EDF Energy Networks

Planning for the future of our networks

November 2008

Consultation Response Document

EDF ENERGY networks

FOREWORD FROM LAURENT FERRARI, CHIEF OPERATING OFFICER, EDF ENERGY NETWORKS

Firstly, I would like to take this opportunity to thank you for your time in responding to our stakeholder consultation, which ran from July to September 2008.

The content of our consultation documents, ***Planning for the future of our networks***, was based on our thinking and planning, as well as previous discussions with key customers and stakeholders. It was built around the four main themes that emerged from this work: delivering for customers; planning for a sustainable future; operating efficiently; and providing affordable services.

We have now reviewed the responses from the stakeholder consultation and this document summarises the actions we intend to take, including those that will be included in our final Financial Business Planning Questionnaire (FBPQ) for submission to Ofgem in early 2009.

In total - online and on paper - we received more than 270 individual responses to our stakeholder consultation from a cross-section of 120 stakeholders and every one has been carefully considered. It was most encouraging that the majority of the responses received were supportive of our core business plans.

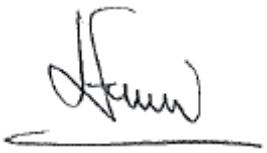
Capacity headroom and developing infrastructure ahead of need attracted the greatest number of comments. In particular, there was strong desire that we should increase the capacity headroom of our networks in order to facilitate connection. However, there were conflicting views about who should pay for this. Respondees also noted the importance of energy efficiency as a priority for the future and we received diverse views on the impact that new sources of energy will have on our network.

The challenges associated with sustainability and climate change were prominent in most responses. Stakeholders also clearly shared our concerns about the availability of skilled resources and the role these will need to play in delivering our plans. The support for our people strategy was particularly encouraging and I reaffirm my commitment to seeing this strategy delivered.

One important area of concern was user connections, where it was apparent that we had not met some of our customers' expectations. Feedback also suggested that there was strong support for our proposals for dealing with such issues. There was also substantial support for our proposals for improving the ways in which our connection customers interact with us.

Although the consultation period has now ended, we welcome the opportunity to engage with our stakeholders on an ongoing basis, as we continue to shape and refine our thinking.

Once again, I would like to extend my personal thanks to you for taking the time and effort to give us your views and opinions, which will go towards building a better tomorrow for our customers, stakeholders and employees.



Laurent Ferrari
Chief Operating Officer
EDF Energy Networks

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1. ABOUT EDF ENERGY AND OUR NETWORKS

EDF Energy is one of the UK's largest energy companies and is a core part of the French-owned EDF Group. We provide power to 25 per cent of the UK's population via our electricity distribution networks in London, the South East and the East of England. In addition, we supply gas and electricity to more than five million customers, generating around five giga-watts of energy from our coal and gas power stations, as well as combined heat and power plants and wind farms. We are also a key player in national infrastructure projects, including the management of private electricity networks that serve four London airports and the Channel Tunnel Rail Link. In the UK, we employ around 13,000 people.

DID YOU KNOW?

We provide three main services to our customers: energy generation; energy distribution and energy supply. This consultation response document deals solely with the distribution component of our business, which is managed by EDF Energy Networks.

Key Financial Data for 2007 (£m)	EPN	LPN	SPN
Turnover	414.5	304.3	218.8
Operating Costs	174.3	124.0	99.7
Capital Investment	230.7	140.5	126.4
Profit after Tax	150.7	118.3	78.6

Figure 1: EDF Energy Networks key financial data

As a Distribution Network Operator (DNO), EDF Energy Networks owns, operates and manages three of the 14 DNOs in the UK. Our licensed DNOs are in London, the South East and the East of England - known as LPN, SPN and EPN respectively. Collectively, these make up EDF Energy Networks -the largest electricity DNO in the UK, with a total service area of approximately 30,000km², extending from the Wash at the top of East Anglia to Littlehampton in West Sussex. Approximately eight million connected customers depend on EDF Energy Networks for their power supply.

WHAT WE DO AND HOW WE DO IT

Put simply, we take electricity at a very high voltage and transform it into a voltage that is suitable for commercial and domestic use, before delivering it to customers. The diagram below (figure 2) illustrates the end-to-end process of how electricity is generated, distributed and supplied to our customers. Power plants around the country generate electricity that is then transformed into useable power voltages by the National Grid. We take power from the National Grid and distribute it, via our networks, to connected customers, who then pay their chosen supplier for the power they receive. The supplier then pays the DNO for the distribution of the power. EDF Energy Networks is also responsible for maintaining and modernising its distribution networks, parts of which are coming to the end of their useful life.

HOW IS THE INDUSTRY REGULATED, AND HOW IS IT STRUCTURED?

DNOs are natural monopolies. This is because there is no realistic means of introducing competition and also because of the prohibitive cost of replacing an entire fixed network infrastructure. It simply would not be economic to duplicate the existing network infrastructure for purely competitive reasons.

Ofgem protects customers' interests by regulating the energy companies through a five-year price control period called the Distribution Price Control Review (DPCR). DPCR includes curbs on expenditure, as well as incentives to be efficient and encourage technical innovation.

