

Relative to the base case, our preferred case caters for additional capital expenditure associated with:

- Improving quality of supply;
- Connecting distributed generation; and
- Accommodating the likely imposition of lane rental charges.

Improving Quality of Supply

In order to achieve the targeted improvement in quality of supply, this improvement scenario caters for the refurbishment of additional quantity of HV overhead line, relative to base case, with the objective of reducing the number of HV overhead line faults that occur.

The aggregate additional non load related capital expenditure associated with this central quality of supply improvement scenario is £15.3m.

Distributed Generation

Our preferred scenario caters for the connection of approximately 190 MW of additional distributed generation during the forthcoming period at an aggregate gross load related capital expenditure of ± 16.3 m.

Lane Rental Charges

Impending changes in legislation are likely to result in the imposition of charges on all utilities when excavation works are carried out in the public highway. It is estimated that a mid point value for the annual charge is £12.0m. This overall increase would be apportioned £4.8m to load related capital expenditure and £7.2m to non load related capital expenditure. There would be an associated £3.4m increase in capital contributions.

Quality of Supply Performance

The targeted reductions are 0.5 Customer Minutes Lost per Customer (0.8% reduction) and 0.7 Customers Interrupted per 100 Customers (0.8% reduction).

Summary financial information - WPD South West

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - WPD SOUTH WEST

TURNOVER			•	— Actual —	•	•			— Forecast —				% change
	real 2002/03 pri	ices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover													
Price Controlled		£m	179.4	181.1	179.6	176.6	169.2	193.6	194.2	195.0	195.2	195.7	10%
Excluded Services		£m	19.5	13.0	11.7	10.0	9.8	9.8	9.8	9.8	9.8	9.8	-23%
Deminimis		£m	7.1	10.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	-29%
Other income		£m	48.0	27.5	20.7	18.3	14.0	10.2	10.1	10.9	11.5	11.4	-58%
Total Turnover		£m	254.0	231.9	216.3	209.2	197.3	217.9	218.4	220.0	220.8	221.2	-1%
OPEX			•	— Actual —		•			— Forecast –			•	% change
	real 2002/03 pri	ices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs													
Cost of sales		£m	(9.2)	(8.1)	(7.3)	(8.3)	(8.3)	(8.3)	(8.3)	(8.3)	(8.3)	(8.3)	1%
Exit Charges (NGC and other)		£m	(9.7)	(10.2)	(9.4)	(8.9)	(4.4)	(4.3)	(4.2)	(5.1)	(5.7)	(5.6)	-42%
Employee Wages		£m	(22.4)	(23.1)	(22.7)	(22.7)	(23.7)	(22.6)	(22.8)	(23.0)	(23.2)	(23.5)	0%
Direct Network Costs		£m	(17.0)	(14.7)	(13.8)	(12.4)	(14.5)	(14.5)	(14.5)	(14.5)	(14.5)	(14.5)	0%
Depreciation		£m	(28.9)	(32.3)	(33.1)	(35.1)	(36.6)	(38.1)	(39.6)	(41.1)	(42.5)	(43.7)	23%
Network Rates		£m	(16.2)	(16.0)	(16.1)	(16.1)	(16.3)	(16.5)	(16.8)	(17.0)	(17.3)	(17.5)	5%
Other costs		£m	(9.3)	8.0	6.6	(3.1)	(3.1)	(20.5)	(20.5)	(20,7)	(20.7)	(21.0)	11389%
						(-)		,	,	,	,		
Total Operating Costs		£m	(112.7)	(96.4)	(95.8)	(106.6)	(106.9)	(124.8)	(126.7)	(129.7)	(132.2)	(134.1)	25%
CAPEX			+	— Actual —		•			— Forecast –			*	% change
	real 2002/03 pri	ices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure													
Load Related		£m	(27.6)	(28.0)	(28.8)	(32.6)	(32.8)	(35.4)	(32.0)	(27.3)	(28.5)	(30.8)	3%
Capital Contributions		£m	14.5	14.4	14.4	18.3	16.8	17.4	16.1	14.7	15.4	15.9	1%
		£m	(13.1)	(13.6)	(14.4)	(14.3)	(16.0)	(18.0)	(15.9)	(12.6)	(13.1)	(14.9)	4%
Non Load Related		£m	(41.9)	(44.4)	(50.9)	(53.0)	(54.1)	(56.9)	(58.5)	(61.4)	(62.9)	(63.4)	24%
Non-operational capex		±m	(11.8)	(7.2)	(7.6)	(8.0)	(9.0)	(9.2)	(7.7)	(9.1)	(8.8)	(8.9)	0%
Total Capital Expenditure		£m	(66.8)	(65.2)	(72.9)	(75.3)	(79.1)	(84.1)	(82.1)	(83.1)	(84.8)	(87.2)	17%
QoS PERFORMANCE			•	— Actual —	0000/00	4	2004/05	2005/06	Forecast -	0005/00	2222/22	•	% change
			2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Cutumented													
Customers connected	m		1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	6%
Unplanned Customer Minutes Lost	m	lins			51.2	60.7	60.7	60.7	60.7	60.7	60.7	60.7	6%
Unplanned Customer Interruptions per 100 cus	siomers				/8.1	85.6	85.6	85.6	65.6	85.6	85.6	85.6	3%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - WPD SOUTH WEST

2009/10
(134.1)
2009/10
(91.0)
(3.8
2009/10
60.7
84.9

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - WPD SOUTH WEST

OPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Base Case OPEX Additional Tree Cutting to improve resilience	£m fm	(106.6)	(106.9)	(124.8)	(126.7)	(129.7)	(132.2)	(134.1)
Additional depreciation resulting from the new Capex profile	£m			(0.1)	(0.4)	(0.7)	(1.1)	(1.5)
Total Opex	£m	(106.6)	(106.9)	(126.6)	(128.8)	(132.1)	(135.0)	(137.3)
Difference vs. Base Case	£m	-	-	(1.8)	(2.1)	(2.4)	(2.8)	(3.2)
CAPEY								1
CALLA	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
								2003/10
Base Case Capex	£m	(75.3)	(79.1)	(84.1)	(82.1)	(83.1)	(84.8)	(87.2)
Base Case Capex Quality of Supply Distributed generation (gross)	£m £m £m	(75.3)	(79.1)	(84.1)	(82.1)	(83.1)	(84.8) (6.2) (3.6)	(87.2) (9.1) (4.4)
Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross)	£m £m £m	(75.3)	(79.1)	(84.1) (2.4) (12.0)	(82.1) (2.8) (12.0)	(83.1) (3.1) (12.0)	(84.8) (6.2) (3.6) (12.0)	(87.2) (9.1) (4.4) (12.0)
Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross) Additional Capital Contributions Total Canex	£m £m £m £m	(75.3)	(79.1)	(84.1) (2.4) (12.0) 4.6 (93.9)	(82.1) (2.8) (12.0) 4.8 (92.1)	(83.1) (3.1) (12.0) 5.0 (93.2)	(84.8) (6.2) (3.6) (12.0) 5.2 (101.4)	(87.2) (9.1) (4.4) (12.0) 5.6 (107.1)
Base Case Capex Quality of Supply Distributed generation (gross) Lane Rental (gross) Additional Capital Contributions Total Capex	fm fm fm fm	(75.3)	(79.1)	(84.1) (2.4) (12.0) <u>4.6</u> (93.9)	(82.1) (2.8) (12.0) <u>4.8</u> (92.1)	(83.1) (3.1) (12.0) 5.0 (93.2)	(84.8) (6.2) (3.6) (12.0) 5.2 (101.4)	(87.2) (9.1) (4.4) (12.0) 5.6 (107.1)

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	60.7	60.7	60.7	60.7	60.7	60.5	60.2
Unplanned Customer interruptions per 100 customers		85.6	85.6	85.6	85.6	85.6	85.4	84.9

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

WPD South West has included distributed generation in its own scenario.

