



RIIO-ED1 Business Plan Assurance Report

June 2013

SSEPD

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SSEPD

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1 Introduction

SSEPD has appointed Mott MacDonald to review and provide a high level technical assessment of its RIIO ED1 Business Plan (BP).

Under the new RIIO model of price control, DNOs are required to submit 'well justified' plans which set out the level of service they will deliver over the eight year period 2015-2023, how it will be delivered and how much it will cost. The Business Plans are due for submission to Ofgem on 1st July 2013.

Following an initial assessment, DNOs whose plans Ofgem considers to be well justified will be fast-tracked i.e. their allowed revenues for the period will be settled without significant further scrutiny. The plans of the companies which are not fast-tracked will be subject to more rigorous examination and analysis by Ofgem.

1.1 Fast-Track Criteria

In March 2013, Ofgem's Strategy Decision documents set out five key criteria that DNOs' Business Plans must meet in order to be fast-tracked:

1. Process: Has the DNO followed a robust process?
2. Outputs: Does the plan deliver the required outputs?
3. Resources (efficient expenditure): Are the costs of delivering the outputs efficient?
4. Resources (efficient financing): Are the proposed financing arrangements efficient?
5. Uncertainty & risk: How well does the plan deal with uncertainty and risk?

For each of these criteria, Ofgem also outlined a series of questions to be used during their assessment for determining compliance with the criteria.

Our review broadly assesses the extent to which SSEPD's Business Plan answers these questions and addresses the Ofgem criteria, but we have also been concerned to establish whether SSEPD's Business Plans represent good practice, based on our international experience.

1.2 Business Plan Papers

The focus of our review has been the 'Output Papers' which form the core of SSEPD's Business Plan. We have also reviewed papers on:

- Expenditure, Uncertainty & Risk and Innovation – which underpin the core Outputs; and
- Stakeholder Engagement and Electricity Distribution Networks: now and in the future – which set the context of the Business Plan.

Our review was based on a set of draft output papers as they were nearing final completion, supplemented by discussion with the papers' authors during development of the documents.

We have not reviewed the extensive suite of Justification or Scheme Papers which provide the detailed analysis to support the Output Papers. We have not seen the data tables and the associated commentary, or the financial model.

2 Business Planning Process

Ofgem Criteria: Has the DNO followed a robust process?

- Does the business plan provide a strategy for long-term delivery?
- Has the DNO engaged with stakeholders, and explained how this has influenced its business plan?
- Is the business plan clearly presented, with all key content included?
- Has the DNO submitted, and justified, all data tables and the PCFM?

2.1 Strategic Direction

In Technical Appendix 01 'About electricity distribution Networks: now and in the future', SSEPD has presented a review of developments in the policy, legislative and technological environment in which the two networks operate in order to assess the implications for the business during the period of the price control and beyond.

SSEPD's assumptions about the state of the Economy; the direction and impact of Government policy; the development and uptake of low carbon technology; and new consumer and renewable generation connections, combine to produce a forecast for low demand growth over the ED1 period, requiring broadly similar levels of investment as now, with some additional expenditure at the higher voltage levels required to deal with the connection of wind generation in Scotland and solar photovoltaic connections in the Southern area.

SSEPD recognises that the DNOs' operating environment could change during the ED1 period and hence the Business Plan must remain sufficiently flexible to adapt to changing circumstances. Mechanisms for dealing with uncertainty are proposed by SSEPD (considered in section 5 of this report), but a key theme throughout the Plan is the importance of being able to find innovative solutions to network challenges.

We agree that the industry's previously enthusiastic view of growth has been dampened by the current economic climate and much of the anticipated 'green' activity, in relation to electric vehicles in particular, has effectively been delayed beyond 2020. Hence we consider SSEPD's relatively cautious view of growth, combined with a commitment to innovation and the proposed uncertainty mechanisms to be a reasonable basis for planning activities during ED1.

The Business Plan is designed to meet the anticipated needs of stakeholders over the next 10 years rather than into ED2. SSEPD recognises that more significant change is likely in the ED2 period, but we support the view that it is difficult to justify spending money now when the post-2023 landscape is so uncertain, both in terms of the demands on the distribution networks and the technology available for dealing with them. SSEPD's suggestion to review the ED2 requirements at the ED1 mid point seems reasonable.

2.2 Stakeholder Engagement

Stakeholder engagement is a key principle of Ofgem's RIIO strategy. Ofgem believes that stakeholders' interests should shape the future plans of the DNOs and that a good Business Plan should demonstrate how this has been achieved.

Ofgem's 'Business Plan and Proportionate Treatment' paper explains what Ofgem expects to see in the Business Plan, which we have distilled into four 'requirements':

- (i) explaining how stakeholders have been engaged – the stakeholder engagement activities;
- (ii) demonstrating that engagement has been (a) effective; and (b) across a wide range of stakeholders. We take this to mean that SSEPD must demonstrate that it understands who its stakeholders are and has used appropriate means to contact and engage with them;
- (iii) explaining what has been learned from the engagement process; and
- (iv) demonstrating how this has been reflected in the business plan.

Over the eighteen months leading up to Business Plan submission, SSEPD has undertaken a range of activities specifically designed to engage with and capture the views of various stakeholders in order to inform the Business Planning process. The Business Plan documents reflect this programme in several ways:

- a) the 'Report on Stakeholder Engagement' includes a description of the approach taken to engaging stakeholders, the activities undertaken, the messages received and the issues raised, particularly in relation to key questions on interruptions, environmental impact and customer service. There are cross references and links to records of all activities – the questions asked, responses received and a log of what has been done as a result – to which stakeholders have access via the website;
- b) there is evidence that responses from the first phase of consultation were used to develop options and refine questions in an iterative learning process as the Business Plan was developed;
- c) each of the core Output Papers identifies the key messages received from stakeholders that are of relevance to that area of the business and indicates how those messages have influenced the service delivery decisions for the ED1 period;
- d) as a result of the feedback from consumers, SSEPD has developed 'Top Twelve Commitments', directly translating the common concerns raised by customers into service delivery pledges.

We are of the view that the effectiveness of SSEPD's stakeholder engagement programme has improved during the ED1 Business Planning process, and that the ED1 consultations have successfully identified issues of significance to customers. Clear themes have emerged and are reflected throughout the

Business Plan, recognising that the messages from stakeholders have not always been consistent between the Scottish and the southern regions. It is noteworthy that SSEPD is also committed to telling stakeholders what has been done in response to their participation in consultation activities.