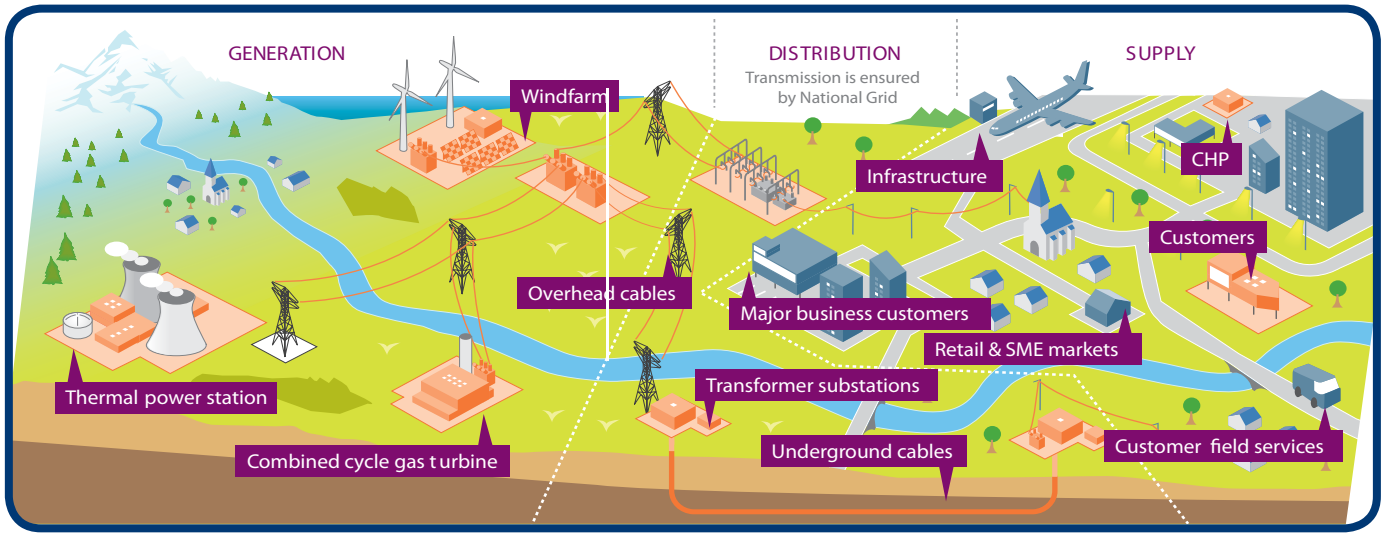

Figure 2: EDF Energy's electricity end-to-end process

DNOs have two distinct types of customers. The first is retail electricity suppliers, which pay DNOs a use of system charge for transporting electricity along their network. They then pass these costs on to connected customers as a proportion of their final bill. The second type of customer is anyone wishing to make a new connection to our network. They are charged a connection fee. As part of the regulatory framework, Ofgem has formally separated electricity retail supply businesses from DNOs. EDF Energy does have a retail electricity business, but stringent arrangements are in place to ensure that its supply and distribution businesses operate independently of each other.

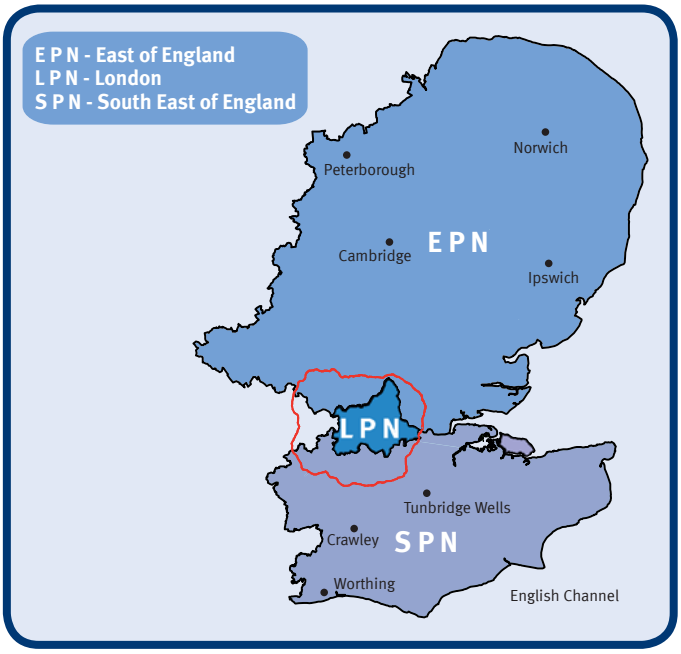

Figure 3: Regions in which EDF Energy Networks operates

SAFETY

EDF Energy's Networks Branch has launched a review of how it carries out its work and interacts with the network – the Zero Harm programme. There are five simple principles of safety for EDF Energy Networks employees.

- Every job will be done safely, no matter how important or urgent it is.
- Each of us has a personal responsibility for our own health and safety and for those around us.
- Putting people to work carries a specific responsibility and accountability for safety and health, which will be visibly demonstrated.
- Each near miss we learn from reduces the chance of harm next time.
- Each of us will spot, report and deal with hazards to help create a harm free workplace.

This provides an effective way of working whilst mitigating the risks inherent in working with electricity. While not formally a feature of the DPCR process, this examination of our future working practices (including a reassessment of how we work on the 'live' network) could have an impact on the way we deliver work for you.

OUR KEY CHALLENGES

The electricity industry will face sweeping changes over the next 15 years. These will bring significant technological developments, new sources of energy generation and new legislative constraints linked to climate change. If society wants to keep the lights on, protect the environment and ensure affordable, sustainable energy, we need to gain consensus on our long-term business plans.