11. SP Manweb (SPM)

Commentary on DPCR4 forecasts

Summary

SP Manweb will continue to manage its distribution network to be sustainable in the long-term. This will ensure that our customers continue to receive reliable electricity supplies, efficiently managed and resilient to severe weather events. The plans that we have recommended to Ofgem for the period 2005-2010 are the next stage of our longer-term plans to ensure that we meet these commitments to our customers.

In compiling these plans we have recognised that this distribution price control review is different from previous reviews due to increasing costs in a number of areas, including network safety, security and reliability and distributed generation. These cost increases result in an upward pressure on prices.

Our plans are based on advanced asset risk management policies and practices and take account of the increased levels of asset replacement required to manage the risks associated with the ageing asset base. These plans are comprised of a number of components:

- the Base Case, as specified by Ofgem, to maintain current levels of asset fault rates, network performance and safety;
- the Quality of Supply Case, to improve overall network performance in line with Ofgem's specified targets;
- the SP Manweb Case, incorporating the Base Case, the Quality of Supply Case and additional expenditure to improve the quality of supply to 'worst served' customers and address the issue of distribution losses; and
- the Distributed Generation (DG) Case, setting out the expenditure necessary to accommodate significantly increased levels of renewable generation in the SP Manweb area.

Ofgem has specified a quality of supply scenario that requires DNOs to achieve a benchmark level of performance by 2020 with an interim target for 2010. SP Manweb has one of the best performing distribution networks in the country and is the only company that is already outperforming the 2020 benchmark targets. No incremental expenditure over and above the Base Case is therefore required. However the levels of expenditure specified in our Base Case are required to prevent any deterioration in the quality of supply experienced by our customers.

Over the five-year period the plans that we have recommended to Ofgem, consisting of the SP Manweb Case plus the DG Case, require the following:

- operating expenditure of £548.8m (£540.8m from the SP Manweb Case and £8.1m from the DG Case); and
- net capital investment of £691.1m (£615.8m from the SP Manweb Case and £75.3m from the DG Case).

It is extremely important that the allowed cost of capital is set at a level that provides a sufficient and stable return on investment and enables companies to attract and retain equity funding. A cost of capital of between 7% and 8% (pre-tax real) is strongly supported by market evidence and authoritative academic studies.

Base Case

Over the five-year period our Base Case plan will require expenditure of:

- operating expenditure of £540.0m; and
- net capital investment of £598.4m.

Ofgem has specified that the Base Case should include the minimum expenditure (operating and capital) necessary to run an efficient business while:

- keeping fault rates constant;
- maintaining network performance levels; and
- maintaining levels of safety.

Opex

Our plans include the operating expenditure required to address the considerable cost pressures impacting SP Manweb and to deliver the increasing service levels required by our customers. Costs are increasing in a number of areas, including, contractor rates for tree cutting, insurance premiums and the costs resulting from complying with changes in legislation and with increasingly onerous environmental obligations. Although some opportunities exist to offset these increasing costs through improved efficiency, the scope for major net cost reductions has now been largely exhausted.

Capex

Ofgem has specified that fault rates should be maintained at a constant level. Our capital expenditure plans will halt the increasing fault rates in critical network assets such as 11kV overhead lines in areas prone to severe weather and manually operated oil-filled switchgear. However, our analysis indicates that excessive levels of capital investment will be required to hold fault rates constant on low criticality assets. In our view this is not currently required and we have therefore proposed an approach that manages the fault rates of these assets in a manner such that overall network performance is maintained. This approach mitigates the requirement for increased levels of investment.

Quality of Supply Performance

Our Base Case plans are designed to maintain network performance at current levels as specified by Ofgem.

Quality of Supply Case

Over the five-year period the incremental expenditure required over and above our Base Case to meet the targets specified by Ofgem is nil (capex and opex).

Ofgem has specified a quality of supply scenario that requires DNOs to achieve a benchmark level of performance by 2020 with an interim target for 2010. SP Manweb has one of the best performing distribution networks in the country and is the only company that is already outperforming the 2020 benchmark targets. No incremental expenditure over and above the Base Case is therefore required. However the levels of expenditure specified in our Base Case are required to prevent any deterioration in the quality of supply experienced by our customers.

SP Manweb Case

Over the five-year period these plans will require:

- operating expenditure of £540.8m (£0.8m incremental to the Base Case); and
- net capital investment of £615.8m (£17.4m incremental to the Base Case).

Our recommended plans, over and above the Base Case, contain initiatives which we believe are necessary to meet the expectations of our customers, deliver a positive environmental impact and manage risk through:

- improvements in the quality of supply experienced by 'worst served' customers and communities;
- installation of low loss distribution transformers; and
- mitigating the security threats to our systems.

Opex

The incremental opex costs over the Base Case arise as a result of our plans to improve IT security, disaster recovery and business continuity planning controls to manage the risks of disruption to SCADA (System Control and Data Acquisition) systems.

Capex/Quality of Supply

Our capital investment plans have been developed to achieve a balance between the cost of implementation and the benefits for our customers. The initiatives selected have a clear 'benefits' focus, addressing areas of key concern to our customers. For example, a small minority of our customers receive an unsatisfactory level of service that is not addressed by a focus on overall network performance. In addition, we are seeking to reduce the differential in network performance between rural and urban areas and therefore reduce the risk of multiple interruptions for our least well served communities.

Our proposals for the installation of low loss transformers will address Ofgem's environmental objectives, consistent with our understanding of Ofgem's initial proposals for a loss reduction incentive.

Distributed Generation Business Plan

Over the five-year period our plans, which are based on accommodating in excess of 800 MW of generation, will require:

- operating expenditure of £8.1m; and
- net capital investment of £75.3m.

Opex

Additional operating costs will be incurred as a result of the increased complexity of operating networks with high levels of generation.

Capex

Government targets for renewable generation are extremely challenging and are driving a substantial increase in the number of applications and enquiries for distributed generation (DG) connections in the SP Manweb area. This is a much more significant issue for SP Manweb than for most other distribution companies due to the high potential for onshore and offshore wind generation in the SP Manweb area.

If these levels of generation are to be accommodated, and Government targets are to be met, then significant investment on the SP Manweb distribution network will be required to accommodate generation at many more points and at lower voltages.

While the exact location and volume of generation that will seek to connect is uncertain, analysis of firm enquiries and applications has allowed us to identify:

- key areas with a clear need for significant network reinforcement to accommodate the anticipated levels of generation; and
- areas forecast to have a relatively low generation impact, where it is anticipated that basic active management techniques or localised reinforcement will be required in response to actual connection enquiries.