2.3 Business Plan Preparation and Governance

SSEPD put together a dedicated project team to coordinate the preparation of the Business Plan. However responsibility for the Plans themselves sat with the relevant departmental managers, which we consider essential to ensure that the business stakeholders both influenced and took ownership of the operational and financial proposals.

Functional expertise was provided by a series of internal Working Groups mirroring the industry work streams.

Corporate direction, regular scrutiny and senior management support was provided by a Strategy Group and ultimately a Project Board, comprising the most senior management representatives. The final Business Plan was approved by the SSEPD Board.

Given the importance of this Business Plan, we consider that the SSEPD project structure reflected an appropriate balance between dedicated project management governance arrangements and the involvement of and ownership by the businesses responsible for its delivery.

2.4 Business Plan Presentation

We have not reviewed the full content of the SSEPD Business Plan but in terms of its structure and constituent elements it appears to correspond to the structure of the Business Plan prescribed by Ofgem in the Strategy Decision document.

We have not checked the inclusion of justified data tables or PCFM.

3 Outputs and Delivery

Ofgem Criteria: Does the plan deliver the required outputs?

- Has the business plan covered the outputs specified in our strategy decision or provided clear and compelling justification for any departures from the strategy decision?
- Has the DNO explained the resource implications for delivery of each output identified?
- Has the DNO explained how it will deliver outputs, and justified output baseline/forecast?
- Has the DNO explained the quality of its existing outputs and secondary deliverable information (including information on asset health, criticality and asset risk) and how it plans to improve this information in future?

3.1 General Overview

SSEPD's Business Plan addresses all of Ofgem's outputs. There is a core paper on each output area, with proportionate emphasis on plans for 'Reliability and Availability', given that this area accounts for the large majority of expenditure.

Each Output Paper outlines what SSEPD will deliver and why, how the outputs will be delivered, together with the resource and cost implications. Proposals are linked to stakeholder feedback and plans are justified by reference to existing and planned measures of performance (e.g. asset health indices, CMLs/CIs, customer complaints).

Overall we consider SSEPD's Business Plan to be credible and consistent with stated strategy and stakeholder feedback. We consider that the increases in output volumes can be delivered with the specified resources.

3.2 Reliability and Availability

3.2.1 Reliability overview

Ofgem's customer research indicates that reliability of supply remains the most important output category for electricity customers. This view is supported by customer responses from SSEPD's stakeholder consultations.

SSEPD's plans for managing the reliability of the network are presented in Technical Appendix "A Reliable Supply of Electricity". We consider this output paper to be very thorough and comprehensive in presenting SSEPD's proposed investment and the justification behind that investment..

In terms of reliability outputs, the following measures are used by Ofgem:

- - Interruptions Incentive Scheme
- - Guaranteed standards of performance
- - Worst served customers
- - Health indices and load indices
- - Network resilience

To achieve these measurable performance outputs requires investment in the network to maintain the assets in an acceptable condition, such that supplies to customers are maintained at acceptable levels and increased network loads can be accommodated in the areas required.

The investment required includes replacement and maintenance of existing assets and reinforcement of the network in response to increasing levels of load. Traditionally these have been the main categories of capital expenditure and operational expenditure in DNO regulatory business plans.

Our commentary on Reliability is based on a review of the output paper and discussions with SSEPD engineers responsible for the planning of the associated projects and programmes for network investment.

3.2.2 What are SSEPD's plans?

3.2.2.1 Load related expenditure

We consider the section dealing with load related reinforcement to be particularly well structured in its explanation of the issues faced by SSEPD for the RIIO-ED1 period.

We note that volumes and costs are broadly similar to DPCR5 at lower voltage levels. This reflects the relatively low levels of load growth being experienced across the UK in general during the present economic downturn. However at higher voltage levels there is a significant increase due to wind generation and associated distribution reinforcement and transmission integration in SSEPD and for connection of more solar photovoltaic generation by SSEPD.

The reasons behind the reinforcement schemes seem sensible in our view, and are typical of the reinforcement requirements across the industry. We have not reviewed Justification and supporting papers behind individual reinforcement schemes, but we understand examples of these have been reviewed by others as part of SSEPD's overall assurance process.

There are no alternative solutions presented for the load related investment plans. However we understand the programme involves a large number of relatively low value schemes at 33kV and below and that alternative solutions will be considered on an individual scheme basis when the projects are being developed. We therefore do not consider it appropriate for alternative schemes to be presented in this paper or in the associated supporting papers.

3.2.2.2 Non-load related expenditure

Non-load related expenditure is covered in SSEPD's section on Network Condition, which like the section on load related reinforcement, is well written and presented.

The non-load related expenditure is the highest cost section of this area of the Business Plan, and is mainly covering replacement and refurbishment of aging assets, before they reach a condition where network performance becomes a problem. The high level of investment in this area is typical across the industry, where there was a large expansion in the 1960s and large amounts of equipment is now reaching the end of its expected 40year life.

To help keep costs efficient, we note that SSEPD is making widespread use of equipment refurbishment programmes, where appropriate, rather than heavily relying on replacement strategies.

During the assurance process, we had the opportunity to discuss several of the main capital investment plans with the engineers responsible for developing the plans and associated Justification Papers. We note that the SSEPD engineers were very knowledgeable about the issues being faced, the justification for the investment and they were very aware of how the plans aligned with stakeholder requirements.

We understand that SSEPD's asset management plans and detailed Justification Papers have been reviewed by another external advisor as part of the overall assurance process. The advisor also undertook a selection of site visits and was of the opinion that SSEPD was managing its assets very well and adopting a best practice approach to replacement, refurbishment and maintenance.

3.2.3 Does the plan meet Ofgem's requirements?

We have reviewed SSEPD's Reliability output paper in terms of compliance with Ofgem's Business Plan Guidance, Assessment Criteria, and Reliability and Safety chapter summary contained in the Ofgem Strategy Decision for RIIO-ED1 documents.

Is the business plan clearly presented with all key content included?

The document appears to comply with the requirements in Appendix 2 of the "Business plans and proportionate treatment" document, and with Chapter 4 of that dealing with "Outputs, incentives and innovation". We consider the document to be clearly written and well aligned with Ofgem's requirements.

The paper provides a comprehensive summary of the relevant aspects of reliability, and contains references/links to supporting papers. The final versions of these supporting papers were not available for review and consequently, it has not been possible to confirm the level of justification that is available to support the statements made in the Outputs Paper. However, as previously mentioned, these Justification Papers have been independently reviewed by others.

The paper identifies that SSEPD has not yet been able to incorporate the proposed changes to asset criticality into the calculation of Health Indices, but indicates that this will be addressed “in the lead up to ED1”.