Our challenges are particular to the regions we serve. In London, demand for electricity supply is greater than in other parts of the country, owing to the high level of business operations and transport links. In addition, we need to plan for future events, such as the 2012 Olympic Games, which will require a large increase in capacity for new facilities, transport links, homes and other associated developments.

In the 18 years since privatisation, the regulatory focus has been on creating a leaner, more efficient electricity industry. This has been successful and we now believe that the focus for the next 20 years should be on substantial investment to replace ageing assets and to develop a resilient, modern and flexible network to meet the country's future energy needs. For more information on EDF Energy's Networks Branch, please go to www.edfenergy.com/products-services/networks/index.shtml

2. THE STAKEHOLDER ENGAGEMENT PROCESS

YOUR FEEDBACK HAS MADE A DIFFERENCE

As part of the preparation for this DPCR, Ofgem asked all DNOs to consult with interested parties. We welcomed this opportunity to engage with you in an informed, open and frank debate on the main issues facing our industry.

To ensure that your opinions on our investment plans were incorporated into the review process we encouraged you to respond to our consultation online. You were free to comment generally on our plans but we also gave you the option of providing feedback in a 'have your say' area, where we asked for your views on specific, targeted questions. The feedback we received is helping us to shape our approach relating to the future of your electricity DNO. We have actively acknowledged all of the responses to our consultation and will ensure that each one is given full consideration as we prepare our final FBPQ for submission to Ofgem.

The original consultation document outlined the main issues facing the energy sector that could have a direct impact on you. The areas we covered in Section 6 set out our core investment plans for our three networks. This is work that we must do in order to comply with the requirements of our distribution licences. Sections 7 to 11 described the additional work we hoped to undertake to create a more efficient and resilient network.

The future economic growth of a region is linked to our ability to provide a secure and resilient service and meet the increasing demand for electricity. The needs of the industry and property developers, and the regulatory obligations on our network, must be balanced with an awareness of the environmental impact of what we do and the impact of climate change.

As part of a regulated industry, we are required to operate and maintain the network efficiently. We sought your comments to ensure that all of these requirements and priorities are taken into account. This, in turn, will help us ensure that our future funding level reflects the need to create a fully modernised, resilient DNO in the regions we serve. The stakeholder consultation has helped to inform us of the energy issues that are most important to you, because of their present and, possibly, future impact on your business (e.g. climate change, electricity sources, reliability, safety, price, customer service and traffic disruption).

IMPORTANT DETAILS AND DATES FOR THE CONSULTATION PROCESS

Our consultation opened on 1 July 2008, and in line with best practice, it ran for 90 days. In addition to the responses we received online, we hosted regional workshops in London - in respect of our plans/issues relevant to the capital and the South East and in Norwich for the East of England. Not surprisingly, there were differences in the views expressed between these regions, which these workshops enabled us to experience at first hand.

The updated timeline diagram below (figure 4) illustrates the key dates and steps in the consultation process. If you have any questions about this please get in touch with us at www.edfenergy.com/dpcr5.

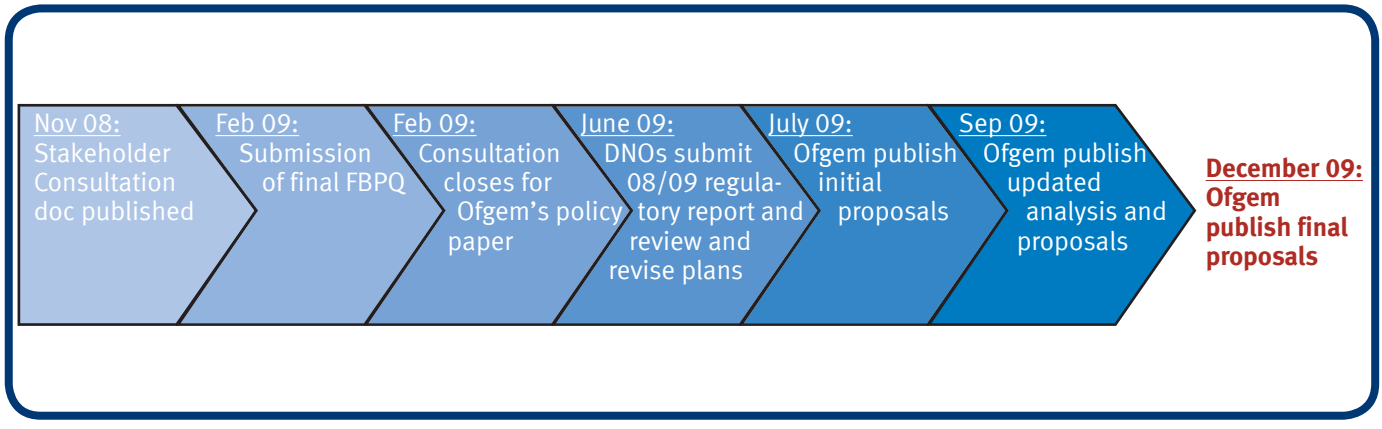

Figure 4: Planning for the future of our networks: Stakeholder Consultation timescales - November 2008 - December 2009

3. OFGEM'S SURVEY OF OUR DOMESTIC AND SMALL BUSINESS CUSTOMERS

Central to the DPCR process is an understanding of the level of service that customers want and the value they place on any improvements to them. To gain a greater insight into the views of domestic and small business customers, Ofgem (working with the DNOs) commissioned a consultant, Accent, to carry out a survey which looked at 'willingness to pay'. This information was then used to help Ofgem determine the level of investment, if any, that it would allow the DNOs for future service improvements. The Ofgem survey also built on similar work carried out at DPCR4 and is divided into two distinct stages - a qualitative survey, followed by quantitative research.