Quality of Supply Performance

Our DG Case has been designed to ensure that the quality of supply to other customers is not adversely impacted by DG.

Summary financial information - SP Manweb

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - SPM

			171.3	173.9	177.5								
TURNOVER			•	— Actual —	•	•			— Forecast —			•	% increase
	real 2002/03 pric	ces	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Turnover													1
													1
Price Contr	olled £	£m	166.6	158.5	159.2	157.6	156.1	172.3	174.5	176.7	179.0	181.1	10.7%
Excluded S	ervices £	£m	24.2	18.3	23.6	24.1	23.3	18.4	18.3	18.2	18.1	17.9	-19.9%
Deminimis	£	£m	0.5	0.6									-100.0%
Other Inco	me		21.0	20.3	18.8	18.4	18.1	17.3	17.3	17.3	17.3	17.3	-10.5%
Total Turnover	£	£m	212.4	197.7	201.6	200.1	197.5	208.0	210.1	212.2	214.4	216.3	5.1%
													1

OPEX			•	— Actual —		•			— Forecast —			•	% increase
	real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Operating Costs													
	Cost of sales	£m	(16.9)	(9.0)	(7.9)	(9.4)	(9.4)	(8.4)	(8.4)	(8.4)	(8.3)	(8.1)	-20.9%
	Exit Charges (NGC and other)	£m	(18.0)	(15.8)	(15.1)	(14.8)	(14.5)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	-8.0%
	Employee Wages	£m	(19.4)	(0.2)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	-88.1%
	Direct Network Costs	£m	(18.9)	(38.5)	(33.9)	(31.2)	(37.9)	(34.0)	(32.6)	(32.6)	(31.5)	(30.9)	0.8%
	Depreciation	£m	(30.2)	(21.4)	(18.7)	(19.2)	(21.8)	(23.7)	(26.4)	(28.9)	(31.7)	(34.6)	30.5%
	Network Rates	£m	(14.9)	(14.8)	(15.5)	(14.9)	(15.0)	(15.0)	(15.0)	(15.0)	(15.0)	(15.0)	-0.2%
	Other costs	£m	(20.7)	(10.2)	(12.7)	(6.1)	(6.9)	(8.3)	(8.4)	(8.4)	(8.4)	(8.5)	-25.8%
													#DIV/0!
Total Operating Co	sts	£m	(139.0)	(109.9)	(104.3)	(96.1)	(106.0)	(104.3)	(105.7)	(108.2)	(109.8)	(112.0)	-2.8%
1		1											

CAPEX		•	— Actual —		4			— Forecast —			*	% increase
	real 2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Capital Expenditure												
Load Related	£m	(31.5)	(40.2)	(47.3)	(47.7)	(60.8)	(50.6)	(42.0)	(38.1)	(35.6)	(36.1)	-11.0%
Capital Contributions	£m	18.7	17.2	12.7	12.5	10.0	4.8	4.8	4.9	4.8	4.9	-66.0%
	£m											
Non Load Related	£m	(37.7)	(49.2)	(65.0)	(49.6)	(62.5)	(74.0)	(77.1)	(84.4)	(89.4)	(95.3)	59.2%
Non-operational capex	£m	(5.0)										
Total Capital Expenditure	£m	(55.6)	(72.2)	(99.6)	(84.8)	(113.3)	(119.8)	(114.3)	(117.6)	(120.2)	(126.5)	40.7%

QoS		4	— Actual —	•	4			— Forecast —			*	% increase
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Customers connected	m	1.4	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.2%
Unplanned Customer Minutes Lost	mins			103.8	49.8	49.8	49.8	49.7	49.7	49.9	49.8	-26.6%
Unplanned Customer interruptions per 100 customers				47.3	45.8	45.8	45.8	45.7	45.7	45.9	45.8	-1.1%

Whilst historic "actual" performance shows the impact of exceptional events the base case investment proposal assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - Incremental cost over Base Case

OPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m							
Difference vs Base Case	£m							

CAPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m							
	±m							
Difference vs Base Case	£m							

QoS		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Customer Minutes Lost Customer interruptions per 100 customers	mins	-	-			-	-	-

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO

OPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m £m			(0.1)	(0.2)	(0.5)	-	-
Difference vs Base Case	£m			(0.1)	(0.2)	(0.5)	-	-
CAPEX								
CAPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX	real 2002/03 prices £m	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX Total Capex	real 2002/03 prices £m £m	2003/04	2004/05	2005/06 (3.8)	2006/07 (3.8)	2007/08 (3.3)	2008/09 (3.3)	2009/10 (3.2)

QoS		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins	-	-	-	(0.1) (0.1)	(0.2) (0.2)	(0.3) (0.3)	(0.4) (0.4)

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation. N.B. All CML/CI figures for both the quality of supply case and the DNO's own scenario are incremental to the base case ScottishPower has submitted a separate Forecast Business Plan Questionnaire for Distributed Generation to Ofgem. The figures included in the table below should be considered as being incremental to the figures included in the "Base Case", "Quality of Supply" and "DNO alternative" tables in this document

OPEX	real 2002/03 pr	ces	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	03/04 and 04/05 opex assumed to be recovered from connecton charge	£m	-	-	- 0.8	- 1.5	- 1.7	- 2.1	2.0
Difference vs Base	Case	£m	-	-	0.8	1.5	1.7	2.1	2.0

CAPEX	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	3.9	7.4	10.4	19.0	21.0	25.9	25.0
Difference vs Base Case	£m	3.9	7.4	10.4	19.0	21.0	25.9	25.0
Less Contributions note change in contribution policy assumed in 05/06	£m	3.9	7.4	2.6	4.9	5.4	6.6	6.4
Net Capex	£m	-	_	7.7	14.1	15.6	19.3	18.6

11. SP Distribution (SPD)

Commentary on DPCR4 forecasts

Summary

SP Distribution will continue to manage its distribution network to be sustainable in the long-term. This will ensure that our customers continue to receive reliable electricity supplies, efficiently managed and resilient to severe weather events. The plans that we have recommended to Ofgem for the period 2005-2010 are the next stage of our longer-term plans to ensure that we meet these commitments to our customers.

In compiling these plans we have recognised that this distribution price control review is different from previous reviews due to increasing costs in a number of areas, including network safety, security and reliability and distributed generation. These cost increases result in an upward pressure on prices.

Our plans are based on advanced asset risk management policies and practices and take account of the increased levels of asset replacement required to manage the risks associated with the ageing asset base. These plans are comprised of a number of components:

- the Base Case, as specified by Ofgem, to maintain current levels of asset fault rates, network performance and safety;
- the Quality of Supply Case, to improve overall network performance in line with Ofgem's specified targets;
- the SP Distribution Case, incorporating the Base Case, the Quality of Supply Case and additional expenditure to improve the quality of supply to 'worst served' customers and address the issue of distribution losses; and
- the Distributed Generation (DG) Case, setting out the expenditure necessary to accommodate significantly increased levels of renewable generation in the SP Distribution area.

Over the five-year period the plans that we have recommended to Ofgem, consisting of the SP Distribution Case plus the DG Case, require the following:

- operating expenditure of £820.7m (£812.4m from the SP Distribution Case and £8.3m from the DG Case); and
- net capital investment of £731.2m (£653.0m from the SP Distribution Case and £78.2m from the DG Case).

