BRIEFING NOTE FOR MINISTER FOR BUSINESS, INNOVATION AND ENERGY

MEETING WITH VINCENT DE RIVAZ CEO EDF ENERGY
WEDNESDAY 22 MARCH 2017, 08:15 -08:45

Key Messages	***The Scottish Government remains 100% behind the islands in achieving their full renewable energy potential and as stated in the SNP manifesto will continue to press the UK for the necessary support.***
Who	**Vincent De Rivaz – CEO EDF ENERGY** **Matthieu Hue, CEO, EDF Energy Renewables** **Paul Winkle, Scottish Business Director and Director, Torness** **Tim McCoy, Head of Ext Relations**
What	Mr De Rivaz requested this introductory meeting with you – he has met with the FM several times in the past . You met briefly at the opening of EDFs offices in Edinburgh in January. Vincent de Rivaz recently visited the Western Isles and EDF's two wind farm projects there. We believe he is in Edinburgh to garner the support of Conservative MSPs for the island wind CfD. We understand he is meeting with Ruth Davidson, Maurice Golden, and Alexander Burnett directly after this meeting. **<u>Items for discussion</u>** • EDF's current activity and investment plans • Scottish Government energy strategy • Remote Island Wind CFD • Update on Torness and Hunterston • Referendum proposal ***<u>Sensitivities</u>: EDF are the developer of Dorenell wind farm. You sent the s36 variation application to PLI. You will be unable to discuss the Government's views as the PLI is on-going.***
Where	**Parliament T4.02**
Attached documents	**Agenda/Points for Discussion** **Annex A: Draft Energy Strategy** **Annex B: EDF and the Western Isles** **Annex C: EDF Renewables** **Annex D: Nuclear & Biography**
Official support	**Chris Stark**

AGENDA/POINTS FOR DISCUSSION

1) EDF current activity and investment plans

- *EDF have a number of current wind projects which are either at PLI or where they are seeking variations and to increase tip heights.*

2) Draft Energy Strategy

The Scottish Government would welcome EDF's response to the consultation.
In particular:

- *Onshore Wind strategy*

- *While the strategy confirms that there will be no new nuclear "under current technologies" it recognises the key role thermal generation has to play in providing base-load capacity and supporting the resilience of the electricity system, as part of a balanced mix of electricity supply.*

  We have invited views on the future of Scotland's decommissioned thermal generation sites (including Hunterston and Torness)

3) Remote Island Wind CFD

- *The Scottish Government has been working closely with EDF and all key island stakeholders and submitted a robust response to the consultation in January.*
- *We believe the Secretary of State for Energy and Climate Change Greg Clark will co-chair a meeting of the Scottish Island Renewables Delivery Forum with Mr Wheelhouse on the Western Isles (on the 11th of April) although this has not been made public. (Mattheiu Hue, CEO, EDF Energy Renewables Ltd, attends the meetings).*
- *We understand Vincent met with Greg Clark recently and you may wish to ask him whether he has gained any insight into BEIS thinking on the Remote Island Wind consultation.*

4) Update on Torness and Hunterston

- *You may wish to acknowledge that Hunterston B passed its Periodic Safety Review last month, which means (subject to inspection re graphite cracking) it is safe to operate through to 2023 .*

- *Unit 7 at Hunterston B Power Station came off the grid at 9.30pm on March 16 after a fault on control fluid system for the Turbine Generator, this is the conventional non-nuclear part of plant. (As of 17th March EDF is currently investigating the cause of this fault.)EDF notified SG promptly .*

- *SG appreciate EDF's prompt communications with energy and resilience officials given the level of interest in nuclear safety recently – especially given the graphite cracking issue.*

5) Independence Referendum

DRAFT ENERGY STRATEGY **ANNEX A**

- The Draft Energy Strategy sets out a vision for the future of energy in Scotland which is consistent with our **draft Climate Change Plan** and its modelling.
- The Scottish Government's vision for 2050 is for **a modern, integrated, low carbon energy system** that delivers reliable supplies of energy at affordable prices to consumers in all parts of Scotland - building upon the existing economic strengths of the energy sector in Scotland, whilst protecting energy security and tackling fuel poverty