EDF Energy Networks' stakeholder consultation was primarily targeted at large customers (typically any business or other body whose annual demand is roughly in excess of 1 MWh) and representative organisations. So, in order to form an overall picture of stakeholder views, this document should be read in conjunction with the output of Ofgem's willingness to pay work.

Ofgem's review process is now complete and the final report is available on Ofgem's website: www.ofgem.gov.uk/Networks/ElecDist/QualofServ/Documents1/1704rep03.pdf.

4. CONSULTATION RESPONSES

As part of the stakeholder consultation period, we asked you 15 questions seeking your views on the future of our DNO. A summary of the responses and of our actions arising from them is provided below.

SECTIONS 1 TO 3. ABOUT EDF ENERGY AND OUR NETWORKS

1. Do you have any general comments you would like to make about our Planning for the Future.... document?

Number of responses: 34 (including 4 responses of 'no comment')

Unlike the other consultation questions, which each focused on a specific topic or issue, this first question allowed participants to comment on any aspect of the consultation document. Not surprisingly, the responses were diverse and some of them touched on subjects covered in later sections. However, there were a number of recurring themes in the responses to this question:

- The need for the provision of additional network capacity, particularly in Central London and the East of England, to address concerns about the difficulty of accessing electricity networks
- Overall energy policy, distributed generation, cleaner fuels, as well as the need to reduce energy usage
- Improvements to the structure of electricity distribution charges
- Requests for plans which are accurate, transparent and convincing, in terms of costs and benefits
- Improved visibility of EDF Energy Networks' Network Asset Management Plan
- Improved communication with customers.

Respondents also welcomed the opportunity to engage formally with EDF Energy's business plans. The comments reflected the respondents' interest in the subject matter and the desire to be involved in future opportunities to communicate with EDF Energy.

Extremely positive comments were received on the consultation process and documentation, particularly with regard to the need for further relationship building between EDF Energy and the local authorities. There was a notable clustering of responses with regard to capacity, energy policy and improved customer response and interaction. There were also references to the fact that, while progress was being made in relation to domestic connections, business customers found the process of connecting large mixed-use developments frustrating. There was also a request for plans to be more accurate and transparent and for improved working relationships between EDF Energy and third parties, to ensure that information was shared at an earlier stage around improving resilience of infrastructures.

Our adjustments to our plans

Stakeholders provided a range of comments in this section on questions raised elsewhere in the consultation document. Where appropriate, we have included these comments in the relevant section. Where responses to the stakeholder consultation have raised detailed questions on specific issues or projects, we have built our responses into our ongoing business contact with customers and stakeholders. If you do not think that you have received a sufficient response on a specific issue that you have raised, please contact the consultation team.

EDF Energy has reviewed the feedback on the consultation process and general stakeholder engagement and is building this into its overall standard business planning processes. We believe that the stakeholder engagement process should be included in future price control reviews and we are in discussion with Ofgem regarding the best way to achieve this.

SECTION 4. BUSINESS ENVIRONMENT AND KEY PLANNING ASSUMPTIONS

2. What are your views about the assumptions we have made with regard to the key issues that we have identified for the future of the electricity industry?

Number of responses: 25

Five responses expressed agreement with the planning assumptions set out in the consultation document. Six responses emphasised the importance of monitoring and taking account of economic trends and some pointed to potential weaknesses in the assumptions.

Sixteen responses commented on the direction of the energy market, referring to a range of specific aspects, such as improving energy efficiency and sustainability. Responses also highlighted the potential role of various forms of power generation, such as combined heat and power and distributed generation. Some respondents questioned specific assumptions made in the consultation document.

Furthermore, it was suggested that EDF Energy should take a more proactive role in relation to sustainability, energy efficiency or investment; that the EPN load growth may need to be re-assessed; and that a greater emphasis was needed on maintaining a viable infrastructure.

A high proportion of responses made reference to the direction of the energy market and expressed a requirement for, and expectation of, leadership. Some of the responses asked questions about specific assumptions - distributed generation and continued economic prosperity. One such comment included: "Most investment decisions are based on anything between five to ten years, but the evidence is growing that this downturn will be relatively severe and

prolonged". In addition, increasingly, stakeholders now appear to be looking to Ofgem to provide a coherent, long-term policy commitment rather than short-term, reactive 'sound bites'.

There was also a call for EDF Energy to take a proactive stance, e.g. with regard to environmental impact or the introduction of new technologies. The subject of deployment of new technologies (and how EDF Energy is developing a strategy for it) was also raised.

Our adjustments to our plans

Many of the matters raised in the feedback are currently beyond the scope of this consultation process and the current regulatory framework relating to DNOs, including the price control review. For example, many respondents wanted us to show greater leadership in taking the steps needed to deliver a low carbon energy sector. However, EDF Energy is fully engaged with the energy debate and is taking a proactive lead, at a corporate level, in developing and responding to the wider governmental proposals. The relevant comments from stakeholders will inform and influence this debate.