It is extremely important that the allowed cost of capital is set at a level that provides a sufficient and stable return on investment and enables companies to attract and retain equity funding. A cost of capital of between 7% and 8% (pre-tax real) is strongly supported by market evidence and authoritative academic studies.

Base Case

Over the five-year period our Base Case plan will require expenditure of:

- operating expenditure of £807.0m; and
- net capital investment of £604.9m.

Ofgem has specified that the Base Case should include the minimum expenditure (operating and capital) necessary to run an efficient business while:

- keeping fault rates constant;
- maintaining network performance levels; and
- maintaining levels of safety.

Opex

Our plans include the operating expenditure required to address the considerable cost pressures impacting SP Distribution and to deliver the increasing service levels required by our customers. Costs are increasing in a number of areas, including, contractor rates for tree cutting, insurance premiums and compliance with changes in legislation and with increasingly onerous environmental obligations. Although some opportunities exist to offset these increasing costs through improved efficiency, the scope for major net cost reductions has now been largely exhausted.

Capex

Ofgem has specified that fault rates should be maintained at a constant level. Our capital expenditure plans will halt the increasing fault rates in critical network assets such as 11kV overhead lines in areas prone to severe weather and manually operated oil-filled switchgear. However, our analysis indicates that excessive levels of capital investment will be required to hold fault rates constant on low criticality assets. In our view this is not currently required and we have therefore proposed an approach that manages the fault rates of these assets in a manner such that overall network performance is maintained. This approach mitigates the requirement for increased levels of investment.

Quality of Supply Performance

Our Base Case plans are designed to maintain network performance at current levels as specified by Ofgem.

Ofgem Quality of Supply Case

Over the five-year period the incremental expenditure required over our Base Case to meet the targets specified by Ofgem is:

- operating expenditure of £4.0m; and
- net capital investment of £29.0m.

Ofgem has specified a quality of supply scenario that requires DNOs to achieve a benchmark level of performance by 2020 with an interim target for 2010. This requires SP Distribution to deliver incremental improvements in overall unplanned customer interruptions (CI) of 1.9 and unplanned customer minutes lost (CML) of 10.5.

Opex

We intend to achieve the majority of the improvements in overall CML performance through changes to operational practices aimed at enhancing our effectiveness at restoring supplies. Specific initiatives include shift working, restoration resources strategically sited within geographic zones and the use of satellite navigation and tracking technology.

Capex

We have followed Ofgem's benchmarking methodology and assumptions closely in developing our investment plans and have concluded that the most cost effective improvements to overall CI performance can be achieved through capital investment in the high voltage (HV) underground cable and overhead line networks. This investment will be targeted toward improvements in underlying fault rates since initiatives aimed at minimising the number of customers affected by an incident have largely been exhausted.

SP Distribution Case

Over the five-year period these plans will require:

- operating expenditure of £812.4m (£1.4m incremental to the Base Case and Quality of Supply Case); and
- net capital investment of £653.0m (£19.1m incremental to the Base Case and Quality of Supply Case).

Our recommended plans, over and above the Base Case and the Ofgem QoS case, contain initiatives which we believe are necessary to meet the expectations of our customers, deliver a positive environmental impact and manage risk through:

- improvements in the quality of supply experienced by 'worst served' customers and communities;
- installation of low loss distribution transformers; and
- mitigating the security threats to our systems.

Opex

The incremental opex costs over the Base Case arise as a result of our plans to improve IT security, disaster recovery and business continuity planning controls to manage the risks of disruption to SCADA (System Control and Data Acquisition) systems.

Capex/Quality of Supply

Our capital investment plans have been developed to achieve a balance between the cost of implementation and the benefits for our customers. The initiatives selected have a clear 'benefits' focus, addressing areas of key concern to our customers. For example, a small minority of our customers receive an unsatisfactory level of service that is not addressed by a focus on overall network performance. In addition, we are seeking to reduce the differential in network performance between rural and urban areas and therefore reduce the risk of multiple interruptions for 'worst served' communities.

Our proposals for the installation of low loss transformers will address Ofgem's environmental objectives, consistent with our understanding of Ofgem's initial proposals for a loss reduction incentive.

Distributed Generation Business Plan

Over the five-year period our plans, which are based on accommodating in excess of 1200 MW of generation, will require:

- operating expenditure of £8.3m; and
- net capital investment of £78.2m.

Opex

Additional operating costs will be incurred as a result of the increased complexity of operating distribution networks with high levels of generation connected.

Capex

Government targets for renewable generation are extremely challenging and are driving a substantial increase in the number of applications and enquiries for distributed generation (DG) connections in the SP Distribution area. This is a much more significant issue for SP Distribution than for most other distribution companies due to the high potential for onshore and offshore wind generation in the SP Distribution area.

If these levels of generation are to be accommodated, and Government targets are to be met, then significant investment on the distribution network will be required to connect generation at many more points and at lower voltages.

While the exact location and volume of generation that will seek to connect is uncertain, analysis of firm enquiries and applications has allowed us to identify:

- key areas with a clear need for significant network reinforcement to accommodate the anticipated levels of generation; and
- areas forecast to have a relatively low generation impact, where it is anticipated that basic active management techniques or localised reinforcement will be required in response to actual connection enquiries.

A substantial proportion of the investment required relates to 132kV works by SP Transmission carried out in order to accommodate generation on SP Distribution's network.

Quality of Supply Performance

Our DG case has been designed to ensure that the quality of supply to other customers is not adversely impacted by DG.

Summary financial information - SP Distribution

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - SPD

		171.3	173.9	177.5								
TURNOVER		•	— Actual —		•			— Forecast —				% increase
	real 2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Turnover												
			1 1	1	1				1 1			1
Price Controlled	£m	273.1	270.8	270.6	262.2	255.3	270.4	273.1	276.0	278.8	281.9	3.6%
Excluded Services	£m	14.7	13.4	15.9	15.8	15.8	10.1	10.1	10.0	9.9	9.8	-34.0%
Deminimis	£m	21.9	3.4			-	-	-	-	-	-	-100.0%
Other Income		57.3	57.3	57.2	56.8	56.9	54.9	54.9	54.9	54.9	54.9	-3.8%
Total Turnover	£m	367.0	344.8	343.7	334.8	328.0	335.4	338.1	340.9	343.6	346.6	-0.8%
			1 1				1	1 1	1 1		1	1

OPEX		4	— Actual —	•	•			— Forecast —			•	% increase
real 2002/03	prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Operating Costs												
Cost of sales	£m	(21.3)	(8.5)	(9.3)	(8.4)	(9.0)	(9.7)	(9.7)	(9.7)	(9.6)	(9.4)	-14.9%
Exit Charges (NGC and other)	£m	(51.4)	(51.2)	(51.5)	(50.9)	(51.0)	(51.0)	(51.0)	(51.0)	(51.0)	(51.0)	-0.4%
Employee Wages	£m	(25.8)	(0.2)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	-90.9%
Direct Network Costs	£m	(15.4)	(32.3)	(29.8)	(38.5)	(30.4)	(30.2)	(29.0)	(28.9)	(28.0)	(27.4)	-2.0%
Depreciation	£m	(45.4)	(36.0)	(30.8)	(31.9)	(33.6)	(32.6)	(34.9)	(37.6)	(40.3)	(43.0)	6.0%
Network Rates	£m	(15.5)	(17.9)	(21.3)	(23.3)	(24.7)	(24.7)	(24.7)	(24.7)	(24.7)	(24.7)	20.3%
Other costs	£m	(29.0)	(14.9)	(16.6)	(6.6)	(8.1)	(8.5)	(9.0)	(9.0)	(9.7)	(9.8)	-38.8%
Total Operating Costs	£m	(203.9)	(160.9)	(159.8)	(160.1)	(157.3)	(157.2)	(158.8)	(161.4)	(163.8)	(165.8)	-4.2%

