

## SUBMISSION FROM SCOTTISH AND SOUTHERN ENERGY

### **Introduction**

Scottish and Southern Energy welcomes the opportunity to comment on the draft second National Planning Framework for Scotland. Improving the planning system to enable the delivery of sustainable development is vital and will no doubt be welcomed by all stakeholders. Improving the system however does not mean that developers like SSE expect to receive positive planning approvals every time, rather SSE seeks a speedier and more transparent system. Delay and lack of clarity in forward planning stifles development and damages investor confidence - any measures to address these difficulties will be positive for sustainable economic growth.

SSE agrees strongly with the statement in the introduction to the 'discussion draft' that 'one of the principal challenges is climate change' and that decarbonising energy supply is an urgent priority. If sustainable economic growth is the top priority of government, then it is clear that addressing climate change must be central to delivering this priority.

SSE also welcomes the comments in the draft that action on climate change need not be perceived as having a negative effect on people's lives. Indeed, many climate change solutions will grow the economy, save people money and deliver improvements to quality of life. It is failure to address climate change that will impact negatively on people and on the economy.

SSE's ambitions to play its part are limited only by the practical constraints that currently stand in the way of Scotland's renewable energy ambitions being realised. The planning system is at the heart of this frustration. Scotland may have over a quarter of Europe's renewable resources, yet the wind generation capacity added last year across the UK (427MW) was only 5% of what was achieved in Europe. The total installed wind capacity in the UK is now 2,389MW, less than two thirds of what Spain installed in a single year. For further example, Gordonbush, one of our wind farm proposals, was in the planning system nearly five years until Scottish Ministers recently gave it the go ahead, which we believe is one of the longest delays for a wind farm anywhere in the world, ever.

As well as the need to deliver renewable projects in a timelier manner, there is a need for significant investment and development of the infrastructure needed to harness renewable energy – and we are pleased to see this recognised in the draft NPF2.

However, clarity is required on the status of the NPF2 in relation to local development plans so that conflict is avoided. An alignment of local plans consistent with the NPF2 is needed and it is not at all clear in the consultation document how such alignment will be achieved nor how the NPF2 holds primacy in the decision-making process.

### **Electricity Transmission**

The NPF2 identifies the need for substantial upgrading of the electricity transmission network, and also recognises the need for delivering these improvements quickly so that significant renewable energy developments can be plugged into the system. The Beaulieu-Denny rebuild currently being considered by the public inquiry process is an

important first step. In the near future further improvements on the mainland system are required to make maximum use of the existing infrastructure and to connect island generation. The upgrades and reinforcements to the current grid system identified in the NPF2 will all be required if Scotland is to deliver on its 50% renewable electricity target by 2020, and therefore these projects need to be started very soon to be in place by the target date. **If the transmission system upgrades are not delivered, then Scotland's renewable energy ambitions will be severely dented.** In the longer term developing additional subsea links may provide additional opportunities to harvest, distribute and export off-shore renewable energy. (for more background on transmission see Annex)

### **Energy production, distribution and use**

SSE agrees that profound changes are required in the way that energy is produced, distributed and used. The new EU mandatory target for 20% renewable energy by 2020 is a major driver for change and therefore much needs to be done in the next twelve years to achieve this in Scotland. Currently, energy used from renewable sources is around 4%, (and less than 2% across the UK). The 50% target for renewable electricity in Scotland by 2020, which SSE strongly supports, will take Scotland over the 10% mark of all-energy from renewables and SSE is determined to play its part in delivering this. In March 2008 SSE announced an intention to invest £6.5bn over the next five years and to double its current portfolio of 2000MW renewable generation capacity in the UK and Ireland to 4000MW.<sup>1</sup> A great deal of this is planned in Scotland – and achieving these and longer term ambitions relies on projects securing the necessary approvals in a timely manner, adequate electricity network capacity and the maintenance of a stable public policy framework which encourages investment in renewable energy.

SSE welcomes the Ministerial commitment to limit the time that renewable energy projects pass through the system to a determination within 9 months, and we are pleased to see an increase in the pace in the last twelve months where the number of determinations made by Ministers appears to have doubled compared to previous years.

### **Variance with UK Planning Bill**

We strongly support the principle of encouraging more renewable energy at all levels and welcome the UK Planning Bill's introduction so that local development plans must, when taken as a whole, include policies designed to secure the development and use of land in the local planning authority's area contributes to the mitigation of, and adaptation to, climate change. This commitment included in the UK National Planning Statement is missing from the NPF2 which is an unfortunate omission. Such an inclusion in the NPF2 could also cover related issues affecting renewable energy developments such as aviation for example.

### **Decentralised Production**

SSE welcomes the government's intention to expand the use of decentralised energy, especially in the heat sector and through the use of microrenewables. This does not however avoid the need for a stable and flexible national grid system to harness Scotland's significant renewable resources which are located some distance from the main centres of population. In addition, it is also likely that in the future more green electricity will be utilised to make inroads into decarbonising the heat and transport sectors. Grid capacity and access will play a key role in taking advantage of

Scotland's available renewable resources for this purpose. There should also be consideration given to the opportunities in developing pumped storage which can make even more efficient and flexible use of renewable energy and the transmission system.