We are revising our core business planning scenario to reflect the significant changes in the UK's economic outlook that have unfolded in the last few months. In particular, we have commissioned expert analysis looking at the likely extent, depth and longevity of the economic downturn.

We also recognise from stakeholder feedback, particularly from the regional workshops, that we should continue to test the implications of our planning assumptions with our key strategic stakeholders. As a result, we are engaging further with the regional development agencies in our areas.

3. Do you have any comments on how we could manage issues around the volatility of raw material prices?

Number of responses: 17 (including 6 responses of 'no comment')

Eight responses suggested a purchasing approach that includes forward planning and mid or long-term price agreements. Two responses suggested reusing and recycling redundant equipment. There was also the view that a diversification of fuel sources would be helpful in dealing with the volatility of raw material prices.

A good proportion of responses expressed support for forward planning and mid/long-term price agreements. As EDF Energy is a core part of the EDF Group, it is expected that the influence of the whole EDF Group is used to maintain equipment prices at a reasonable level. Our stakeholders believe that EDF Energy has a justifiably better understanding of risk than consumers do. While this was acknowledged, feedback also expressed that EDF Energy should stick to its core business and leave commodity trading to others. Another comment was that, in current economic conditions, it is not appropriate for suppliers, contractors and network operators to simply pass-through price increases to consumers.

Our adjustments to our plans

In view of the fact that respondents were confident that EDF Energy has a better understanding of commodity price risk than consumers, we will continue to press Ofgem for a regulatory regime in which the DNOs are incentivised to manage the volatility of raw material prices in all but exceptional circumstances.

SECTION 5. PROVIDING A SAFE, SECURE AND EFFICIENT NETWORK

4. To what extent should we increase our investment to further protect your power supply?

Number of responses: 23 (including 4 responses of 'no comment')

Several responses emphasised the importance of replacing and developing the network in order to ensure security of supply and resilience, with two responses reinforcing the need for capacity headroom in Central London. Further comments refer to charging structure, cost models and cost transparency, regulatory aspects for investment, remote network monitoring and aspects specific to network condition.

Responses confirmed that there were concerns about maintaining networks to ensure security of supply and network resilience. Retaining current standards of service, despite predicted increase of use, was a priority. There were also references to investment being made at a level which would ensure that all equipment was replaced at the end of its useful life.

However, the responses do not 'quantify' what a desirable increase in investment should, or could be. One stakeholder asked what metrics would be used to quantify it and stated that future measurement is "key to demonstrate value for money". Another comment was that if there were measures of network risk that affected the overall availability of the network, it would be far easier to make a judgement on the need for increased levels of investment.

Our adjustments to our plans

We welcome the general support shown in the responses and at our regional workshops for our core investment programmes and do not propose to change the expected level of overall network performance, or our view of the main drivers (network condition, age and remaining economic useful life) of the proposed non-load related expenditure. We have also listened to stakeholders' feedback - including Ofgem's - and are proposing to introduce a series of network outcome measures. These measures will enable customers to have a better understanding of our investment plans. Our high-level proposed network performance management outcomes currently include:

- Quality of supply (customer interruptions and minutes lost)
- Quality of supply during exceptional events (such as storms)
- Quality of supply for the worst served customer groups
- Duration of short interruptions (less than 3 minutes)
- Asset health indices
- Weather related reliability risk
- Future proofing of network with enhanced capabilities.

5. To what extent do you think we should broaden our measures of quality of service to include additional customers, for example, our remote customers?

Number of responses: 17 (including 8 responses of 'no comment')

The majority of responses supported the need for improving the quality of service in general. Additional aspects mentioned were the need for a better complaints procedure, the view that customers in remote areas may 'have to accept' lower quality of service and the suggestion that utilities need to improve their co-ordination of street works.

Feedback indicated a strong interaction with the matters addressed in Ofgem's willingness to pay survey. Five responses were supportive of the need to improve the quality of service in remote areas, saying that they believed that quality of service should be consistent wherever a customer is connected.

However, not all of the respondents were in agreement. One response indicated that there was a general acknowledgement that customers in rural areas would not receive an identical level of service to, say, urban customers, but were 'willing' to accept this. Another response to this question, relating to complaint procedures, highlighted a need for improved focus and care around formal complaints.

Our adjustments to our plans

We broadly support the introduction of a targeted improvement for those customers who have a significantly worse than average continuation of supply and quality of service. We will continue to work with Ofgem to promote and agree targets for improving service to this group of customers. This will be developed with reference to the results of Ofgem's customer survey, as summarised on page 7, and we recognise that this should be achieved without undue cross-subsidy of rural network investment.

6. To what extent should we change our investment plans for fluid-filled cable (FFC) decommissioning?

Number of responses: 15 (including 7 responses of 'no comment')

Five respondents supported the decommissioning of FFC, and a number of further specific aspects were mentioned in responses to this question. One respondent indicated the advantages of FFC. The high level of 'no comment' may indicate that stakeholders are not familiar with the issues around this question. One response referred to a longer-term strategy to replace all of the FFC over a set period (e.g. 30 years), which would ultimately address the issue for good, remove an environmental risk and allow for an efficient planned strategy to be developed.

Our adjustments to our plans

In view of the feedback received, and the current environmental risk status of our FFC network, we are not planning to revise our FFC strategy or investment profile for DPCR5.