CAPEX		+	— Actual —		4			— Forecast —			*	% increase
	real 2002/03 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Capital Expenditure												
Load Related	£m	(45.3)	(40.6)	(68.1)	(59.6)	(54.1)	(58.0)	(56.0)	(52.7)	(51.2)	(50.9)	0.4%
Capital Contributions	£m	20.4	23.8	29.3	20.6	20.5	20.6	18.7	18.5	16.8	15.6	-21.3%
	£m	(24.9)	(16.8)	(38.8)	(39.0)	(33.6)	(37.4)	(37.3)	(34.2)	(34.4)	(35.3)	16.6%
Non Load Related	£m	(43.5)	(70.6)	(81.9)	(83.8)	(46.3)	(76.2)	(79.9)	(85.5)	(89.3)	(95.4)	30.7%
Non-operational capex	£m	(11.6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100.0%
Total Capital Expenditure	£m	(80.0)	(87.5)	(120.7)	(122.8)	(79.9)	(113.6)	(117.2)	(119.7)	(123.7)	(130.7)	23.2%

QoS		•	— Actual —	•	4			— Forecast —			•	% increase
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	04/05-09/10
Customers connected	m	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	4.4%
Unplanned Customer Minutes Lost	mins			66.3	68.0	68.0	67.9	67.8	67.9	68.0	68.0	1%
Unplanned Customer interruptions per 100 customers				61.7	61.1	61.1	61.0	60.9	61.0	61.1	61.1	0%
1												

Whilst historic "actual" performance shows the impact of exceptional events the base case investment proposal assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - Incremental cost over Base Case

OPEX real 2002.	/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m	-	-	(0.9)	(0.8)	(0.8)	(0.7)	(0.8)
Difference v Base Case	£m	-	-	(0.9)	(0.8)	(0.8)	(0.7)	(0.8)

CAPEX								
	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	(17.7)	(2.2)	(5.9)	(5.8)	(5.7)	(5.8)	(5.8)
Difference v Base Case	£m	(17.7)	(2.2)	(5.9)	(5.8)	(5.7)	(5.8)	(5.8)

QoS		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Customer Minutes Lost Customer interruptions per 100 customers	mins	-	-	(0.9)	(2.9) (0.4)	(5.4) (1.1)	(7.5) (1.5)	(10.5) (1.9)

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO

OPEX	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex	£m £m			(1.0)	(1.1)	(1.5)	(0.9)	(0.9
Difference v Base Case	£m			(1.0)	(1.1)	(1.5)	(0.9)	(0.9
CL DEV		1						
CAPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
CAPEX Total Capex	real 2002/03 prices	2003/04	2004/05	2005/06	2006/07 (10.1)	2007/08 (9.4)	2008/09 (9.4)	2009/10 (9.2

QoS		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins Gwh	-	-	(0.9)	(3.0) (0.4)	(5.5) (1.2)	(7.7) (1.7)	(10.7) (2.1)

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation. N.B. All CML/CI figures for both the quality of supply case and the DNO's own scenario are incremental to the base case ScottishPower has submitted a separate Forecast Business Plan Questionnaire for Distributed Generation to Ofgem. The figures included in the table below should be considered as being incremental to the figures included in the "Base Case", "Quality of Supply" and "DNO alternative" tables in this document

real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex 03/04 and 04/05 opex assumed to be recovered from connecton charge	£m £m	-	-	0.4	- 1.9	2.7	- 1.8	- 1.5
Difference v Base Case	£m	-	-	0.4	1.9	2.7	1.8	1.5

CAPEX	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex 0	£m £m	2.1	3.1	9.7	- 52.9	74.5	50.6	- 40.1
Difference v Base Case	£m	2.1	3.1	9.7	52.9	74.5	50.6	40.1
Less Contributions note change in contribution policy assumed in 05/06 Net Capex	£m £m	2.1	3.1	6.4 3.3	34.8 18.1	49.0 25.6	33.3 17.4	26.4 13.8

13. Scottish Hydro-Electric Power Distribution (SHEPD)

Commentary on DPCR4 forecasts

Base Case

Opex

Scottish Hydro-Electric Power Distribution (SHEPD) is the most remote and widespread Distribution Network Operator (DNO) managing an extensive electricity system in Northern Scotland covering over 25% of the UK land mass. Operating over this widespread region requires additional staff and increased travel costs compared to the average DNO. In addition the greater frequency of severe weather, the multiple submarine cables to the Islands and the island based diesel generation add to these additional costs. We firmly believe that these costs are substantial and must be recognised in comparing efficiency between DNOs and in setting allowed revenue going forward.

Opex in Ofgem's Quality of Supply scenario and SEPD's company scenario is included as for the Base Case. Ofgem did not require DNOs to re-submit opex forecasts, however we would not expect opex to change apart from depreciation which flows through from the additional capex.

The Opex submission for DPCR4 continues SHEPD's focus on efficiency and performance. There are however additional external cost pressures that have been recognised in the Business Plan and these are summarised below:

- <u>Salaries</u>. Pressure on salaries is increasing with annual awards above inflation being required;
- <u>Pensions</u>. Pension contributions by SHEPD to the SHE pension scheme increased to 20% of basic salaries on 1 April 2003 and are forecast to remain at that during the DPCR4 period. No pension deficit funding has been forecast;
- <u>Storm costs</u>. Severe weather is becoming increasingly expensive to insure against and it is believed to be more cost effective to allow reasonable provisions to cover these costs. It is also clear that customer expectations are rising considerably and it is becoming more expensive to restore supplies quickly during storms;
- <u>Network maintenance</u>. The Electricity, Safety, Quality and Continuity Regulations (2002) require us to manage our network risks differently. We anticipate this will increase costs in the areas of inspection, risk assessment and data management;
- <u>Tree cutting.</u> This is a major issue with external contractor costs rising steeply as DNOs increase their programmes. The scarcity of labour, increased frequency due to restricted cuts and faster tree growth mean we will see a substantial increase of costs in this area;
- <u>Efficiency</u>. By changing work practices, adopting innovative techniques and constantly reviewing structures and staff numbers we will continue to mitigate cost increases. Ongoing efficiencies on both salary and non-salary opex costs have been factored into our business plan.

There are however potentially significant costs which may arise which have not been included at this stage, these include Lane Rentals, atypical/exceptional/one-off costs and the costs of IT changes arising from reform of competitive market systems.

Forecasts have been based on 20 year regulatory depreciation. They also assume that Exit charges and Rates continue as pass-through and that metering is still included.

Capex

Over the current and previous two price control periods SHEPD has made a substantial investment in improving customer service, providing network resilience and maintaining the good fault performance of the network. Many of our programmes have been at the leading edge of DNO innovation, with our overhead line strengthening work giving improved network resilience at least cost. The benefit from this investment has become clear in the current price control period with customer minutes lost reducing by approximately 46% against the IIP target.

