Supporting Document 01

Our approach to developing
our Business Plan

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Introduction

Our Business Plan is the product of thorough stakeholder engagement and review of the future requirements of our transmission network for the forthcoming eight-year RIIO-T1 period, 1 April 2013 to 31 March 2021. SSE, as a group, prides itself on its safety and efficiency values, and these are inextricable elements of our Business Plan.

The purpose of this document is to explain how we have met the specific criteria set down by Ofgem in its March 2011 document, 'Decision on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 Business plans, innovation and efficiency incentives'.

Many of these criteria fall naturally within our seven supporting documents and therefore are not covered again here. However, where this is not the case, and the criteria lend themselves to a more specific response or we feel it is useful to summarise how these criteria have been addressed, the following sections set out our approach.

Our Business Plan has been through rigorous internal scrutiny prior to sign-off and submission to Ofgem.

Contents

Our approach to developing our Business Plan

Key Content

Outputs

The outputs that we expect to deliver over the RIIO-T1 period, are described in our core Business Plan documents.

To summarise the outputs that we propose to deliver over the period:

- To operate safely.
- To maintain the current condition and performance of our network.
- Subject to the construction-related impact of our growth capital expenditure programme, to maintain or improve the reliability of our system.
- To provide timely connections for new renewable generators and strengthen our transmission system to accommodate increased flows of renewable energy.
- To minimise, as far as possible, our impact on the environment and transparently report on our performance to our stakeholders.
- To engage with our customers so that we can improve our service.
- To achieve our outputs at the lowest possible cost to customers.

SYSTEM PERFORMANCE
Primary output: Incentivised loss of supply volume - (MWh)
Secondary output: Faults and failures
Supporting document: Information to support our proposed base capital expenditure programme
SERVICE TO, AND ENGAGEMENT WITH, CUSTOMERS
Primary output: Stakeholder engagement and customer survey
Secondary output: Timely connections indicators
Supporting document: Future standards of customer service
ENVIRONMENTAL
Primary output: Broad Environmental Measure, Reportable Incidents
Secondary output: Business Carbon Footprint, Flood Prevention Schemes, Oil and SF6 Leakage
Supporting document: Reporting on our environmental impact
LOCAL ENABLING WORKS
Primary output: Local Activity Indicators and Costs (MW's connected and expenditure)
Secondary output: Sole-use and shared-use revenue drivers
Supporting document: Information to support our proposed growth capital expenditure programme
WIDER WORKS
Primary output: Boundary Capability (MW's connected and expenditure)
Secondary output: Within period determination mechanism
Supporting document: Information to support our proposed growth capital expenditure programme
DEMAND RELATED WORKS
Primary output: Demand and Supply Capacity at Substations
Secondary output: Ex-ante funding for named schemes
Supporting document: Information to support our proposed base capital expenditure programme
NON-LOAD RELATED WORKS
Primary output: Network Output Measures (Asset Health Indices, Criticality, Replacement Priority)
Secondary output: Ex-ante funding for named schemes
Supporting document: Information to support our proposed base capital expenditure programme

Our approach to developing our Business Plan

Stakeholder engagement

As already stated, our Business Plan is the product of thorough stakeholder engagement. For the purposes of this review, we have formalised our existing process and put in place a clear structure and means of collating and accurately reflecting stakeholder feedback. To give credence to our approach, we appointed global consultants, ERM, early in the process to provide independent assurance.

Our approach and ERM's report is set out in detail in the supporting document **Our customer and stakeholder engagement process**.

Sustainability

At a group level, sustainability was introduced as one of our six core values in November 2006. This value states that we operate ethically, taking the long-term view to achieve growth while safeguarding the environment. Sustainability is also included as one of our 2016 goals, where we have set ourselves the target of becoming the leading global utility in the field of sustainability and environmental impact.

It therefore follows that we will develop our transmission system in line with this value and this is reflected throughout our Business Plan.

Addressing key uncertainties

There is uncertainty with any forecast, but this is unavoidably increased with the requirement to forecast out to 2021 and the uncertainty that we have over our customers' requirements this far out. Moreover, the nature of our business and the uncertainties facing the sector, both in terms of policy change and technology advances, accentuate this.

Given the uncertainty that is inherent with any price control, mechanisms already exist to manage this, for example, the K_t term, logging up and cost pass-through. We have discussed our use of these mechanisms in the RIIO-T1 in our supporting document **Determining our allowed revenue**.

