INTRODUCTION

1. This document relates to the Robin Rigg Offshore Wind Farm (Navigation and Fishing) (Scotland) Bill introduced in the Scottish Parliament on 15 May 2003. It was prepared, in advance of introduction of a Bill with the same short title in Session 1, by the promoters, Offshore Energy Resources Limited and Solway Offshore Limited, to satisfy Rule 9A.2.3(b) of the Parliament’s Standing Orders. The contents are entirely the responsibility of the promoters and have not been endorsed by the Parliament.

2. Explanatory Notes and other accompanying documents published by the Parliament are available separately as SP Bill 1–EN. That document contains details of the accompanying documents published by the promoters, and other documents relevant to the Bill, and where those documents may be inspected or purchased.

OBJECTIVES OF THE BILL

3. In narrow legal terms, the objective of the Bill is to give the promoters statutory authority to interfere with the public right of navigation and trawling for the purposes of building and operating Robin Rigg Offshore Wind Farm within the Solway Firth. The authority sought is limited to that strictly necessary, a matter which is further explained in Sections 4, 8 and 9 of the Environmental Statement prepared separately (copies of which have been provided to the Parliament) and in paragraphs 39 to 46 of this document.

4. To understand the reasons for promoting Robin Rigg Wind Farm, which in turn necessitates the Bill, it will be helpful to explain what is being proposed and the rationale for the development

The development

5. Two development companies – Offshore Energy Resources Limited and Solway Offshore Limited – propose to develop an offshore wind farm on adjacent leases situated on the Robin Rigg sand bank in the Solway Firth.

6. Sixty wind turbines on monopile or multi-pile foundations are proposed within Scottish waters in the Solway Firth. The wind turbines will have a maximum tower height of 80m above
the foundations and a maximum blade diameter of 100m. Ancillary development proposed includes a wind measuring mast on a monopile foundation, an offshore substation, buried cables between the wind turbines and to the offshore substation, buried cables between the offshore substation and the English shore, and buried cables leading to an overhead grid connection line within England.

7. It is intended to seek consents for those parts of the development within English waters or on the English mainland under a mixture of the Coast Protection Act 1949 (for marine cables), the Town and Country Planning Act 1990 (for buried cables onshore) and, if required, section 37 of the Electricity Act 1989 (for overhead lines).

8. There is no development proposed on the Scottish mainland. Within Scottish waters the proposed wind turbines, cables and offshore substation are proposed to be consented under section 36 of the Electricity Act 1989 and an Environmental Statement has been prepared in support of the application for that consent. There will also be an application for consent for these works under the Coast Protection Act 1949. The scope and objective of the Bill is described in paragraph 3.

Wind energy development in the UK

9. For the environmental reasons explained in paragraphs 24-38, wind energy has been exploited onshore in the UK since the early 1990s. By the end of 2001, total installed wind energy capacity in the UK had reached 473MW, supplying the needs of about 285,000 homes.

10. In Scotland, total installed wind energy capacity at the end of 2001 was in excess of 134 MW with a further capacity of over 140 MW permitted, but not yet installed. A further capacity of in excess of 1,000 MW is, or is about to be, the subject of planning applications.

11. The development of wind energy in Scotland has the strong encouragement of the Scottish Ministers. That encouragement can be seen in NPPG 6: Renewable Energy, issued in 2000. NPPG 6 can only apply within the planning jurisdiction, but it is relevant to Robin Rigg Wind Farm in giving a clear indication of the views of the Scottish Ministers on the principle of wind energy development and renewable energy generally. Examples of the attitude towards renewable energy displayed within NPPG 6 can be seen in the quotations in the next paragraph.

12. Paragraph 2 of NPPG 6 confirms that “The promotion of renewable sources of electricity generation, an integral part of the UK Government’s energy policy, has been identified as having a key role in its commitment to addressing the causes of climate change and the introduction of measures in support of the UK’s “Climate Change Programme”. The policy is for renewables to make a steadily increasing contribution to secure, diverse and sustainable energy supplies.”

13. Paragraph 9 of NPPG 6 notes Scotland’s long tradition of generating electricity from renewable sources, while paragraph 12 confirms the Scottish Executive’s proposal to increase the contribution of renewables from that 11% up to 12.5% by 2003, and a further 5% (taking the total to 18%) by 2010.
14. Finally, paragraph 8 of NPPG 6 notes that “burning fossil fuels is a “major contributor” to greenhouse gas emissions. Reducing the use of fossil fuels and replacing them with non-fossil fuel sources is a key part of the Scottish Executive commitment to reducing such emissions. Increasing the proportion of energy supply from renewables is seen as an important contribution to meeting the UK targets for reducing greenhouse gases.”

15. The broader energy policy need for developments such as Robin Rigg Wind Farm is explored in paragraphs 24-38.

**Offshore wind energy**

16. The exploitation of the UK’s offshore wind energy resource has been only recently envisaged on a full commercial basis. In 1996 three electricity supply contracts were awarded to offshore wind energy projects in English waters. One of these, at Blyth in Northumberland, has been implemented with two wind turbines.

17. At the same time as the award of three contracts in 1996 the DTI decided to support a number of offshore wind energy projects through a competitive tendering process. The initial objective was to provide economic support for 6 to 10 projects, using a range of methods, locations and developers, in order to enable a broad exploration of the offshore wind energy resource.

18. In 1998 the Crown Estate granted potential developers licences to research relevant data, including the erection of wind measuring masts. In December 2000 the Crown Estate issued invitations to potential developers to bid for and register sites within the UK’s territorial seas. In April 2001 the successful consortia were announced.