There are general references to Health Index, and to the profile remaining unchanged, the individual sections are silent on this aspect. The Ofgem guidance expects a well justified plan to include HI information for the beginning of the period, and for the middle and end of the period with and without intervention. We understand this has been completed by SSEPD, but is in a separate submission document that we have not reviewed.

There is no quantitative information on Load Index profiles, although we understand these are presented elsewhere in SSEPD’s submission to Ofgem.

Has the DNO engaged with stakeholders, and explained how this has influenced its business plan?

Throughout the Reliability paper there is frequent reference to stakeholder engagement and stakeholders’ views and to how these relate to SSEPD’s proposed strategies. These views are summarised on page 12, which refers to “engaging with stakeholders individually and at group events”. In addition, from discussions with SSEPD during the assurance process, it is clear that the stakeholder engagement process has been used in the development of the Reliability aspects of the business plan.

Does the business plan provide a strategy for long-term delivery?

The output paper comprehensively summarises SSEPD’s strategy for ED1. The paper makes reference to reinforcement investment associated with low carbon, specifically for Distributed Generation in both SHEPD and SEPD, and identifies the opportunities for the future integration of Smart Metering.

The paper notes that there are uncertainties around economic growth and the impact of DG and other low carbon technologies and identifies that these will be monitored to allow plans to be changed accordingly.

SSEPD’s view is that overall volumes of work are similar to DPCR5 although there are a number of areas where there will be a significant increase in workload including load related reinforcement at higher voltages, generation connection for both windfarms and PV, battery replacement for black start, and Major Diversions in SHEPD.

We would support SSEPD’s view that these areas requiring additional expenditure could be implemented using similar resourcing and delivery skills in terms of engineering and contracting as for much of the existing DPCR5 expenditure.

Mention is made of how network investment will evolve into the RIIO ED2 period and beyond but, understandably, discussion on ED2 investment is very brief, while recognising that there is likely to be significant growth in low carbon technologies that will impact on network investment. We would support SSEPD’s view that the longer 8 year regulatory period under RIIO makes it more difficult to accurately

predict the likely levels of investment in RIIO ED2, and forecasts for RIIO-ED2 will be more meaningful at mid-term review stage in ED1.

[Has the business plan covered the outputs specified in our strategy decision or provided clear and compelling justification for any departures from the strategy decision?](#)

The Reliability Output Paper appears to cover all of the outputs and deliverables required in the Strategy Decision.

[Has the DNO explained the resource implications for delivery of each output identified?](#)

SSEPD's Reliability paper contains a statement that they are confident that their proposals as set out in the Business Plan are realistic and achievable. This is based on the overall annual volumes of work proposed for the RIIO-ED1 period being broadly similar to the existing DPCR5 price control and SSEPD already having sufficient internal and contracting resources and necessary skills available to complete these programmes of works.

[Has the DNO explained how it will deliver outputs, and justified output baseline/forecast?](#)

For each of the categories within reliability, the Reliability Output Paper identifies its targets and relates these both to stakeholder feedback and existing performance. Costs are identified at high level, with the detailed costs elsewhere in the Business Plan submission.

[Has the DNO explained the quality of its existing outputs and secondary deliverable information \(including information on asset health, criticality and asset risk\) and how it plans to improve this information in future?](#)

The Reliability Output Paper contains comprehensive summary information derived from the fault reporting system, which will have been subject to audit by Ofgem.

The paper does not contain quantitative information on Health and Load Indices but this is included elsewhere in the Business Plan submission.

[Has the DNO demonstrated that cost projections are efficient?](#)

The Output Paper identifies that alternative options were considered in developing SSEPD's strategy and that refurbishment and Opex solutions are considered as part of this process. We observed that Cost Benefit Analysis is used both in developing particular solutions and in optimising the portfolio of investment.

Reference is made to SSEPD having delivered the required outputs, at less cost with an improved network performance, in this, and over the previous two price controls. Reference is also made to SSEPD's favourable position in Ofgem's comparison of DNO's relative network expenditure costs.

We are therefore of the opinion that SSEPD's cost projections remain efficient.

How does the plan compare with others/does it reflect best-practice?

SSEPD engaged another experienced external advisor (energypeople) to review their asset management plans and the advisor was of the opinion that SSEPD's asset management plans reflect best practice.

Has the DNO demonstrated a consideration of alternative approaches to achieving value for money in the delivery of its outputs?

There is a clear theme of innovation running throughout this paper. Where appropriate, SSEPD has opted for innovative solutions where they offer better value than conventional reinforcement solutions. In particular, reference is made to using techniques developed in Orkney Regional Power Zone, the NINES project in Shetland and Greenway Park in Slough.

A number of innovative techniques are identified including applications to support fault management, system automation, fault location, overhead line construction and cable laying.

SSEPD has also used cost benefit analysis to support the decisions taken on the asset replacement programmes – particularly to demonstrate the cost effectiveness of refurbishment programmes in comparison to alternative asset replacement schemes.

Has the DNO clearly articulated the key uncertainties it faces and how it will address them (e.g. including uncertainty mechanisms)?

This paper provides a discussion of the key risks and uncertainties for each category of expenditure and outlines the strategy for managing them. The identified risks link through for further discussion and explanation in the Risks and Uncertainties section of the Business Plan submission.

3.2.4 Reliability Conclusion

We consider that the Reliability Outputs paper is very thorough and comprehensive and addresses Ofgem's requirements.

3.3 Health and Safety (H&S)

According to the Ofgem documents, the Primary Output in relation to H&S is that of regulatory compliance, designed to support rather than duplicate the regulatory framework already in place and enforced by the Health and Safety Executive (HSE)¹. No financial incentive has been introduced for this element of the Business Plan. DNOs must comply with all relevant H&S legislation. The relevant legislative requirements are recognised and reflected in the SSEPD Business Plan.

¹ Secondary deliverables are more focused on safety performance embedded within asset health, criticality and composite risk indices, the measures for which are covered in the Reliability paper.

SSEPD's Plans in relation to the primary outputs for Health and Safety are presented in Technical Appendix: 'Health and Safety' and focuses on two key areas over the RIIO-ED1 period:

- Keeping Customers and Public Safe; and
- Ensuring Staff and Contractors Work Safely.