More specifically, we have provided, as part of our Business Plan, **Our Innovation Strategy**, which demonstrates what we are doing to ensure that we are at the forefront of technology changes and best-placed to understand where opportunities exist to do existing practices better during RIIO-T1.

In terms of the impact that this uncertainty has on our capital expenditure, we have reflected this in our three scenarios for the growth of our business: Accelerated Growth, our Central Case ("Gone Green") and Slow Progression, which are discussed

Our approach to developing our Business Plan

in detail in our supporting document **Information to support our proposed growth capital expenditure programme**.

In terms of dealing with this uncertainty, this same supporting document also sets out our approach to accommodate less certain connection works through a revenue driver mechanism and to deploy the within period determination mechanism for the purposes of large capital projects. Both of these mechanisms ensure that customers pay only for those projects that come to fruition in the price control period.

We have also developed, as part of our Business Plan, a similar mechanism to allow for changes to our operational costs, an opex escalator, in response to an increase in our capital programme beyond certain thresholds. This is set out in our supporting document **Determining our allowed revenue**.

Efficiency and longer-term value for money

We pride ourselves on our commitment to provide an efficient and value for money service. Indeed, SSE has developed an industry-wide reputation on this basis.

We recognise the extent of investment required in our network over the forthcoming price control period to deliver the growth in largely renewable generation in the north of Scotland. This marks a substantial increase on previous price controls. As such, we are mindful of placing further expense on customers. Our Business Plan therefore reflects, within reason, the demands of our customers that are consistent with delivering an effective and efficient system that meets safety and reliability standards.

Importantly, we operate a combined electricity transmission and distribution business. At the recent distribution price control review (DPCR5), our two distribution business, Scottish Hydro Electric Power Distribution (SHEPD) and Southern Electric Power Distribution (SEPD), were ranked among the most efficient operators in terms of their operational costs. It therefore stands to reason that these same operational efficiencies apply across our transmission business and both Ofgem and customers should take real comfort from this.

Market Testing and Benchmarking

Benchmarking can play a key role in driving improvements and has been used in recent electricity distribution price controls to great effect to deliver operational efficiencies. However, effective benchmarking relies on having access to statistically significant volumes of data and a sufficiently large

Our approach to developing our Business Plan

pool of comparator companies. Whilst this is the case in electricity distribution, there is limited gain to be achieved from benchmarking three GB transmission owners (TOs), particularly given their different scales of operation. One alternative is to look towards international benchmarking and, whilst we have been more supportive of this approach and worked with Ofgem to develop this, there is a view that the complexity of this work may be counter-productive.

Notwithstanding this, we have engaged with the other GB TOs during the development of our RIIO-T1 Business Plan to facilitate joint working and share best practice where opportunities exist. We see this as being an ongoing process, particularly in relation to the development of mechanisms such as the customer survey, where there are already plans to hold a joint workshop following the submission of our proposed Business Plan.

Innovation

Innovation is very much an integral part of our networks business. Our strategy for the forthcoming price control period is set out in **Our Innovation Strategy**, which accompanies our Business Plan.

Context

The main driver of our Business Plan is the forecast growth in renewable generation expected to connect to our network in the forthcoming price control period. We are actively involved not only at a national level in terms of planning for this growth, but also at a European level, where we share our knowledge of renewables and the resulting requirements this places on the network through ENTSO-E.

More generally, we are very aware of developments at an EU level. To this end, we have been active in pursuing European funding to facilitate our proposed hub development in the Moray Firth and, through our electricity distribution business, we have and continue to pursue the opportunities for funding innovative trials on our network.

In terms of offshore network developments, our capex forecast includes costs relating to the connection of offshore renewables. This is an area that we are particularly keen to engage with Ofgem, Government, renewable developers and offshore providers alike to ensure that the most economic and coordinated system can be developed. We believe we can provide a valuable contribution and have already put forward a detailed straw man setting out how the transmission licensing regime might be

Our approach to developing our Business Plan

modified in light of the third party access proposals. Unfortunately, we have been excluded from participating in Ofgem's Offshore Transmission Coordination Group; our involvement therefore has been limited to a working group level. Nevertheless, we are keen to engage in this process on an ongoing basis.

Major Projects – justification of costs

This is set out in detail in the supporting document **Information to support our proposed growth capital expenditure programme**.

Our approach to developing our Business Plan

Structure and Proportionality

Clear and concise structure

Stakeholder engagement has been central to the development of our Business Plan. As such, we have tailored our Business Plan and all preceding documents, namely our **Green Paper** and **White Paper consultations**, to ensure that they are not only clear and concise to Ofgem, but also accessible to our stakeholders.