### **Water resource management**

SSE welcomes the government's intention to deliver a 'joined-up, source to sea' approach to water resource management. However, it is clear that alignment of policy between government departments and agencies is required so that the potential for renewable energy generation from hydro schemes is not held back from realising further potential. In its recent consultation on its approach to implementing the water framework directive for example, SEPA proposes an approach to hydro schemes which risks hampering projects from being considered in a more balanced way, and in its preface to this consultation even asserts that: *The direct effect of even the largest renewable energy schemes or greenhouse gas emitting projects in Scotland on global emissions of greenhouse gases can be assumed to be negligible*<sup>2</sup>. This assertion is proposed to be a factor in SEPA's approach to assessing renewable energy projects. This is in direct contrast to the government's climate change consultation which states that: *There are those who argue that as Scotland emits only 0.15% of the world's greenhouse gases, we should not burden ourselves with a specific Scottish target to reduce emissions and we should instead wait for larger countries to take action. The Scottish Government believes that this is an irresponsible position.* Clearly an alignment of all government agencies and bodies is required to ensure that projects do not enter the planning system with obstacles and contradictions in the structure of governance built in.

### **Comment on other areas**

The NPF2 recognises the fact that whilst emissions from energy production and business have fallen in real terms since 1990, the benefits of these cuts have been offset by increases in emissions in the transport sector in particular. With a substantial number of projects in the NPF2 likely to increase or accommodate rising traffic levels it will be important to assess the impact of this across the economy and the impact on carbon budgets set in the new climate change bill.

Even with 50% renewable electricity by 2020, (together with an assumption of around 10% renewables in the heat and transport sectors included), Scotland will only move to around 18% renewable energy overall by this target date. With electricity responsible for around 37% of our carbon emissions however, 50% renewable electricity will make significant inroads towards the 80% reduction target by 2050. This means that the necessary improvements and upgrades to the transmission system in particular are even more important, otherwise the low carbon economy and pollution reduction target ambitions of the country will fail.

In the NPF2 Annex regarding statements of need in relation to transmission system SSE would suggest that 'ticks' are also justified in the 'global connections', 'smarter' and 'healthier' boxes. If we do not have a transmission system in place to harness renewables, investors will look to other countries to develop renewables. Scotland already has a historically poor reputation for its planning system, and despite recent improvements, if there is nowhere to plug renewable capacity in to the grid network, investment will not be forthcoming.

Scotland's communities will also face enormous challenges as climate change impacts worsen, and therefore if we do not tackle it communities may well be overwhelmed regarding their ability to 'respond effectively' as indicated in the 'Healthier' section of the document.

If Scotland's renewable energy potential is lost due to an inadequate planning system and supporting infrastructure, it is also likely that much of our remaining and developing skills will move elsewhere. This could drain Scotland's economy of its most valuable asset – its enterprising and innovative human resources which have been building up in recent years – and thereby harm the government strategic objective – to be 'smarter'.

### **About Scottish and Southern Energy**

SSE is one of the largest energy companies in the UK and are involved in the generation, transmission, distribution and supply of electricity; the storage, distribution and supply of gas; telecommunications; contracting; and other energy services. SSE is the leading renewable energy company in the country with a total operating portfolio of renewable energy of just over 1,900MW, including 480MW of wind, making it the largest wind farm operator in the UK and Ireland. Pending development, SSE expects to have over 4000MW of operating renewable energy capacity, including hydro, pumped storage and biomass, by 2013.

A new 100MW hydro power project is under construction at Glendoe near Loch Ness, and together with Talisman Energy we have installed two of the largest offshore turbines in operation anywhere in the world and have plans to extend the project, which has the potential to deliver up to 1,000MW. We have invested in biomass co-firing facilities at both of our coal fired power stations and are currently building a new CCGT station at Marchwood near Southampton. We are continuing to explore Carbon Capture and Storage projects.

We believe that our portfolio shows our commitment, past, present and future, to tackling climate change and ensuring secure supplies, in partnership within industry, government, consumers and other stakeholders.

## **ANNEX**

### **Background to transmission upgrade projects**

All transmission licensees have an obligation under primary legislation<sup>3</sup> to, "*develop and maintain an efficient, co-ordinated and economical system for the transmission of electricity*" and to facilitate competition in the generation and supply of electricity.

The regulator (OFGEM)<sup>4</sup> needs to ensure that the transmission licensees are able to finance the activities stemming from their licence obligations, but does so in the context of its principle objective which is to protect the interests of consumers.

The drivers for transmission system works include;

- Ongoing maintenance and replacement of existing assets
- Closure of existing generation which for example might trigger works to support system voltage
- Changing patterns of demand both in terms of location and characteristics
- The requirement to accommodate new generation developments.