3.3.1 Keeping Customers and Public Safe

Three key areas have been identified for focussed resource:

- **Risks around Equipment** – which are being addressed by a combination of education and awareness as well as investment in: increasing the height of overhead lines (OHLS) (in accordance with ESQCR 2002); using innovative ideas to inform the agricultural community better about the dangers; and undergrounding power lines using a risk based approach.
- **Planned Roll Out of Smart Meters**. The installation of smart meters will be the responsibility of electricity suppliers and their agents, but the Business Plan clearly sets out the risks associated with these works and the approach that will be taken to support the suppliers to mitigate these risks.
- **Theft of Copper**. The Business Plan commits to investment across 600 sites, estimated at £21million, to increase the security of substations.

Although investment costs have been included in the H&S Business Plan for the above issues, safety is considered integral to operations and these costs are therefore included as the 'business as usual' costs.

3.3.2 Ensuring Staff and Contractors Work Safely

The SSEPD approach to ensuring the safety of staff and contractors has two strands as follow:

- The '**Safety Family**' ethos focuses on safety, health and environmental (SHE) behaviours and encourages staff to consider their own behaviours and how they can influence the behaviours of others. Communication is key and an effective Communications Plan is to be maintained. Contractors are required to sign the SHE Charter and to follow best practice from within their own behavioural safety schemes and the 'Safety Family'. A contractor safety roll out programme is planned for 2013.
- **Safety Management System (SMS)** that is robust, flexible and underpins business strategy. The SMS is underpinned by a Risk Management Standard that considers People; Environment; Asset; and Reputation (PEAR). The core policy of the SMS covers four main sections: People; Process; Plant; and Performance. As it stands the SMS already demonstrates effectiveness by way of SSEPD's performance however notwithstanding this SSEPD commits to continuously reviewing and updating the SMS using a risk based approach and can be considered best practice.

Costs associated with the 'Safety Family' initiatives and the SMS are considered integral to operations and these costs are therefore included as the 'business as usual' costs.

3.3.3 H&S Conclusion

We consider that in general the H&S Business Plan aligns with the criteria set out by Ofgem for the RIIO-ED1.

3.4 Customer Service

Ofgem's incentive framework for customer satisfaction is designed to encourage DNOs to:

- Provide customers with a good quality service;
- Deal with complaints quickly and effectively; and
- Engage with a wide range of stakeholders in order to understand their service requirements.

SSEPD's plans to meet these objectives are contained primarily in the Output Paper 'Technical Appendix 05: Listening to our customers and providing the service they want', which:

- Presents feedback from customers about their engagement and service requirements and in response establishes six principles of customer service to be applied to all activities;
- Makes a series of Commitments in relation to levels of service and engagement that customers will be able to expect that reflect the principles identified; and
- Sets out an approach to continuously capturing customers' views.

While this Output Paper is the main source of discussion about customer service, there is also evidence presented in other Output Papers (e.g. Reliability and Availability) that customers' views have been taken into consideration in developing plans and that there is a focus on improving the quality and reliability of the service delivered to customers.

It is noteworthy that of SSEPD's 'Twelve Commitments', five relate to improving customer service and another to seeking customer views, which suggests customer service is recognised as a business priority. Evidence from stakeholder consultations is presented to justify these Commitments, and whilst we cannot tell whether the evidence is representative of the SSEPD customer base as a whole, consistent messages appear to have been received from a range of different stakeholder engagement activities. In the Stakeholder Engagement report, SSEPD describes how questions were refined and options developed for subsequent consultation throughout the lead up to Business Plan submission.

The Business Plan identifies some new or enhanced levels of customer service activity, which we consider to be consistent with Ofgem's objectives and SSEPD's customer service Commitments, such as improved field/customer service staff communication, enhanced customer service training for field operatives, development of the telephony systems, website and other communications tools, and one-stop-shop complaint handling. It appears that some of these activities will commence ahead of 2015, but there will be resource implications into the ED1 period.

SSEPD has identified additional resource requirements to deliver the increased activity in the Customer Service area, including increased numbers of people in the customer contact centre team, call assessors and training team, stakeholder engagement team and performance management team, as well as the development of telephony and IT systems, which we consider to be consistent with the level of increased activity.

Consequently, Customer Service is an area of the business in which SSEPD is proposing an increase in expenditure for the ED1 period. We have not reviewed the proposal in detail but would expect an increase in costs given the enhanced levels of service proposed and the tighter performance standards to be achieved.

3.5 Environment

Ofgem's environmental criteria set out in the strategy decision documentation for RIIO-ED1 are focussed on:

- A requirement to report annually on the business carbon footprint (BCF) with reputational incentives by way of published league tables;
- Licence obligations to reduce electrical losses; and
- Undergrounding of power lines in designated areas.

The environmental outputs to meet the RIIO criteria include both 'narrow' and 'broad' environmental impacts:

- Narrow environmental impacts - electricity losses on the distribution network; Electricity theft; Business Carbon Footprint (BCF); Sulphur hexafluoride (SF6); Fluid filled cables (FFC); and Noise reduction.
- Broad environmental impacts - undergrounding in Areas of Outstanding Natural Beauty (AONB) and National Parks (NPs); and environmental discretionary reward.

SSEPD's proposals for managing environmental impacts are presented in the Technical Appendix: 'Managing our Environmental Impact'. It has been prepared in cognisance of the Ofgem assessment criteria and has been drafted with a focus on five key parameters:

- Business Activities
- Oil, including fluid-filled cables
- Electrical losses
- Visual amenity
- Standby generation on Scottish Islands

Although the Business Plan is not prescriptively structured around the 'narrow' and 'broad' environmental impact areas detailed in the Ofgem Strategy Decision document², we consider that the five key parameters included in the Business Plan appropriately address the criteria required. More specifically:

² Decision Outputs, incentives and innovation Annex (Ref. 26a/13).

- In relation to electrical losses we consider the commitments contained in the Environmental Business Plan (such as use of low loss equipment and technologies and optimal network configuration; work with customers to reduce energy consumption) align with the Ofgem criteria and will support delivery of the objectives therein;
- BCF reduction plans are aligned with the Ofgem criteria and the proactive approach (including targets) put forward for reducing BCF will support the objectives of Ofgem in setting appropriate baselines for reduction of DNOs BCF.
- The annual reporting requirements for fluid filled cables and noise reduction have been recorded in the Environmental Business Plan.
- We consider that the approach to undergrounding and the methodology proposed for prioritising undergrounding projects in ANOBs, National Parks and NSAs fulfils the criteria set out by Ofgem.

Overall we consider that SSEPD has aligned the Environmental Business Plan with the criteria set out in the Ofgem strategy decision and has engaged appropriately with stakeholders and incorporated their views into their thinking.