The draft Energy Strategy seeks views on a wide range of issues, including:

- **An ambitious new 2030 target of 50% of Scotland's energy consumption to be met by renewable energy** - demonstrating Scottish Government's commitment to a renewable future.
- **Getting the market right for renewables as the costs continue to fall** – particularly in onshore and offshore wind; providing **certainty and leadership despite changes to UK Government's support for the sector.**
- Building on the success of our existing energy industries and exploring the role of new forms of energy – **Scotland's oil and gas industry** as the engineering and technical bedrock for our wider energy transition.
- Opportunities to develop new energy sources and technologies in Scotland, like **Hydrogen and Carbon Capture and Storage.**
- **A renewed focus on energy efficiency** – taking a targeted approach to reducing demand and improving the energy efficiency of Scotland's homes and buildings through **Scotland's Energy Efficiency Programme**.
- **We want to see an energy market that works for everyone –** the role of regulation, Smart Meters and other innovative technologies, and new business models to support enhanced consumer engagement – particularly for the most vulnerable in society.
- We remain committed to creating **vibrant local energy economies**, as part of a varied and proportionate response to the transformation of Scotland's energy system.
- **A strategic, local approach to planning for energy** – working in partnership with Local Authorities and partners, building on existing Scottish Government support, and exploring the role of a **Government-Owned Energy Company** and the creation of a **Green Energy Bond** to support Scottish energy projects.

The draft Energy Strategy is **open for consultation until 30 May 2017**.

- There are **four accompanying consultation documents** covering Scotland's Energy Efficiency Programme (30 May), Heat and Energy Efficiency Strategies and District Heating Regulation (18 April), Onshore Wind Policy (30 May), and Unconventional Oil and Gas (31 May).
- Throughout this consultation period the Scottish Government will **engage widely with a variety of stakeholders**. The results will be analysed and considered in the development of the final strategy, for publication in the latter half of 2017.

Future for thermal sites in Scotland

- **The Strategy highlights the Scottish Government's position towards thermal electricity generation in Scotland – recognising the key role it has to play in providing base-load capacity and supporting the resilience of the electricity system, as part of a balanced mix of electricity supply.**
- **The Scottish Government takes the view that important strategic and regional factors merit much stronger consideration in future system design and planning as part of the transition to a low-carbon future energy system.**

EDF AND THE WESTERN ISLES **ANNEX B**

- EDF Renewables, together with AMEC Foster Wheeler is developing two wind farm projects on Lewis of 180MW and 162MW.
- The have owned the **Stornoway Wind Farm** development for some years but recently acquired a second larger wind farm development the **Uisenis{Ooshnish} wind farm** on the Eishken Estate towards the south of the island (land owned by Nick Oppenheim).
- Critical to construction of the Western Isles projects has been establishing the needs case for an transmission link to the mainland through the Scottish Island Renewables Delivery Forum which was co-chaired by Fergus Ewing and successive DECC ministers.
- Due to the size of the required cable (around 600MW), SHE-Transmission the network owner has highlighted that a commitment of ready-to-build projects of around 350MW would be needed to submit a 'needs case' to Ofgem for regulatory approval from Ofgem.
- **EDF's purchase of the second wind farm development ensures that this critical level of capacity could be realised. The fact that a large utility is the developer of both also increases certainty that the projects would proceed if they are able to get a CfD(Contract for Difference).**
- EDF(Mattheiu Hue) wrote to you about their acquisition of the Uisenis Project in September 2016 and FM wrote to him on 30th September acknowledging the significance of EDF's continued commitment to the projects for the Western Isles as a whole.
- The projects could be transformational in terms of economic and social benefit for the community.

UK Government announcements

Key to the construction of the wind farms is a route to market in the form of subsidy support that compensates for the substantial added cost of the cable (£670million).