The overall approach of industry, the regulator and government seeking to work in an integrated way to outline necessary infrastructure is positive and is being used as a model for the development of the UK National Planning Statement on transmission.

Since 2000 the dominant driver for transmission works in Scotland has been applications for connection to and use of the transmission system by new renewable generation development projects.

*Identification of potential reinforcements to support renewable generation*

In 2002 the three transmission licensees (Scottish Hydro Electric Transmission Ltd, Scottish Power Transmission Ltd and National Grid) began studying transmission options for accommodating significant increases in the level of renewable generation in Scotland. The resulting 'Renewable Energy Transmission Study (RETS)' report which forms an annex to the then DTI 'Transmission Issues Working Group – Final Report – June 2003'<sup>5</sup> proposed options for transmission network development capable of accommodating three levels of new renewable generation in Scotland; 2,000MW, 4,000MW and 6,000MW.

The proposed reinforcements are necessary to facilitate the connection of renewable generation. In 2004, as part of the process of making offers for connection to the GB transmission system, the licensees revisited the RETS reinforcement proposals to identify more specifically those that would be required given the volumes of generation that had applied and their location.

SSE's transmission subsidiary SHETL identified grid projects up to a level of providing capacity for around 5.2GW of new renewable generation<sup>6</sup> in the north of Scotland, the first of which is the Beaulay-Denny rebuild. Subsequent reinforcements will realise the total 5.2GW capability. In October 2006 the level of applications for connection in the north of Scotland stood at around 7.6GW.

Ofgem carried out an assessment of the grid projects against the anticipated growth in renewable generation. Based on the information available to Ofgem at the time of assessment, it classified those earlier projects that appeared to be clearly justified as 'baseline' with economic justification of each project based on its estimated cost and estimated savings in constraint costs. Provision has been included in the SHETL licence to fund the costs of progressing baseline projects through the planning process and, subject to planning consent, to fund agreed construction costs.

**Beaulay-Denny:-** Rebuild the existing 132kV overhead line between Beaulay and a site near Bonnybridge at 400kV. The rebuild and the associated extension or relocation of existing substations en-route would allow for significant renewable energy generation to connect throughout the north of Scotland.

**Sloy:-** Establish a 275/132kV substation near Inverarnan where an existing 132kV route from Killin passes under the existing 275kV route from Dalmally. Some 180MW of wind generation contingent on this upgrade.

Additional projects would not start until both Ofgem is satisfied that there is sufficient economic justification to proceed, and any necessary planning consents have been granted. The projects are:

Orkney link reinforcement:- Reinforcement of the existing 33kV subsea cable links by the installation of additional new 132kV AC subsea cables between Orkney and Caithness to accommodate applications and interest in the connection of new wind and marine renewable generation around Orkney.

Dounreay-Beauly:- Only one side of the existing 275kV overhead line route between Dounreay and Alness is currently strung with conductors forming a single circuit. In common with most steel lattice overhead line routes the towers are designed to carry two circuits and so this proposal would provide the installation of a second circuit on the existing towers.

Western Isles:- The volume of generation seeking connection to the GB transmission system on the Western Isles far exceeds the capacity of the existing subsea cable and new, additional circuits would therefore be required should the new generation schemes go ahead.

Shetland:- The subsea distances and power rating requirement make HVDC technology the only option for connecting Shetland to the Scottish mainland.

East coast 400kV upgrade:- There are existing overhead line routes on the east coast currently operating at 275kV but which are of a design that allow them to be reinsulated for operation at 400kV.

Beauly-Keith:- there are options for increasing the transmission capacity between the two northerly ends of an upgraded Beauly-Denny route to the west, and the existing high capacity circuits on the east coast. This would provide a strengthened transmission ring for the collection of up to 5.2GW of new renewable generation<sup>7</sup> across the north of Scotland.

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[http://www.scottishsouthern.co.uk/SSEInternet/index.aspx?id=12898&TierSlicer1\\_TSMenueTargetID=1364&TierSlicer1\\_TSMenueTargetType=1&TierSlicer1\\_TSMenueID=6](http://www.scottishsouthern.co.uk/SSEInternet/index.aspx?id=12898&TierSlicer1_TSMenueTargetID=1364&TierSlicer1_TSMenueTargetType=1&TierSlicer1_TSMenueID=6)

2 <http://www.sepa.org.uk/pdf/consultation/current/water/WAT-SG-BEN-34.pdf>

3 The Electricity Act 1989 as modified by the Utilities Act 2000 and the Energy Act 2004.

4 The Office of Gas and Electricity Markets (OFGEM) supports the Gas and Electricity Markets Authority (GEMA) the duties and powers of which are more fully defined under the primary legislation

referenced in note 1 above.

5 [www.berr.gov.uk](http://www.berr.gov.uk) 'The Transmission Issues Working Group Final Report – June 2003', document ref

URN 03/954

6 New renewable generation since 1990, i.e. excluding pre-existing hydro-electric schemes.

7 New renewable generation since 1990.