The Base Case Capex submission for DPCR4 builds on our existing processes, producing a best value programme of works that will maintain our network performance at existing levels. The main work areas are as follows:

- <u>Overhead Lines</u>. Many of SHEPD's lines were built during the 1950's and 60's to design standards that do not meet today's more rigorous requirements. We have developed a method of upgrading these lines (Line Strengthening) that gives an acceptable performance at least cost. Reliability Centred Maintenance techniques have been used to develop a 12 year cycle of refurbishment which factors in line strengthening and produces an efficient method of managing overhead lines;
- <u>Plant & Equipment</u>. We have extended the average asset life of our assets by condition assessment and risk management. This will continue during the next price control period;
- <u>Cables</u>. Our cable population is not showing signs of requiring large scale replacement. Stable fault rates mean most cables are replaced on failure although we do have plans to manage the environmental risks associated with fluid filled cables by a targeted overlay and joint refurbishment programme;
- <u>Load Related</u>. Load growth in the SHEPD Licence area is expected to be fairly flat over the review period and anticipated expenditure slightly less than allowed during DPCR3. Our expenditure plans assume new connections are wholly funded by customer contributions from 2005 onwards.

QoS Performance

By definition there are no specific Quality of Supply initiatives in the Base Case. The Base Case will maintain existing performance standards only.

Quality of Supply Scenario

Capex

Huge improvements in Quality of Supply performance during the current price control period, together with already being close to the Ofgem benchmark, mean that relatively little additional expenditure is required by SHEPD to meet the benchmark. We plan to carry out some further rural automation to address this issue using remotely controlled pole mounted re-closers to reduce the number of customers affected by overhead line faults. However the opportunities to use automation to improve performance are becoming limited due to saturation on the networks, diminishing returns and problems of protection discrimination.

QoS Performance

Our programme of rural automation will meet the Ofgem Quality of Supply benchmark for DPCR4.

DNOs Own Scenario

Capex

In this, our company submission, we have built on our Base case in a structured way that we believe is the most cost effective and best value solution to a number of issues including customer service, network resilience, safety and the environment.

Network resilience and performance are important to our customers and we have included measures to bring improvements in these areas that are reasonable, responsible and value for money. We have included Line Strengthening, ABC, undergrounding and automation in this submission that will reduce faults, speed restoration and reduce customer interruptions and customer minutes lost.

Our approach in DPCR4 has the following three strands:

(i) Continue our policy of refurbishing our overhead lines every 12 years. This approach will have a slightly higher average unit cost than at present due to the marginally deteriorating fault rates that we need to address. This will necessitate some HV lines being rebuilt/line strengthened and some LV lines re-conductored with ABC which will improve network resilience and fault performance. This will mean we will have removed 42% of our under-designed HV lines over the period and we believe represents a reasonable expenditure for the benefit it brings.

(ii) Automation has been a large part of our CML/CI improvements to date. The marginal benefits from this are inevitably lower than historically but we firmly believe still represent value for money. As a result some bare wire HV circuits will have pole-mounted re-closers and automatic sectioning links fitted. These measures will have a direct impact on reducing CMLs and Cls on an ongoing basis.

(iii) There are a number of circuits that will benefit from overhead line being placed underground. We believe this should be done on a measured basis to derive maximum benefit from least cost.
QoS Performance

These measures will improve our customers quality of supply and also impact on network resilience. The programme will also deliver a 5% reduction in Customer Minutes Lost and will be cost effective and continue the improvements achieved to date. Our line strengthening and LV ABC will mean less impact during ice storms and faster restoration of customers during major network storms.

Summary financial information - Scottish Hydro-Electric Power Distribution

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - SHEPD

TURNOVER	OVER Actual Actual Forecast										% change	
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover	1											
												ł
Price Controlled	£m	159.4	160.9	157.4	155.4	152.4	160.5	164.4	168.3	172.3	176.6	7%
Excluded Services	£m	7.5	7.8	6.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	19
Deminimis	£m	(0.4)	0.4	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-29%
Other income	£m	5.0	14.9	15.3	15.5	15.5	10.5	10.5	10.5	10.5	10.5	-219
Total Turnover	£m	171.5	184.0	180.6	178.6	175.6	178.7	182.6	186.5	190.5	194.8	5%
												1
OPEX		•	— Actual —		4			— Forecast —			+	% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												1
												ł
Cost of sales	£m	2.4	2.0	1.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	19
Exit Charges (NGC and other)	£m	-	9.9	10.4	10.5	10.5	10.5	10.5	10.5	10.5	10.5	27%
Employee Wages	£m	17.2	14.4	15.5	15.9	16.3	16.6	16.6	17.3	17.4	17.7	89
Direct Network Costs	£m	9.2	9.0	9.8	8.9	9.5	9.8	9.7	9.6	9.4	9.3	39
Depreciation	£m	31.0	32.9	32.1	32.1	28.1	28.5	28.7	29.5	30.5	31.3	-5%
Network Rates	£m	9.1	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	-2 %
Other costs	£m	16.5	11.2	12.5	13.1	13.1	13.2	13.2	13.4	13.5	13.7	19
Total Operating Costs	£m	85.4	87.7	90.4	90.9	87.9	89.0	89.1	90.7	91.7	92.9	39
CAPEX		•	— Actual —		4			– Forecast –				% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure	1											
												ł
Load Related	£m											1
Capital Contributions	£m											ł
	£m	15.8	18.5	14.5	10.5	7.5	10.5	11.6	10.0	11.1	11.1	-199
Non Load Related	£m	24.8	28.0	21.0	24.9	30.8	39.6	34.8	38.5	36.3	34.7	429
Non-operational capex	£m	0.5	0.8	0.5	-	-	0.4	0.4	0.4	0.4	0.4	119
												ł
Total Capital Expenditure	£m	41.1	47.3	36.0	35.4	38.3	50.5	46.8	48.9	47.8	46.2	219
												L
QoS PERFORMANCE			Actual —		4			- Forecast -				% change
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
												(
Customers connected	m	0.644	0.670	0.681	0.684	0.691	0.704	0.711	0.718	0.725	0.733	79
Unplanned Customer Minutes Lost	mins			71.3	103.7	99.1	99.1	99.1	99.1	99.1	99.1	819
Unplanned Customer interruptions per 100 customers				85.5	100.2	97.1	97.1	97.1	97.1	97.1	97.1	729
												1

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - SHEPD

OPEX real 2002/03 pri	ces	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
		T				· · · · · ·		1	
Total Opex (excluding increase in depreciation)	£m	90.9	87.9	89.0	89.1	90.7	91.7	92.9	
						· · · · · · · · · · · · · · · · · · ·	· · · · ·		
Difference vs. Base Case	£m	-	-	-	_		-		
CAPEX						· · · · · · · · · · · · · · · · · · ·			
real 2002/03 pri	ces	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Total Capex	£m	36.3	40.3	51.3	47.6	49.7	48.6	47.0	
						'			
Difference vs. Base Case	£m	0.9	2.0	0.8	0.8	0.8	0.8	0.8	
						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	[
QoS PERFORMANCE						· · · · · · · · · · · · · · · · · · ·			
		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Unplanned Customer Minutes Lost	mins	103.7	99.1	98.6	98.0	97.5	96.9	96.4	
Unplanned Customer interruptions per 100 customers		100.2	97.1	96.8	96.6	96.3	96.0	95.8	
					1	1 '	1 '	1	