3.6 Connections

3.6.1 Connections overview

Ofgem's requirements for Connections are based around a series of incentives and measures:

- Customer satisfaction survey (for minor connections customers)
- Time to Connect incentive (for minor connections customers)
- An Incentive on Connections Engagement (ICE) (for major connections customers)
- Guaranteed Standards of Performance

SSEPD's proposals for Connections are presented in the Output Paper entitled Technical Appendix "Getting Connected to our Network". Our assurance review considers its compliance with Ofgem's Business Plan Guidance, Assessment Criteria, and Connections chapter summary contained in the Ofgem Strategy Decision for RIIO-ED1 documents.

SSEPD's Business Plan makes a number of commitments to their connections customers and the plans have been prepared around how SSEPD intends to deliver the expected level of service to all of their connections customers. These commitments and plans are structured around providing a good level of service to all connections customers and are aligned with Ofgem's incentives and measures for connections performance. The plans also consider how SSEPD will facilitate the uptake of Low Carbon Technologies and connection of increasing levels of renewable generation.

SSEPD's document is well written and appears to comply with the requirements in Appendix 2 of the "Business plans and proportionate treatment" document, and with Chapter 8 of that dealing with "Outputs, incentives and innovation"

In particular, it comprehensively summarises SSEPD's approach to Improving Connections Engagement (ICE) for major customers.

3.6.2 Review against Ofgem Criteria

In this section we have summarised our review of SSEPD's connections paper against each of Ofgem's assessment criteria.

Is the business plan clearly presented with all key content included?

The Connections Output paper is logically presented and contains links to all relevant supporting documents although these have not been available for review.

It is written in accessible language, and provides good explanations of the connections process.

Has the DNO engaged with stakeholders, and explained how this has influenced its business plan?

Throughout this paper there is detailed reference to SSEPD's engagement with stakeholders and the strategies are clearly designed to address the issues identified by the stakeholders.

Does the business plan provide a strategy for long-term delivery?

The Connections Output Paper discusses the impact of Low Carbon Technologies and Smart Metering and summarises SSEPD's evaluation of the DECC scenarios for Low Carbon. The paper indicates that resources can be scaled up or down should the need arise.

The impact of Large Scale Embedded Renewable Generation is also reviewed, and this, together with LCT and Smart Meters are supported by further documents (although these supporting documents were not available for review).

In considering these issues the Connections paper focuses on ED1. We understand SSEPD's view is that they cannot justify spending on networks now for what might come along in 10 years time. . We would support SSEPD's view that with a long 8 year price control period under RIIO, it will be more appropriate to review longer term proposals into RIIO-ED2 at the mid-point review on ED1, when there will be more certainty over the uptake of low carbon technologies.

Has the business plan covered the outputs specified in our strategy decision or provided clear and compelling justification for any departures from the strategy decision?

The Connections paper appears to include all of the outputs and deliverables required for Connections in the Strategy Decision.

Has the DNO explained the resource implications for delivery of each output identified?

The Connections output paper identifies a number of resource implications, including doubling customer service staff dealing with connections, expanding engineering teams, extending mobile work practices, and expanding the major connections contracts team.

There is a general reference to the plan being scaled up or down should the need arise, and these issues have been considered fully in the paper on Uncertainty and Risk, where the effect of various volume drivers for load related works is discussed in more depth.

The paper makes reference to benchmarking to demonstrate efficiency, reference is made to the separate paper on Efficiency.

Has the DNO explained how it will deliver outputs, and justified output baseline/forecast?

The Connections Output Paper identifies targets that are clearly derived from SSEPD's engagement with stakeholders and addresses Low Carbon Technologies and Smart Metering.

Has the DNO explained the quality of its existing outputs and secondary deliverable information (including information on asset health, criticality and asset risk) and how it plans to improve this information in future?

Whilst this assessment criterion is more appropriate for asset information, the Connections paper has identified a number of areas where improved information will be used in ED1.

These include improvements to the web site, provision of heat maps showing networks with little or no spare capacity, use of Smart Meter information and Active Network Management.

These are all examples of how information and its use is being reviewed and improved.

Has the DNO demonstrated a consideration of alternative approaches to achieving value for money in the delivery of its outputs?

There are a number of examples of innovation that are identified in this paper, especially on Low Carbon Technologies. Links are provided to the associated output paper on Innovation, where these innovative approaches to managing connections activity are explained more fully.

Has the DNO clearly linked its expenditure to relevant outputs and secondary deliverables?

There are tables in this paper which we consider clearly identify proposed outputs and their associated costs.

Has the DNO clearly articulated the key uncertainties it faces and how it will address them (e.g. including uncertainty mechanisms)?

The Connections Output paper summarises risks and their mitigation for both major and minor connections and contains a link to the supporting paper dealing with Risks and Uncertainties where they are explained more fully.

3.7 Social Responsibility

The DNOs play a key role in the delivery of an essential service to all consumers. Ofgem sees the potential in this position for DNOs to undertake a greater role within the communities they serve, and in particular to help identify and support the most vulnerable customers within those communities.

Ofgem recognises that such a role will require a “major cultural and behavioural shift”

SSEPD’s strategy for increasing its role in social society is outlined in ‘Technical Appendix 08: Behaving responsibly: Our social obligations’ and to some extent in the Customer Service Output Paper. SSEPD identifies three themes to its strategy, which build on the local bias of its operations and long standing relationships within communities:

- **Community Energy Needs** – supporting community-led energy initiatives, including renewables and energy efficiency;
- **Strengthening Communities** – investing in local communities through training local staff, encouraging volunteering and building relationships with local suppliers;
- **Helping People** – widening the support provided to vulnerable customers and working with others to tackle fuel poverty.

One of SSEPD’s Twelve Commitments relates to social responsibility – “Every year we will publish our Resilience Plan so you know what we will do in the event of a power cut”.

At this stage, social responsibility is as much about a way of working as is it about delivering pre-defined outcomes, so it is difficult to judge whether SSEPD has met Ofgem expectations in this regard. However, the Business Plan identifies both working practices and initiatives that we consider demonstrate SSEPD’s social responsibility.

SSEPD’s Business Plan identifies existing schemes, such as Community at Heart, the employee volunteer scheme, and some interesting new initiatives such as the Community Energy Coaching pilot scheme in

Wiltshire, designed to facilitate behavioural change in energy consumption; and a two-year research programme through the Knowledge Transfer Partnership, which will explore how to increase the resilience of priority customers in communities affected by severe weather events.

The key message from the Business Plan is the need for and intention to build and strengthen relationships with local communities, local authorities, professional and educational organisations and suppliers. There is recognition of mutual benefits to be gained from collaboration – in sharing information, knowledge, skills and ultimately sharing responsibility for protecting the most vulnerable.