During DPCR4, we led an Electricity Networks Association working group which was tasked with developing a 'good practice guide' for the asset management of fluid filled cables for all network operators. We have improved our environmental mapping to be able to determine the proximity of cables with a poor leakage history to source protection zones; this has enabled a significant level of 'expenditure deferred with minimal or no increase in risk'. We have also developed (as part of an IFI project) a new leak detection technology, known as perfluorocarbon tracing (PFT), which has now been deployed. This has facilitated the prompt detection and repair of leakages, enabling us to constrain oil leakage volumes to levels which, at the time of our DPCR4 bid, we thought were only achievable by implementing a targeted replacement (or decommissioning) programme.

However, we must emphasise that while this is an effective asset management strategy, it is not a substitute for a longer-term prioritised decommissioning and replacement programme. We are, therefore, proposing that Ofgem should complete a fundamental review of this issue during the DPCR5 period and seek agreement to a long-term replacement strategy.

7. To what extent should we change our investment plans for the undergrounding of cables in Areas of Outstanding Natural Beauty (AONB)?

Number of responses: 16 (including 5 responses of 'no comment')

Half of the respondents supported the proposal for continued undergrounding. One response stated that this activity should not be carried out at the expense of asset replacement or other development needs. Another agreed with EDF Energy's approach to the undergrounding allowance and indicated that they would support the doubling of this, but explained that this increase would only

be worthwhile if EDF Energy had the resources in place to carry out that amount of projects in the 2010-2015 period.

However, not all responses were supportive, with comments like: "Why spend more on beauty and yet you force developers to reinforce existing networks that are not demonstrably required?" being an example. Another stakeholder pointed out that a case for increased funding should be developed and that, where local public consultation demonstrated a strong interest in improving amenity, the case should be developed and prioritised over other funding needs.

Our adjustments to our plans

We will continue to promote and support the AONB investment scheme. As a result of stakeholder feedback, and with the support of the Protected Area Steering Groups, we are proposing to increase the investment profile for DPCR5. However, Ofgem has already indicated that customers' willingness to pay is declining and that as a result customers expect a reduction in costs as volumes increase. This may not be the case for all proposed schemes, since Ofgem's current threshold is based on an average pound per km overhead line removed which does not take account of the length of cable laid or the number of ground-mounted substations required.

We have found that over the entire portfolio, which the Protected Areas have proposed and selected, 1km of overhead line removed requires nearly 1.2km of cable to be laid, and one ground-mounted substation to be installed. We intend to work with local stakeholders to identify suitable schemes for inclusion in DPCR5 and to form a view of the size of the increase, which could be accommodated within Ofgem's final revised cost caps.

8. Do you have any general comments on our proposals contained in Section 5? (See the summary below for a list of topics covered in this section)

Number of responses: 19 (including 5 responses of 'no comment')

The list of topics provided alongside this question is:

- EDF Energy Networks' asset base
- What we are doing to maintain the performance of our assets
- How regional development is reflected in our network plans
- How we propose to improve the resilience of our network against storms
- How we plan to improve network reliability and reduce customer interruptions
- How we are minimising the level of disruption to the public caused by working on our network
- How we are making it easier for customers to connect to our network
- How we are improving customer service
- How we are ensuring that the public is kept safe around our network
- What we are doing to minimise the impact of our plans on the environment
- How we have improved relationships with our contractors
- The pricing implications of our plans.

The responses reflected the variety of aspects covered in Section 5.

It was reiterated that one of the major challenges that EDF Energy faces in London is congestion below ground and that construction of deep level tunnels throughout London would continue to provide an effective solution for delivering 132kV cables between substations. It was suggested that Ofgem could enquire further about the likely impact on operational demands of proposals within DPCR5 and whether it is legitimate to factor how DNOs can deliver their safety responsibilities into these considerations.

A subset of responses expressed support for engagement activities or the desire for improved communication between EDF Energy and particular stakeholder groups (e.g. developers and contractors). It was pointed out that there is no forum to discuss proposed development plans at very early stages and that the need for capacity advice at this stage, in particular, is important.

Our adjustments to our plans

This question raised a wide range of diverse comments on EDF Energy's plans and we welcome this further opportunity to listen to customer and stakeholder feedback. We believe that continued consultation with stakeholders is a condition of success for an organisation and have built this further into our standard business planning process. We also recognise that a significant consultation exercise will raise questions about the scope and role of a DNO and will need to be reflected in our final agreement with Ofgem.

SECTION 6. PLANNING FOR UNCERTAINTY

9. We believe that increasing network resilience for High Impact Low Probability (HILP) events is a key issue that currently lies outside our current regulatory plans - to what extent should this be core to our DNO investment plans in future?

Number of responses: 19 (including 2 responses of 'no comment')

Eight responses endorsed the idea of making increasing network resilience for HILP events part of EDF Energy's DNO investment plans. These responses saw merit in making increasing network resilience for HILP events part of EDF Energy's DNO investment plans. One respondent pointed out that the regulator, as the perceived agency of Government, needs to decide policy that recognises a combination of preventative and reactive measures that have been properly risk assessed. Another point made was that increasing the level of network resilience in the City's network would

protect against HILP events, which is imperative in order to maintain electricity supply to the City's businesses.

Further responses highlighted the importance of risk assessment/prioritisation and a transparent cost benefit analysis. Some responses suggested priorities different from managing HILP.