To this end, we have developed a clear structure based upon the areas of our business that matter most to our stakeholders, and we have maintained this structure throughout. The supporting documents that contribute to our proposed Business Plan fit into this same structure and Figure 1.3 in our overarching document **Keeping the lights on and supporting growth: Our proposed Business Plan for the next decade**, illustrates this structure diagrammatically.

At each stage, we have made the relevant documents leading up to our final proposed Business Plan available on our website:
www.ssepd.co.uk/Projects/TransmissionPriceControlReview

Materiality and proportionality

We recognise that some aspects of our submission are more material than others; in particular, our engagement with stakeholders and our proposed capital growth programme. This materiality is reflected in the level of content within these sections of our Plan. However, we have endeavoured to be thorough in our approach to our entire Business Plan.

End to end process

Our Business Plan clearly documents the end to end process that we have followed and, at a high level, this is most clearly set out in our overarching document **Keeping the lights on and supporting growth: Our proposed Business Plan for the next decade**. Each stage of our Plan's development is further supported by our suite of seven supporting documents.

Our approach to developing our Business Plan

Long Term Context

Transmission price controls

This is now the fifth regulated price control review of the transmission business in the north of Scotland since privatisation some twenty years ago. Over that period, the transmission business has successfully continued to improve the condition of the individual assets and its performance in relation to the overall system. It has maintained its strong commitment to responsible asset stewardship and ongoing improvement.

Extension to price control period

Ofgem has been sufficiently reassured to propose an extension of the price control review period from a five year period to an eight year one, on the basis that such businesses can be trusted to invest in and develop the transmission system in line with providing a system of sound health, and of adequate capacity to meet its customers' requirements. This is particularly significant given the period of unprecedented change in the growth of renewable generation, across a range of developed and emerging technologies, and the uncertainties that arise from that growth in terms of scale and timing.

Core asset management

The core asset management of the business takes a long term view of asset condition over the asset's life and its associated ongoing risk profile as its age increases. This risk profile is also assessed in terms of how the asset operates as part of a whole system. The measures of this performance include faults and supply interruptions, both in terms of the number of incidents and their duration, and the environmental risks and safety risks to staff and third parties.

More information about our approach to managing our assets can be found in the supporting document **Information to support our proposed base capital expenditure programme**.

Developing and building for the future

Perhaps the most important consideration in taking a long term view to inform our Business Plan for the period out to 2020/21 is in developing the system and building for the future. The north of Scotland transmission system will play a key role in enabling environmental targets to be achieved in the move to a low carbon economy. Targets set by both UK and Scottish Governments are ambitious yet achievable and will be met by the development and successful harnessing of the rich renewable resource that exists in Scotland. The development of the transmission

system, to ensure that sufficient capacity is provided to coincide with the pace at which generation is developed, is the key challenge for the decade.

Generation scenarios

An essential and early phase of the process of developing the new transmission system over the RIIO-T1 period is to ensure that the potential volumes of possible generation are well forecast and are reflected in a range of scenarios that cover the reasonable extremes of such development. To this end, generation scenarios have been developed for the north of Scotland and these have been aligned with overall targets. The development of these scenarios has been overseen and approved by the Electricity Networks Strategy Group, co-chaired by DECC and Ofgem.

Renewable generation targets

Renewable generation forecasts are on the same timescales as the proposed price control and extend out to 2020. These forecasts are informed, not only by Government targets, but also by the levels of activity shown by developers of renewable generation through applications and agreements for connections to the system.

To give an insight into the possible volumes and timescales of less well-developed renewable technologies, such as wave and tidal, and for scenarios to be developed that address the uncertainty that surrounds the deployment rates of these future sources of renewable generation, the renewable generation forecasts have been extended out beyond the period of the immediate Government targets to 2030.

Rate of transmission development

The long-term context of the RIIO-T1 period helps to ensure that our Business Plan is consistent with the rate of transmission system development necessary to ensure that we are neither too late in providing system capacity and access, nor too premature in the event of delayed deployment of the various renewable technologies. This long-term perspective also helps to ensure continuity in approach, avoiding the risk of limiting future upgrade options or the stranding of assets.

Our approach to developing our Business Plan

Historic levels of growth and uncertainty

The major period of development that took place during the 1950s and early 1960s was integral to the development of the hydro electric resource in the north of Scotland and the associated provision of electricity to the many rural Scottish communities.