The feedback presented from stakeholder consultation suggests that a ‘partnership’ approach has the support of stakeholders. SSEPD’s experience in March of this year during the storms in the West of Scotland has provided particularly pointed evidence of the value of working in partnership with professional and community groups to more effectively support vulnerable customers during service interruption and severe weather conditions.

We consider that SSEPD’s partnership approach and the activities and initiatives identified will help to strengthen the role that the company plays in the communities it serves.

SSEPD has committed to reporting on what has been done each year in our Looking Back Report.

3.8 Innovation

SSEPD has prepared an Innovation strategy document as part of their business plan submission to Ofgem. The document sets out SSEPD’s plans for innovation across all areas of the business for RIIO-ED1, and presents SSEPD’s proposals for innovation as part of Business as Usual (BAU) activities and engagement with Ofgem’s innovation stimulus arrangements.

The requirements for innovation strategy were published by Ofgem in Section 10 of the RIIO ED1 Outputs and Incentives and Innovation document. We see the following requirements to be relevant in reviewing how SSEPD have prepared their innovation strategy:

- 10.15. DNOs must submit an innovation strategy as part of their business plan submissions. This will set out their approach to innovation during RIIO-ED1 and beyond.
- 10.16. The innovation strategy should contain, at a minimum, the following information:
 - the high-level problem(s) and/or challenge(s) which the sector/company expects to face over the period, and the justification for initiating projects to address these
 - the process or methodology by which the company will decide the focus for innovation during RIIO-ED1
 - demonstration that the problems/challenges have been identified/prioritised and justified in consultation with stakeholders
 - discussion of the relative priorities, risks, benefits, value for money and potential customer impacts the consequences of innovation(s) not occurring
 - deliverables and potential deliverables from the research or development or trials, such as defined learning on an issue, revised codes, new charging methodologies etc.

- 10.17. In addition, DNOs must set out in their innovation strategy information relating to the following three requirements:
 - evidence of how DPCR5 innovation funding (ie IFI & LCN Fund) has been used effectively and resulted in improved outcomes for consumers
 - a description of their approaches to ensuring the efficient roll-out of successful innovation into business as usual (including innovation developed by other DNOs)
 - a description of their processes for reviewing and updating their innovation strategies within the price control period

A comprehensive document has been prepared setting out SSEPD's proposed investments in innovative solutions and technologies. The document is well structured to align with the above guidelines.

SSEPD have indicated that they see the following high level challenges which need to be addressed through innovation:

- stakeholder needs and requirement to deliver value and choice to customers
- flexibility of the network in the transition to a low carbon economy
- realising the full value of previous innovation expenditure

We consider SSEPD's focus on these particular high level challenges to be relevant and appropriate.

SSEPD's business plan presents the process by which they have decided the focus and priority for directing their expenditure on innovation. There is widespread reference to stakeholder engagement as part of this focus. From this process, SSEPD has identified 20 core innovations to take forward, and these individual innovations are discussed in further detail along with the associated investment costs and expected benefits.

Throughout the document there is reference to innovative projects undertaken during DPCR5, such as the Orkney Islands Active Network Management scheme, the Northern Isles New Energy Solutions (NINES) project on Shetland and Thames Valley Vision project. The project references demonstrate a high level of stakeholder engagement in these schemes. We consider these references very relevant to future investment in other active network management / smart grid schemes which will form the basis of innovative solutions in business as usual activity in RIIO ED1. Such business as usual activity includes managing the network to address network capacity issues such as accommodating unpredictable renewable generation (especially in the north of Scotland).

The innovations proposals includes investment in Smart Grid technologies with justification based on the on the industry wide Smart Grid Forum and associated Workstream 3 model, as well as investment in new methods of doing existing work tasks (e.g. tree cutting). These investments are clearly linked to RIIO-ED1 outputs across the business, especially in Reliability of the network and Connections.

The proposed level of investment in innovative solutions is relatively small in comparison with the overall levels of investment required in the business. This is in line with SSEPD's view of maintaining a state of readiness for more widespread use of innovative technologies when the anticipated use of low carbon technologies becomes more widespread. However, the investments proposed appear to be well directed,

to address specific network needs and demonstrate efficiency, value and cost effectiveness in comparison to established conventional investments and working methods. We note that a series of Cost Benefit Analysis (CBA) calculations have been prepared in order to support the decisions made on adoption of these innovative solutions.

4 Resources – Efficient Expenditure

Ofgem Criteria: Are the costs of delivering the outputs efficient?

- Has the DNO demonstrated that cost projections are efficient?
- How does the plan compare with others/does it reflect wider best-practice?
- Has the DNO demonstrated that their financial costs are efficient (e.g. through market-testing)?
- Has the DNO explained cost projections in context of historical performance?
- Has the DNO demonstrated a consideration of alternative approaches to achieving value for money in the delivery of its outputs?
- Has the DNO clearly linked its expenditure to relevant outputs and secondary deliverables?

4.1 General Overview

SSEPD's expenditure proposals are summarised in the technical appendix 'Our Expenditure Forecast'. The cost implications of SSEPD's service delivery proposals are also outlined in each of the relevant Output Papers in order to demonstrate the cost of delivering outputs. A further technical appendix 'Be Efficient' explains SSEPD's approach to ensuring efficiency.

We consider that SSEPD has presented strong evidence of its historic efficiency within the Business Plan and its intention to remain at the frontier of efficient service delivery into the ED1 period. Against a commitment to deliver improved services in ED1, SSEPD states that its expenditure forecast for ED1 is 95% of its average annualised expenditure allowance during DPCR5 on a like for like basis. Including cost items that are new to ED1, the overall funding requirement is 104% of the DPCR5 allowance. Combined with SSEPD's proposed financial parameters, this forecast results in a fall of 10% in real terms in SSEPD's base revenue requirement from 2014/15 to 2015/16. Thereafter, proposed efficiency gains of 1% are mitigated by real price effects (RPEs), so proposed revenues are flat in real terms for the duration of the control period.

In the Business Plan, SSEPD has provided evidence:

- (i) of the efficiency of its historic and existing service delivery;
- (ii) of the business processes that will ensure the ongoing efficiency of future service delivery; and
- (iii) that expenditure forecasts and total revenue requirement for ED1 compare favourably with current price control allowances.

Each is considered in turn below.

4.2 Historic and Current Efficiency

SSEPD presents a case that it has been and continues to be the most efficient DNO group.