- In November the UKG announced that it had changed its position and no longer felt that Island wind projects should be treated differently to mainland onshore wind projects in terms of the CfD subsidy.
- As subsidy has been removed from mainland onshore wind this meant they were excluded from the next round of auctions .
- UKG launched a consultation on this position which ended on the 31st January.
- **EDF commissioned consultants BVG to produce a report on the socio-economic benefits of their projects on the Western Isles to inform their consultation response and focussed heavily on the industrial strategy benefits of the projects.**

SG Lines to Take

- ***The Scottish Government has been working closely with EDF and all key island stakeholders and submitted a robust response to the consultation in January.***
- ***We believe the Secretary of State for Energy and Climate Change Greg Clark will co-chair a meeting of the Scottish Island Renewables Delivery Forum with Mr Wheelhouse on the Western Isles (on the 11th of April) although attendees have not been formally invited .***

EDF RENEWABLES KEY POINTS **ANNEX C**

- EDF's new offices shows the commitment by EDF to continue to work in Scotland with **35 new jobs** being created to support their growing portfolio of wind farms in Scotland.
- There were 250,000 man hours across their ER construction sites last year (2016)
- **250MW of onshore wind** is in operation across Scotland, enough to supply the needs of around 139,500 homes.
- With a further **245MW of installed capacity** with 3 projects under construction – Dorenell, Corriemoillie and Pearie Law
- EDF currently pays **£536,000 in community benefits** in Scotland each year. Another two funds are due to start early this year (Pearie Law and Corriemoillie) an additional £338,000 and when Dorenell is completed they will receive almost £1 million a year (bringing their total contribution to communities to £1.9 million annually).
- No shared ownership projects although their Stornoway wind farm includes the option for the community to buy a 20% share and EDF have been actively reaching out to SG to engage in shared ownership.

ONSHORE WIND

- SG is committed to supporting onshore wind, using clear planning policy to ensure it is only sited in the correct places.
- Large scale onshore wind currently has no route to market after the UK Government decision to leave it out of the current subsidy system Contracts for Difference (CfDs), this is stalling investment in new projects,
- Industry have asked the UK Government for what has been called a subsidy-free CfD, which stabilises the price allowing industry to de-risk their project and obtain funding,
- FM asked Greg Clark to consider the Scottish onshore wind industry in the BEIS upcoming Industrial Strategy, you wrote to him in October reiterating this, but as yet we have had no response,
- Onshore wind activity (direct and indirect) accounted for £3.2 billion in turnover, 30% of total Scottish low carbon and renewable turnover. Onshore wind also accounted for 13.8% of total low carbon and renewable employment in Scotland.

CS Wind – Manufacturing in Scotland

- EDF have signed an MOU with CS Wind, based in Machrihanish near Campbeltown, to use their turbines, wherever possible, in all future UK developments.
- CS Wind are one of very few turbine manufacturing companies in Scotland and so the commitment from companies such as EDF to use them is extremely important. CS Wind also have committed to working with Liberty Steel in their manufacturing process.

NUCLEAR **ANNEX D**

Key points:

- Scottish Government policy on nuclear energy was outlined in the 2013 *Electricity Generation and Policy Statement* which confirms that nuclear energy will be phased out in Scotland over time, with no new nuclear build taking place in Scotland.
- In the draft energy strategy SG has confirmed that there will be no new nuclear ***"under current technologies".***
- The policy does not preclude extending the operating life of Scotland's existing nuclear stations (Torness and Hunterston B) to help maintain security of supply over the next decade while the transition to renewables and cleaner thermal generation takes place.
- The Scottish Government supported the extension of the operating life of Hunterston B power station until at least 2023, as announced by EDF Energy in December 2012. However, Scotland's long term energy needs can be met without the need for new nuclear capacity and there will therefore be no new plants in Scotland.