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - SHEPD

OPEX real 2002/03 price	real 2002/03 prices		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
tal Opex (excluding increase in depreciation)	£m	90.9	87.9	89.0	89.1	90.7	91.7	92.9
Difference vs. Base Case	£m	-	-	-	-	-	-	-
CAPEX real 2002/03 price:	s	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	35.4	38.3	56.8	53.2	55.3	54.2	52.6
Difference vs. Rese Cose	fm	-	-	6.3	6.4	6.4	6.4	6.4
Difference vs. base case	2111			0.0	4		0.1	0.4

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	103.7	99.1	98.0	97.0	95.9	94.9	93.9
Unplanned Customer interruptions per 100 customers		100.2	97.1	96.7	96.4	96.0	95.7	95.4

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

Scottish Hydro-Electric Power Distribution has not included distributed generation in its own scenario.

14. Southern Electric Power Distribution (SEPD)

Commentary on DPCR4 forecasts

Base Case

Opex

Southern Electric Power Distribution Limited (SEPD) is one of the largest Distribution Network Operators (DNOs) managing an extensive electricity network in central southern England. We believe that SEPD is at the frontier of Opex costs within the industry despite increased additional regional costs compared to the average DNO including the additional tree cutting required due to high tree density, high costs associated with operating in West London and the costs of replacing Consac cable. We firmly believe that these additional costs should be recognised when comparing efficiency between DNOs and setting allowed revenue going forward.

Opex in Ofgem's Quality of Supply scenario and SEPD's company scenario is included as for the Base Case. Ofgem did not require DNOs to re-submit opex forecasts, however we would not expect opex to change apart from depreciation which flows through from the additional capex..

Our Opex submission for DPCR4 continues SEPD's focus on efficiency and performance. There are however additional external cost pressures that have been recognised in the Business Plan and these are summarised below:

Salary Levels. Pressure on salaries is increasing with annual awards above inflation being required and increased allowances to reflect London working;

- <u>Pensions</u>. Pension contributions are expected to increase from current levels following the actuarial review of the SE pension scheme on 1 April 2004. In addition a significant pension deficiency payment is expected during the DPCR4 period to address the current pension deficit in the SE pension schemes;
- <u>Storm Costs</u>. Severe weather is becoming increasingly expensive to insure against and it is believed to be more cost effective to allow reasonable provisions to cover these costs. It is also clear that customer expectations are rising considerably and it is becoming more expensive to restore supplies quickly during storms;
- <u>Maintenance</u>. The Electricity, Safety, Quality and Continuity Regulations (2002) require us to manage our network risks differently. We anticipate this will increase costs in the areas of inspection, risk assessment and data management;
- <u>Tree Cutting</u>. This is a major issue for DPCR4 with external contractor costs rising steeply as the DNOs increase their programmes. The scarcity of labour, increased frequency due to restricted cuts and faster tree growth mean we will see a substantial increase of costs in this area;
- <u>Efficiency</u>. We believe that by changing work practices, adopting innovative techniques and constantly reviewing structures and staff numbers we will continue to mitigate cost increases. Ongoing efficiencies on both salary and non-salary opex costs have been factored into our submission.

There are however potentially significant costs which may arise which have not been included at this stage, these include Lane Rentals, atypical/exceptional/one-off costs and the costs of IT changes arising from reform of competitive market systems.

Forecasts have been based on 20 year regulatory depreciation. They also assume that Exit charges and Rates continue as pass-through and that metering is still included.

Capex

Over the current and previous two price control periods SEPD has made a substantial investment in improving customer service, providing network resilience and maintaining the good fault performance of the network. Many of our programmes have been at the leading edge of DNO innovation, with our BLX and ABC network resilience programmes singled out for praise by the DTI in their report of the October 2002 storm.

The Base case submission for DPCR4 builds on our excellent past performance producing a best value programme of works that will maintain our network performance at existing levels. The main work areas are as follows:

- <u>Overhead Lines</u>. BLX and ABC are proven to be excellent standards for overhead line builds in our heavily tree affected Licence area. Reliability Centred Maintenance techniques have been used to develop a 12 year cycle of refurbishment which factors in BLX, ABC and lighter refurbishment producing an efficient process for managing overhead lines;
- <u>Plant & Equipment</u>. We have extended the average asset life of our assets by rigorous condition assessment and risk management. This will continue during the next price control period;
- <u>Cables</u>. Expenditure on cables within SEPD is dominated by the problem with Consac. We plan to continue our existing approach of combining full overlays with fast-track replacement of specific lengths. The remainder of our cable population is not showing signs of requiring large scale replacement. Stable fault rates mean most of these cables are replaced on failure although we do have plans to manage the environmental risks associated with fluid filled cables by a targeted overlay and joint refurbishment programme;
- <u>Load Related</u>. Of particular note are two schemes that will require major investment to comply with P2/5 requirements. Our expenditure plans assume our new connections are wholly funded by customer contributions from 2005 onwards.

QoS Performance

By definition there are no specific Quality of Supply initiatives in our Base case. The Base case will maintain existing performance standards only.

Quality of Supply Scenario

Capex

We do not believe the Ofgem Quality of Supply scenario represents the best value that can be obtained for our customers nor what our customers actually want. However as requested we have developed the programme below to meet the targets set. We also do not support the methodology used by Ofgem to derive DNO benchmarks.

SEPD have identified six main work streams that are required to produce the Quality of Supply scenario improvements. As the benefits of circuit automation become more difficult to realise and are affected by diminishing returns we will have to introduce other, more expensive measures. These work streams are noted below:

- <u>BLX rebuilds</u>. We would need to rebuild 916km of our 11kV overhead lines over the period;
- <u>Undergrounding of Overhead Lines</u>. We anticipate a requirement to underground 320km of our most vulnerable 11kV;
- <u>Feeder splitting</u>. A number of our HV overhead networks have seen a disproportionate growth in 'tail end' customer numbers over recent years. We would require to split these feeders by laying cable or building lines from appropriate points on adjacent networks. We would need to work on approximately 80 circuits;
- <u>Rural automation</u>. As noted above opportunities for rural automation are becoming limited. However we still see this as an effective area to improve our QoS performance albeit with no actual performance improvement in fault rates. We would have to address 480 circuits;
- <u>Consac overlay</u>. We would have to overlay 248km of Consac;
- <u>Underground distribution boxes</u>. A number of our Consac LV cable circuits will benefit from the installation of Underground Distribution Boxes (UDBs) at extremities of radials and at mid way points. We would need a programme to install 1250 units.

QoS Performance

Our programme of rural automation will meet the Ofgem Quality of Supply Targets for DPCR4.

DNOs Own Scenario

Capex

In this, our company submission, we have built on our Base case in a structured way that we believe is the most cost effective and best value solution to a number of issues including customer service, network resilience, safety and the environment.

Network resilience and network performance are important to our customers and we have included measures to bring improvements in these areas that are reasonable, responsible and value for money. We have included BLX, ABC, undergrounding and

automation in this submission that will reduce faults, speed restoration and reduce customer interruptions and customer minutes lost.