SSEPD justifies this assertion by reference to Ofgem's analysis and decisions for DPCR4 and DPCR5 and SSEPD's own analysis of cost data from 2010/11 and 2011/12 using the WPD disaggregated cost benchmarking model. SSEPD presents comparative analysis of the overall expenditure of each DNO, as well as more specific comparisons of the DNOs' activity costs (for indirect and business support cost categories) and unit costs (such as asset replacement, civil works, diversions).

A key element of SSEPD's case is that there are regional factors which affect the north of Scotland (large rural and remote land area, small and widely distributed customer base, more severe climate) resulting in costs to SHEPD which are not incurred by any other DNO. The removal of these costs from the SHEPD cost base in the WPD model makes SEP and SHEPD first and second most efficient DNOs overall, rather than first and sixth respectively. SSEPD illustrates, and it is interesting to note, that under the revised ranking of all the DNOs (with regional costs removed from SHEPD), DNOs within the same group are now ranked alongside one another. It would be reasonable to expect that DNOs operated and managed in the same way would demonstrate the same levels of efficiency.

We have not audited or replicated SSEPD's analysis but we consider the arguments presented to be logical and well supported. We agree that there are unique costs associated with service provision in the North of Scotland which should be recognised in any comparative analysis and which make the use of appropriate cost drivers essential to meaningful comparisons. We also agree that the results of comparative analysis need to be considered as a whole and that whilst benchmarking is a useful tool, the results must be considered in context.

4.3 Ongoing Efficiency

SSEPD argues that the working and management processes that have made it efficient in the past will continue to ensure that SSEPD remains efficient in the future. The Business Plan outlines a culture in which efficiency is a core value, suggesting that it is integral to the everyday workings of the organisation. SSEPD suggests that efficiency is a natural outcome of three features of its business operations:

- (i) **Smart working practices.** The Business Plan presents examples of management processes, working practices and training programmes that are designed to ensure operational efficiency. SSEPD's increasing use of internal resources (rather than out-sourcing) for example is justified by reference to consequent savings on specific projects.
- (ii) **Innovation.** There is evidence of a strong focus on innovation throughout the Business Plan. We understand that the 'Licence to Innovate' scheme has delivered around £14 million of savings during 2012/13 across the network businesses, along with ideas for improving the service provided to customers. Examples of innovative solutions are included in the Business Plan as evidence of

how efficiency is being enhanced by innovation. SSEPD has an Innovation Strategy that sets out how it will continue to be innovative during the ED1 period.

- (iii) **Prudent investment and expenditure.** SSEPD has an extensive asset refurbishment programme, designed to extend the life of assets and delay their replacement. As part of the Business Planning process, SSEPD's asset management practices were reviewed by a reputable consultant and reported to represent best practice. The Business Plan also presents evidence of 'value for money' procurement processes that include market testing/benchmarking of the costs of goods and services against industry averages. The evidence presented suggests that in March 2013, SSEPD was procuring items in a basket of goods cheaper than the industry average.

On the basis that SSEPD is already an efficient business, and in light of the evidence presented, there is no reason to believe that it will not continue to be as efficient in ED1.

The Business Plan commits to a 1% annual reduction in costs during ED1.

4.4 Forecast Expenditure

In the paper 'Our Forecast Expenditure' SSEPD's ED1 expenditure forecast is summarised and presented in comparison to DPCR5 allowance to demonstrate the continued efficiency of ED1 activities.

SSEPD states that:

- on a like-for-like basis, its overall expenditure forecast for ED1 is 95% of the average annualised expenditure allowance during DPCR5; and
- including cost items that are new to ED1, the overall funding requirement is 104% of DPCR5 allowance.

In the Expenditure Paper, projected spend in each of the output areas is presented in summary. The overall forecast is also broken down into the main cost categories used in the Ofgem data tables, in order to allow a direct comparison between ED1 and DPCR5 volumes and expenditure allowances in the same category. The paper shows whether volumes and/or costs are expected to increase, decrease or stay the same.

The overall trend in many of the cost categories is down; attributed largely to improvements in efficiency and more innovative ways of delivering services. In areas of forecast increased expenditure, such as asset replacement, SSEPD indicates that increases in volumes will at least to some extent be offset by reductions in unit costs.

Detailed justification for increases in volumes and/or unit costs is provided in the relevant Output and Justification papers and other supporting documents.

We consider that SSEPD has usefully explained cost projections in the context of historical performance as required by Ofgem.

4.5 Alternative Approaches

In preparing the plans for their major investment schemes, we are of the opinion that SSEPD has given appropriate consideration to alternative approaches and made decisions based on long term value.

A series of Cost Benefit Analysis calculations have been prepared in Ofgem's calculation format in order to support these decisions. For their major asset replacement and refurbishment strategies across asset categories, SSEPD has typically adopted strategies involving widespread use of refurbishment of equipment to achieve asset life extension, with comparisons made against the alternatives, most often:

- (i) more widespread replacement with new equipment; or
- (ii) considering the effect of doing nothing (with associated increases in fault and repair costs and deterioration of network performance).

SSEPD's Business Plan places a strong emphasis on the role of innovation in delivering outputs efficiently and resolving network challenges. Finding new and better ways to do things appears to be embedded in the organisational culture and there is evidence throughout the Plan that alternative approaches to service delivery have resulted in greater value for customers.

5 Uncertainty and Risk

Ofgem Criteria: How well does the plan deal with uncertainty and risk?

- Has the DNO clearly articulated the key uncertainties it faces and considered how it will address them (eg including uncertainty mechanisms)?
- Has the DNO considered risk and how to mitigate those risks?

SSEPD has prepared a paper specifically addressing where they see areas of Risk and Uncertainty. This largely records SSEPD's support and agreement with Ofgem's published decisions on uncertainty mechanisms and re-openers. As allowed by Ofgem, SSEPD has also proposed some additional uncertainty mechanisms in areas that will affect SSEPD including:

- Acceptance of the smart meter installation volume driver, but removal of the tapering mechanism
- Proposal for Smart Meter Data Communications Company (DCC) charges to be recovered in full from customers each year (not just until 2019 as proposed by Ofgem)
- Street works mechanism adapted to proposed legislation in Scotland
- Mechanism to address the potential costs associated with diversions for rail electrification
- Changes to the Shetland Balancing Mechanism

We have not had the opportunity to review these risk and uncertainty measures and proposed re-openers. However we believe that SSEPD has a thorough understanding of the risks facing its business and note that SSEPD has presented the required justification and mitigation measures in the format required by Ofgem.