Our adjustments to our plans

EDF Energy considers it a matter of national importance to ensure that the resilience of its networks serving key strategic areas, such as central business districts (CBDs), is sufficient to ensure a rapid restoration of supply, with minimal disruption to business activities in the event of a "high impact event". EDF Energy has identified two CBDs (London City and Westminster Mid-Town) which, in gross value added (GVA) terms, jointly contribute some £32bn annually to the British economy. In the (albeit improbable) event of a major disruption to electricity supplies affecting these two CBDs, it is estimated that the loss of GVA would be approximately £1.2bn for London City and £0.8bn for Westminster Mid-Town.

Stakeholders have shown strong support for improving the resilience of our network serving these two key CBDs against the consequences of a high impact low probability event. In line with our continued work with Government and the industry, EDF Energy will include, as part of its business plan submitted to Ofgem in February 2009, a detailed proposal to increase the resilience of these networks. The estimated cost of this work (at current price levels) is £70m for the City and £25m for Mid-Town Westminster. The investment would protect some £1.2bn of the potential £2.0bn loss of GVA referred to previously by ensuring that approximately 80 per cent of the CBD's electricity power requirements would be met within three days of the HILP event.

The proposed works are extensive, and installation timescales are subject to further feasibility studies, but we estimate that work would extend from 2010 until at least 2018 (for both the City and Mid-Town). The investment proposal is subject to reaching a satisfactory position with Ofgem in respect of an agreed investment funding mechanism. An important component of reaching such a position will be Government (DECC) and Ofgem reaching agreement on the justification of the investment and the means by which such investment would be recovered from stakeholders (including the important decision as to who should pay).

SECTION 7. PROTECTING THE FUTURE OF THE UK ECONOMY

10. What impact do you think the current arrangements for the provision of new electricity infrastructure is having on economic growth?

Number of online responses: 16 and 34 attendees to the Capacity Headroom workshop.

Nine responses supported the idea of changing the regulatory framework in order to allow investment in the network ahead of demand; such a change is considered to be fundamental to future economic growth. There were concerns that the regulatory framework could constrain future economic growth and the delivery of new housing as expected by Government. This is because the cost of providing new infrastructure in locations where capacity has been reached would appear to fall on the first developer in the area.

Another aspect mentioned was the current practice of how developments are financed - in particular, the burden of investment that is placed on developers. In addition, it was suggested that cooperation with relevant parties (e.g. developers and local authorities) should begin at an earlier planning stage.

Respondents expressed concern about their economic growth and consequently that of their sub-region, being constrained by lack of availability of power. There were also views that the current arrangements are acceptable and have little impact on economic growth.

Our adjustment to our plans

This question in EDF Energy's consultation provoked considerable engagement and is clearly the main issue for many of our stakeholders.

The current regulatory framework incentivises DNOs to fully utilise existing assets and only provide additional capacity where there is predictable load from existing customers, or evidence of user-commitment from new ones (such as payment of a connection charge). We understand that these arrangements do not support the provision of new capacity in order to facilitate connection and the associated economic growth.

We believe that it is possible to devise regulatory arrangements that facilitate the provision of network capacity ahead of need without creating an undue risk of asset stranding. Such arrangements would allow the DNOs to develop infrastructure before firm connection applications. We are already working with our economic advisors to work up detailed proposals to submit to Ofgem for their consideration as part of the DPCR5 process.

11. What changes to the charging methodology for new connections would you like to see?

Number of responses: 16 (including 2 responses of 'no comment')

Different views and preferences were expressed in response to this question. Three participants would like us to consider more flexible funding models. Transparent costing models were requested in five responses. Two responses expressed a preference for standard connection charges. There were also three responses saying that developers should not be charged prior to development and one response was opposed to ongoing reservation charges that developers have to pay. Four responses stated that EDF Energy's connections service needs to be improved.

There were five responses concerning transparency and equity, although the charging methodology was singled out as not being the easiest of documents to navigate as it is designed to cover all customers. Four responses complained about inefficiency in our connections service. One comment said that the cost of the new connection is borne by the developer - who pays in advance for the work - and that the poor level of service that its members have reported causes delays, financial losses and financial penalties.

Our adjustment to our plans

EDF Energy recognises the concerns raised by customers and stakeholders about the lack of apparent transparency and equity within the current connection charging methodology. This is, however, a necessary reflection of the current requirements to ensure that connection charges reflect the costs associated with the site-specific circumstances of the local network, rather than a generic cost. We have already provided feedback to Ofgem through the recent charging framework consultation and have asked our economic advisors to consider this issue as part of the capacity headroom review.

SECTION 8. BUILDING FOR A SUSTAINABLE FUTURE

12. To what extent should network operators be targeted to reduce their direct impact on the environment?

Number of responses: 13 (including 1 response of 'no comment')

Six participants believed that the DNOs should have a specific responsibility to encourage our customers to reduce their energy consumption. The point was made that DNOs must be targeted to reduce their direct impact on the environment and should additionally be targeted to encourage more efficient, or reduced, electricity use by their customers. There was also a concern logged around the apparent level of activity being devoted to sustainability issues - in particular, whether more could be done to assist the environment by embracing the use of sustainable methods of power generation. Another view that was expressed was that the reduction of environmental impact is good business practice, regardless of the industry or business activity in question.

Our adjustment to our plans

As part of our initial business plans to Ofgem, we have proposed a group of measures to quantify the impact our business is having on the environment.