We have been critical of the high costs of new nuclear

- The nuclear strike price has been set at £92.5/MWh (or £89.5/MWh if EDF's investment at Sizewell C goes ahead). This compares to onshore wind projects delivering at £82.50 in 2018/19.
- The UK's first new nuclear reactor is not expected to commission until 2023 at the earliest, so UK consumers will be subsidising Hinckley's output until around 2060.
- Depending on wholesale prices Hinkley C could receive an estimated £35 billion subsidy support plus a £10 billion infrastructure guarantee.
- The UKG has recently opened a competition to establish the best design for small modular nuclear reactors(SMRs) which could be cheaper. These are unlikely to be developed until 2030 at the earliest . EDF have some of the prime sites for SMRs in GB including at Torness and Hunterston and have made no secret that they would like the SG position on new nuclear to change.

Background

- Around one-third of Scotland's electricity comes from its two nuclear sites:

HUNTERSTON B

- Hunterston B (commissioned in 1976) has two reactors with a capacity of 960MW now operating at 75% load, due to boiler temperature restrictions. Life extended in December 2012 to 2023. Relevant inspection records can be found at http://www.onr.org.uk/sites/hunterston-b.htm .
- In October 2014 during a periodic shutdown 'Keyway Root Cracks' were discovered two of the 3,000 graphite fuel bricks that make up its No 4 core. This had been predicted and there were no immediate impacts on safety. A total of ten cracks have been found to date.
- The nuclear safety and security regulator ONR has approved the PSR for Hunterston B power station on the 31st of January 2017 the report was published by the ONR on 24 February 2017.
- Following an extensive review of the safety case processes and procedures, ONR has confirmed that subject to ongoing inspections EDF has justified future operations for the period through to end of generation (currently 2023) and defueling/decommissioning activities to 2027. This has not changed the current lifetime expectation of 2023 for Hunterston B.

TORNESS

- Torness (commissioned in 1988) has two reactors with a capacity of 1185 MW capable of supplying over 2.5 million homes. Licensed to operate to 2023 – we expect EDF to seek a 7-year extension for Torness so it can operate to 2030. http://www.onr.org.uk/sites/torness.htm
- On the 16th February 2016 EDF announced its intention to extend the scheduled closure date of Torness to 2030 . It will be for EDF alone to make a commercial decision about whether to do this, however, it will subsequently need to secure permission from the Nuclear Decommissioning Authority (NDA) /Department of Energy Climate Change for the extension.

EDF have secured 1 year agreements for both Hunterston B and Torness in the UKG's capacity market auction – EDF will still sell power to the market in the normal way but will receive an additional 'retainer' payment in return for a commitment of availability to deliver capacity in 2018/19.

BIOGRAPHY

Vincent de Rivaz CBE - Chief Executive Officer of EDF Energy

Member of the Executive Committee of EDF Group. Wholly owned by EDF Group, EDF Energy is Great Britain's largest producer of electricity, of low-carbon electricity, and its biggest supplier of electricity by volume. Vincent was appointed Chief Executive of London Electricity Group in 2002. From that point, he led the merger of London Electricity Group, Seeboard and the Eastern Network to form EDF Energy in 2003. As Chief Executive, he led the incorporation of the UK nuclear operator, the former "British Energy", into EDF Energy from January 2009. A hydroelectric engineer, he joined EDF in 1977 in the External Engineering Centre. From 1985 to 1991, he managed the Far East region for the International Division of EDF, placing EDF as a major international player in China. Between 1991 and 1994, he was Managing Director of the Hydro Power Department of EDF and between 1995 and 1998 he worked as Deputy Head of EDF International Division, in charge of large projects abroad. Vincent de Rivaz joined the EDF Finance Division in 1999 as Deputy Chief Financial Officer and, in 2000, became Director of Financial Strategy and Operations. Vincent de Rivaz was made Chevalier de la Légion d'Honneur in 2009 and an honorary Commander of the British Empire (CBE) in 2012 by Her Majesty the Queen. He was elected as a Fellow of the Royal Academy of Engineering in September 2015.