From our brief review, we are of the opinion that the approach proposed by SSEPD for these additional uncertainty mechanisms is a reasonable approach in the interests of the electricity customer. We also note that the identified risks are referenced back to the relevant outputs papers (e.g. Reliability and Connections)

6 Conclusions

We consider that SSEPD's Business Plan is well put together. Based on our review of the core proposals contained in the Output Papers, we have been able to conclude that overall it addresses the criteria set out by Ofgem.

6.1 Business Planning

There is evidence throughout the Business Plan that the activities and outputs proposed for the ED1 period reflect feedback received from stakeholders. Consistent messages appear to have been received from a range of different stakeholder engagement activities. Each of the core Output Papers identifies the key messages of relevance to that area of the business and indicates how those messages have influenced the service delivery decisions for the ED1 period. SSEPD's 'Top Twelve Commitments' appear to be a direct reflection of the issues raised by consumers during the consultation activities.

The Business Plan is designed to meet the anticipated needs of stakeholders over the next 10 years rather than into ED2, but we support SSEPD's view that it is difficult to justify spending money now when the post-2023 landscape is so uncertain, both in terms of the demands on the distribution networks and the technology available for dealing with them. SSEPD's suggestion to review the ED2 requirements at the ED1 mid point seems reasonable.

6.2 Outputs and Delivery

SSEPD's Business Plan addresses all of Ofgem's outputs. There is a core paper on each output area, with proportionate emphasis on plans for 'Reliability and Availability', given that this area accounts for the large majority of expenditure. Each Output Paper outlines what SSEPD will deliver and why, how the outputs will be delivered, together with the resource implications. Proposals are linked to stakeholder feedback and plans are justified by reference to existing and planned measures of performance (e.g. asset health indices, CMLs/CIs customer complaints).

SSEPD has prepared a comprehensive document on the network investment required in order to maintain the levels of operation reliability expected by its customers. From our reviews, we are of the opinion that SSEPD's network investment plans are credible and appropriate, given the existing condition and future requirements of the network. From our discussions during the assurance process, we have seen that these plans have been developed by SSEPD's engineers based on their extensive knowledge of the particular issues facing their network. There is an extensive set of more detailed supporting papers behind these investment plans, and we note these have been subject to independent review by a reputable external advisor.

The annual levels of investment proposed in SSEPD's network are comparable to the levels delivered efficiently during DPCR5. Based on this we are of the opinion that SSEPD will be able to deliver the proposed network outputs for RIIO-ED1.

6.3 Expenditure and Efficiency

We consider that SSEPD has presented strong evidence of its historic efficiency within the Business Plan and made a commitment to remain at the frontier of efficient service delivery into the ED1 period. On the basis of SSEPD's own comparative analysis, the company looks to have been the most efficient of the DNO groups during the first two years of DPCR5. SSEPD presents evidence of internal processes that embed efficiency within the business (e.g. insourcing resourcing strategy, asset management strategy) which underpin current performance and will continue going forward. On the basis that SSEPD is already an efficient business, there is no reason to believe that SSEPD will not continue to be as efficient in ED1.

On a like-for-like basis, SSEPD states that its expenditure forecast for ED1 is 95% of the average annualised expenditure allowance during DPCR5. Including cost items new to ED1, the overall funding requirement is 104% of DPCR5 allowance. Combined with SSEPD's proposed financial parameters, this forecast results in a fall of 10% in real terms in SSEPD's base revenue requirement from 2014/15 to 2015/16. Thereafter proposed efficiency gains are mitigated by real price effects, so proposed revenues are flat in real terms for the duration of the control period.

In the Expenditure Paper, costs projections are broken down and ED1 forecasts are compared to DPCR5 volume and expenditure allowances in the same category, clearly showing whether volumes and/or costs are expected to increase, decrease or stay the same. Justification for changes is provided in the relevant Output and Justification papers and other supporting documents.

In preparing the plans for their major investment schemes, we are of the opinion that SSEPD has given appropriate consideration to alternative approaches and made decisions based on long term value. A series of Cost Benefit Analysis calculations have been prepared in Ofgem's calculation format in order to support these decisions. For their major asset replacement and refurbishment strategies across asset categories, SSEPD has typically adopted strategies involving widespread use of refurbishment of equipment to achieve asset life extension, with comparisons made against the alternatives of more widespread replacement with new equipment, and considering the effect of doing nothing (with associated increases in fault and repair costs and deterioration of network performance).

6.4 Risk and Uncertainty

SSEPD has prepared a paper specifically addressing where they see areas of Risk and Uncertainty. This largely records SSEPD's support and agreement with Ofgem's published decisions on uncertainty mechanisms and re-openers. As allowed by Ofgem, SSEPD has also proposed some additional uncertainty mechanisms in areas that will affect SSEPD.

We have not reviewed these proposed re-openers/ uncertainty mechanisms in any detail, but we note that SSEPD has presented the required justification in the format required by Ofgem. From our brief review, we are of the opinion that the approach proposed by SSEPD for these additional uncertainty mechanisms is a reasonable approach in the interests of the electricity customer.

6.5 Innovation

A comprehensive document has been prepared setting out SSEPD's proposed investments in innovative solutions and technologies. This includes investment in Smart Grid technologies with justification based on the industry wide Smart Grid Forum and associated Workstream 3 model, as well as investment in new methods of doing existing work tasks (e.g. tree cutting).

The proposed level of investment in innovative solutions is relatively small in comparison with the overall levels of investment required in the business. This is in line with SSEPD's view of maintaining a state of readiness for more widespread use of innovative technologies when the anticipated use of low carbon technologies becomes more widespread. However, the investments proposed appear to be well directed, to address specific network needs and demonstrate value and cost effectiveness in comparison to established conventional investments and working methods.

Throughout the Business Plan there is a strong emphasis on innovation to deliver more efficient ways of working and to address network challenges.

Appendix A. SSEPD Employees Consulted

During the course of our assurance, we met with the following staff. Thank you for your assistance.

Heather Bain – Network Investment Engineer

John Blyth - RIIO-ED1 Project Team

Alan Broadbent – Head of Engineering

Doug Cunningham – RIIO-ED1 project team

Julia Dawson – Head of Customer Service

Cathy Falconer – Head of Connections

Landel Johnston - RIIO-ED1 Project Team

Aileen Macleod – Head of Regulation, Networks

Niall McDonald – RIIO ED1 project team

Kenny McAllister – SSEPD Finance

Daniel Mellis – Network Investment Engineer

Jo Niven – SEPD Projects

Samantha Ridsdale – Networks Regulation

Rahul Sharma - Innovation

John Smart – SEPD Projects

Mark Smith

Antony Urquart – RIIO-ED1 project team

Kirstine Wood – Stakeholder Engagement Manager