This RIIO-T1 period has the potential to see a similar or indeed increased level of growth in the north of Scotland's transmission infrastructure.

The requirements for growth and the eventual outturn at the end of the RIIO-T1 period will depend on the political and market support framework that is in place for renewable generation growth and deployment, and the rate at which the generation schemes and the related transmission networks can be built.

Given this, and the extension of the price control period to eight years, it is essential that the uncertainties in looking to the future are acknowledged. To this end, the uncertainty mechanisms proposed by both Ofgem and the Transmission Owners are absolutely integral to this Business Plan.

Our approach to developing our Business Plan

Reflecting Best Practice

Within SHETL, we have considerable experience in developing business plans, both for internal purposes and for external stakeholders. In the development of our RIIO-T1 Business Plan, we have not only drawn on this experience, but also the international experience of the SSE Group.

Best practice on the development of networks and completion of business plans

We have utilised Ofgem's guidance, as set out in its March strategy decision document, as a primary means of informing the content and scope of our Business Plan.

Another primary component has been our stakeholder engagement process and the resulting feedback that we have gathered throughout. This has been an iterative process and we have sought to demonstrate best practice by seeking independent assurance from global consultants, ERM. At each stage of this process, we have asked ERM to assess our approach to ensure that it is in line with the process expected by Ofgem and that the resulting outputs captured in our proposed Business Plan are a genuine reflection of the feedback received.

The detail behind this process, the breadth of responses received and ERM's report are set out in the supporting document **Our customer and stakeholder engagement process**.

Importantly, our engagement with stakeholders and Ofgem is not limited to the development of RIIO-T1. We engage with stakeholders and Ofgem on an ongoing basis to ensure that we continue to meet and understand their expectations and requirements.

As discussed earlier in this document, one area where we have specifically engaged with Ofgem is in relation to international comparators. We believe there is merit in exploring this approach further to establish whether compatible and comparable data sets can be developed.

Through the ongoing engagement process referred to above, we have received stakeholder feedback describing us as *'Industry Leaders'* in construction and our construction management procedures as *'best practice in Scotland'*.

In terms of other specific examples of what we are doing at an international level, we have hosted international electricity network companies, such as China Light and Power and Northern Ireland

Our approach to developing our Business Plan

Electricity where we have shared best practice and benchmarking information.

We also utilise a number of international consultants for key elements of work, including a specific review by SKM on the content of our Business Plan and our approach to developing our network. In our supporting document **Information to support our proposed growth capital expenditure programme**, we also highlight how we will deliver our increasing capex programme by supplementing SSE internal resource with international staff, such as our strategic partnerships with KBR and how we are continuing to develop our supplier base and innovative solutions beyond the UK, such as the development of our office in Tokyo, Japan.

As we employ specialists such as project management staff from other industries (oil and gas), this ensures we draw on a larger pool of expertise and continue to develop our best practice.

At a national level, we have worked with Ofgem and the other TOs to develop the detailed data tables that support the business plan and other key items, such as developing and agreeing the Network Output Measures, which were recently approved by Ofgem.

We also draw on the experiences of our sister companies SHEPD and SEPD and the many working groups hosted by the Energy Network Association.

Our approach to developing our Business Plan

Accurate, Timely and Full Completion of Business Plans

We have endeavoured to provide an accurate, timely, complete and well-justified Business Plan in accordance with the guidance provided by Ofgem.

Completion of all templates provided by Ofgem

Ofgem has provided guidance for the completion of the Business Plan and the associated templates. We have adhered to this guidance and provided Ofgem with supporting narrative detailing our approach and any assumptions made.

Reasoned justification

We have provided reasoned justification for the completion of the Business Plan and associated templates and have endeavoured to provide all the information requested by Ofgem.
Where this information has not been available (i.e. no historic information has been previously submitted), we have endeavoured to collate this and the basis for completion has been documented.

Aligned with Ofgem's Expectations

In a number of areas, we have worked with Ofgem and the other TOs in the completion of our Business Plan. This has been in the form of face-to-face meetings and more informal correspondence to ensure that our methodology for completion meets Ofgem's expectations and, where relevant, demonstrates joined-up thinking across the TOs. In addition, through our stakeholder engagement process, we have kept Ofgem informed of the evolution and development of our thinking.

As noted above, where we have made assumptions or applied a specific approach these are documented in the relevant sections of our Business Plan.