- To reduce our street works landfill waste (70% by 2012)
- Taking action to cut CO2 emissions from our offices and depots (30% by 2012)
- To reduce CO2 emissions from transport (20% by 2012).

We are also proposing that these should be benchmarked against all DNOs' performance and are working with Ofgem on the best means to achieve this.

13. To what extent should network operators be given incentives to address the skills gap and to build a sustainable industry?

Number of responses: 15 (including 1 response of 'no comment')

Eight respondents said that more investment is needed to address the skills gap. Two responses supported incentives for DNOs to deal with this issue. Three respondents did not think that incentives were appropriate. Further aspects mentioned were the concern about the ethics of recruiting staff from abroad and the concern about the loss of skills within EDF Energy due to continued restructuring.

It was also clear from feedback that we need to place particular emphasis on the need to invest in the company's people assets, and that the training and development costs of a DNO and its contractors should be ring-fenced and not subject to the fluctuation of work. This would enable long-term investment to be targeted at the areas of need without concern for budgetary cuts.

Three participants did not think that incentives were appropriate and it was the express opinion of one stakeholder that it was unclear why an incentive should be required to address the skills gap. "If a business does not have adequate skills, its capacity to operate and make money will be affected which should be a sufficient enough incentive alone".

Our adjustment to our plans

We agree strongly with stakeholders' comments that there is a need for further investment in skills. In our initial draft business plan, we had already included a significant increase in our investment in skills and people. In recognition of the long lead times in implementing a skills and people strategy, EDF Energy has already started its implementation. We have also worked further with our key strategic contractors in order to better understand their requirements. We are refining the analysis of the required skills and people investment for the final business plan submission to Ofgem,

but do not expect to propose any fundamental variation. We recognise stakeholders' concerns about DNOs receiving enhanced incentives to invest in skills, training and people and we would not expect to receive any incentive beyond a fair recognition of any additional costs to either EDF Energy or its contractors.

SECTION 9. PROVIDING GOOD VALUE FOR MONEY

14. Do you have any general comments on this section?

Number of responses: 13

Four participants expressed concern about the quality of EDF Energy's customer service. Further issues raised were the transparency and fairness of connection costs, EDF Energy's capacity to deliver connections and network diversions. There was also a response favouring the market entry of more independent distribution network operators (IDNOs), a response supporting our move to long-term framework contracts, and a suggestion to work closely with sub-contractors.

Three of the responses to this question referred to clarity over costs and return. There was also a request to encourage further competition.

Our adjustment to our plans

We are also including improvements to our customer connections business and we are further revising these with the following additional changes:

- Numerous business interfaces – we are completing a full review of our business process based on customer experience
- Escalation route – in Unmetered Connections our customers have contact details for the managers and senior managers responsible. In small services, each quotation folder has the contact details for the Customer Care Manager. In the project arena, the biggest 300 customers have an EDF Energy Networks account manager who should provide an escalation route. However, we recognise that this is an issue for smaller and occasional project customers and we are looking at how we can include an escalation point in the quotation letters sent to customers
- Comparison with market rates and costs – EDF Energy is committed to providing a quality service at the least cost. EDF Energy has commissioned an independent comparison with other DNO small service and UMC connections prices. This showed, in some cases, our prices were lower than all other DNOs, and generally, we were in the middle of the range of prices for each service
- Customer satisfaction – EDF Energy has a strong commitment towards customer service and we track complaint volumes and root causes through an independent research agency survey of customer satisfaction of project, small service and UMC customers. Currently 63 per cent of Connections customers are satisfied with the service and value that they receive. We are working to understand better the reasons for customer dissatisfaction and are continually improving the information that we provide to customers.

SECTION 10. INVESTING FOR THE FUTURE

15. To what extent should the current funding arrangements for research into new technologies be extended to their deployment?

Number of responses: 12 (including 1 response of 'no comment')

Five responses endorsed the idea of extending funding to pilot deployment. Another four responses supported funding for research in general. Further responses suggested sharing the risk of research funding between Government, research and development organisations and DNOs, re-introducing a central overarching research facility and investing in smart metering respectively. One response stated that piloting is already possible under current arrangements and that deployment, as such, should not be considered as part of research.

Responses also endorsed the idea of extending funding to initial test deployments. This question also returned suggestions for the sharing of research (and costs) across the energy sector. Four other responses supported funding for research in general.

Our adjustment to our plans

We have gained broad support for our approach to investing in the future as included in our draft plans and we are proposing to include them as part of our core plan for DPCR5. We are actively promoting to Ofgem the idea of increasing the boundary of the scheme to include deployment and we recognise that stakeholders need to share technologies across the industry.

5. WHAT ARE THE NEXT STEPS?

The publication of this report does not imply the end of the stakeholder engagement process for the final DPCR5 settlement. We have already signalled a strong desire to Ofgem to incorporate this enhanced consultation into business as usual.

We will submit our final plan in February 2009, taking into account the results of the stakeholder feedback findings, revised economic circumstances, changes to our business strategy and optimisation of plans for deliverability.

During the first half of 2009, Ofgem will review our plans and provide feedback, in an initial proposal document, in July 2009. We would then expect the final proposals to be published at the end of December 2009.

If you have any questions regarding this document or future engagement, please contact Keith Hutton (Keith.Hutton@edfenergy.com), Head of DPCR, EDF Energy Networks.