Our approach in DPCR4 has the following three strands:

(i) Continue our policy of refurbishing our overhead lines every 12 years. This approach will have a slightly higher average unit cost than at present due to the marginally deteriorating fault rates that we require to address. This will necessitate some lines being rebuilt/re-conductored with BLX and ABC and improve network resilience as a result. This represents 2200km BLX and 950km ABC. This will bring our total BLX to 40% of our HV lines and we believe represents a reasonable expenditure for the benefit it brings.

(ii) Automation has been a large part of our CML/CI improvements to date. The marginal benefits from this are lower than historically but we firmly believe still represent value for money. As a result some bare wire HV circuits will have pole-mounted re-closers and automatic sectioning links fitted. We also plan to split some of our urban and rural feeders to address the issue of concentrations of customers at 'tail ends'.

(iii) There are a number of circuits that will benefit from overhead line being placed underground. We believe this should be done on a measured basis to derive maximum benefit from least cost. We therefore plan to address 210km.

Our Consac low voltage cable continues to show much higher than average fault rates and will require increased levels of investment than that spent during this price review period. Our network has 6000km of Consac cable.

In recent years we have tackled this issue in two complementary ways. We intend to overlay the worst sections and target specific lengths where we have had faults and overlay a number of other joints whilst we are out repairing faults. In total this means we will address 250km.

We have noted a marked increase in wayleave terminations recently with some estimated to cost over ± 1 m in compensation (or much more for network alterations). This will require to be carefully managed and an increase in required funding is inevitable.

QoS Performance

These measures will improve our customers quality of supply and also impact on network resilience. The programme will also result in a 7% reduction in CMLs which will be cost effective and continue the improvements to date. In particular, our HV BLX and LV ABC will mean less network impact during storms and faster restoration of customers during major network storms.

Summary financial information - Southern Electric Power Distribution

This financial information is as submitted in the Business Plan Questionnaires by the DNOs and has not been normalised. The commentary set out in this appendix on each of the scenarios has been provided by the DNOs.

BASE CASE - SEPD

TURNOVER		I ↓	— Actual —	•	•		Forecast					% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Turnover	1											
Price Controlled	£m	313.6	309.2	310.6	307.6	303.6	312.6	322.1	330.7	339.5	348.6	7%
Excluded Services	£m	27.7	25.1	28.7	27.0	27.0	27.0	27.0	27.0	27.0	27.0	0%
Deminimis	£m	-	-	-	-	-	-	-	-	-	-	
Other income	£m	31.3	29.9	26.4	27.4	27.5	20.6	20.6	20.6	20.6	20.6	-28%
Total Turnover	£m	372.6	364.2	365.7	362.0	358.1	360.2	369.7	378.3	387.1	396.2	4%
	-											
OPEX		•	— Actual —	*	4			— Forecast —			+	% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Operating Costs												
Cost of sales	£m	6.7	8.0	8.2	7.6	7.6	7.6	7.6	7.6	7.6	7.6	0%
Exit Charges (NGC and other)	£m	24.9	23.4	19.8	20.6	20.6	20.6	20.6	20.6	20.6	20.6	-6%
Employee Wages	£m	26.6	29.1	32.9	33.6	40.1	40.6	40.8	42.3	42.5	43.1	29%
Direct Network Costs	£m	14.5	14.6	21.0	17.2	18.1	18.6	18.8	18.7	18.7	18.6	9%
Depreciation	£m	53.2	55.0	56.5	50.1	51.1	54.8	57.9	61.2	64.0	64.2	14%
Network Rates	£m	29.8	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	3%
Other costs	£m	23.6	12.9	8.8	10.3	10.1	10.3	10.3	10.4	10.6	10.9	-20%
						-						
Total Operating Costs	£m	179.3	177.1	181.3	173.5	181.7	186.6	190.1	194.9	198.1	199.1	9%
CAPEX		•	— Actual —		+		Forecast				+	% change
real 2002/0	3 prices	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Capital Expenditure												
Load Related	£m											
Capital Contributions	£m											
	£m	33.2	44.9	41.1	41.8	47.3	41.3	41.3	41.3	41.3	41.3	-1%
Non Load Related	£m	60.5	54.9	47.2	52.1	64.0	79.2	78.9	77.2	76.7	75.9	39%
Non-operational capex	£m	0.7	1.4	-	-	-	1.0	1.0	1.0	1.0	1.0	138%
Total Capital Expenditure	£m	94.4	101.2	88.3	93.9	111.3	121.5	121.2	119.5	119.0	118.2	23%
								— Forecast —			b	% change
Q03 FERFORMANCE		4	— Actual —	•							-	
QUS FERFORMAINCE		▲ 2000/01	— Actual — 2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Q05 FERFORMAINCE		2000/01	— Actual — 2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2005-2010
Customers connected	m	▲ 2000/01 2.727	Actual 2001/02	2002/03 2.736	2003/04 2.761	2004/05 2.789	2005/06 2.817	2006/07 2.845	2007/08 2.873	2008/09 2.902	2009/10 2.931	2005-2010 5%
Customers connected Unplanned Customer Minutes Lost	m mins	2000/01 2.727	<u>Actual</u> 2001/02 2.689	2002/03 2.736 101.7	2003/04 2.761 86.4	2004/05 2.789 85.0	2005/06 2.817 85.0	2006/07 2.845 85.0	2007/08 2.873 85.0	2008/09 2.902 85.0	2009/10 2.931 85.0	2005-2010 5% 56%

The base case assumes the existing underlying Quality of Supply performance is maintained. No distributed generation is included.

QUALITY OF SUPPLY CASE - SEPD

OPEX real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Opex (excluding increase in depreciation)	£m	173.5	181.7	186.6	190.1	194.9	198.1	199.1
Difference vs. Base Case	£m	-	-	-	-	-	-	-
CAPEX real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex	£m	100.5	115.6	149.7	149.4	147.7	147.2	146.4
Difference vs. Base Case	£m	6.6	4.3	28.2	28.2	28.2	28.2	28.2
QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost Unplanned Customer interruptions per 100 customers	mins	86.4 92.8	85.0 90.0	82.8 88.7	80.6 87.4	78.4 86.2	76.2 84.9	74.0 83.6

The QoS case assumes that each DNO achieves 40% of its 2020 benchmarked performance by 2010. No distributed generation is included.

DNO'S OWN SCENARIO - SEPD

OPEX real 2002/03 prices	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
Total Opex (excluding increase in depreciation) Difference vs. Base Case	£m £m	173.5	181.7	- 186.6	190.1	194.9	198.1	199.1
CAPEX real 2002/03 prices		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Capex Difference vs. Base Case	£m £m	93.9	- 111.3	132.4 10.9	132.0 10.8	130.3 10.8	129.8 10.8	129.0

QoS PERFORMANCE		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Unplanned Customer Minutes Lost	mins	86.4	85.0	83.8	82.6	81.4	80.2	79.0
Unplanned Customer interruptions per 100 customers		92.8	90.0	89.3	88.6	87.9	87.2	86.5

The DNO's own scenario includes each DNO's own assumptions on QoS and other factors such as distributed generation.

Southern Electric Power Distribution has not included distributed generation in its own scenario.