19. Two of the sites which were successful in this first bidding round are situated on adjacent portions of the Robin Rigg sand bank in the Solway Firth, and were promoted respectively by Offshore Energy Resources Limited and Solway Offshore Limited. The project which is now being promoted is a joint development sponsored by these two companies.

20. The size of Robin Rigg Wind Farm has been substantially dictated through rules imposed by the Crown Estate and DTI. In this first round of offshore wind energy development each lease is limited to 30 wind turbines within an area of 10 square km. Within this limit the promoters clearly wish to maximise the generation of electricity from the site. Since the project will incorporate two adjacent leases, it can accommodate 60 wind turbines, whose rated capacity will be between 2.5 MW and 3.6 MW each. Turbine selection has not yet taken place.

21. The reasons for the selection of the area of Robin Rigg for wind energy development are explained in Chapter 3 of the Environmental Statement. In broad terms the site was selected having regard to technical, commercial and environmental considerations, including wind resource, ecological impact, seabed conditions, grid access, and impact on navigation. It is the belief of the promoters of the Bill that the proposed Robin Rigg Wind Farm fulfils all relevant, technical, commercial and environmental criteria. This topic is not expanded on within this memorandum, but is fully reasoned within the Environmental Statement.
22. It may be noted that the proposed wind farm will create in the order of 100 construction jobs and a much smaller number of permanent jobs during the operation of the development. On the experience of wind energy projects elsewhere in the UK, many of the construction jobs will be awarded locally. Indirect economic benefits include manufacturing jobs elsewhere in Scotland for the components of the wind turbines, and the potential for increased tourism as has been observed for wind farms elsewhere in the UK and Europe.

23. In addition to strong encouragement for onshore and offshore wind energy development in Scotland through the UK’s energy policy and through NPPG6 (see paragraphs 9-15 above) it is clear that the continued exploitation of the UK’s wind energy resource enjoys strong public support.¹

**Need for and benefits from wind energy development**

24. In 1999 the UK Government set a target of 10% of electricity generation from renewable resources by 2010. This target derived from earlier aspirations of 1,000MW by 2010 (1990) and the later 1,500MW by 2010 (1993). The UK Government’s support for renewable energy development appears to have strengthened through the years.

25. In Scotland there is substantial existing renewable energy capacity through hydro-electricity. At the same time Scotland enjoys the most productive onshore and offshore wind energy resource in Europe. The UK enjoys 40% of Europe’s wind energy resource, and Scotland enjoys 25% of the UK’s wind energy resource.

26. Scotland has the engineering and other skills required to enable the country to effectively develop a wind energy industry over the coming years, provided that the opportunity is taken to exploit the potential for development. An example of a recent success has been the opening of a wind turbine assembly plant at Macrahanish in Kintyre by Vestas Celtic.

27. The Scottish Executive, against the UK background of a 10% target by 2010, has adopted a policy of achieving 18% of electricity generation from renewable sources by the same date (see paragraph 13). This is an ambitious target which will require a substantial increase in the exploitation of Scotland’s onshore and offshore wind energy resource.

28. The previous paragraphs under this heading have explained in policy terms why Robin Rigg and other onshore and offshore wind energy projects are likely to come forward in increasing numbers as the first decade of this century advances. This and subsequent paragraphs explain in turn the rationale for the UK’s and the Scottish Ministers policies towards renewable energy. The rationale for wind energy development can be found in climate change, a phenomenon now fully accepted by most of the world’s Governments and which has given rise to a number of international agreements designed to limit climate change through reductions in harmful emissions.

¹ See Development Department Research Programme Research Findings No. 93: Public Attitudes towards Wind Farms in Scotland, Scottish Executive Central Research Unit.
29. The global climate change background to the UK’s renewable energy policy can be found in Section 2.2 of the Environmental Statement. Broadly, global mean temperatures are predicted to increase by between 1.7 and 4.2 degrees centigrade by 2100 with corresponding rises in sea level through thermal expansion of the oceans and by melting of the polar ice caps.

30. The likely impact of the climate change expected on human and natural systems are difficult to predict, but they are widely acknowledged by governments as likely to be very severe. For example, one of the effects to be anticipated will be on coastal ecosystems. According to the Inter Governmental Panel on Climate Change (IPCC):

“… many coastal areas will experience increased levels of flooding, loss of wetlands and mangroves and sea water infusion into fresh water sources. The extent and severity of storm impacts, including storm surge floods and shore erosion will increase as a result of climate change …”

31. The IPCC also predicts direct risk to human settlements from climate change through flooding and landslides, with consequent economic losses. Recommendations by the IPCC to reduce the effects of climate change fall into two parts. Firstly, there is the objective of reducing human influences on climate, primarily through reductions in the use of fossil fuels in the emissions of other greenhouse gases. Secondly, measures are proposed to allow human and natural systems to adapt as far as possible to the expected changes.

32. The main international agreement on climate change is the Kyoto Protocol to which the UK is a signatory. This protocol derives from earlier international conventions sponsored by the United Nations including the Earth Summit in Rio de Janeiro in 1992, and a summit in Berlin in 1995.

33. The Kyoto Protocol commits the UK to legally binding targets to limit or reduce greenhouse gas emissions. These commitments are reflected in undertakings given by the UK Government at both an EU and at domestic level. In brief, the UK Government committed itself in 1998 to a domestic target of a reduction in the emissions of carbon dioxide (one of the so-called “greenhouse gases” which play a part in adverse climate change) of 20% below 1990 levels by 2010.

34. Developments subsequent to the 1998 commitment may well mean increasing the targets to which the UK Government is already committed. In particular, the UK Climate Change Programme published in December 2000 recognised that the domestic goal for a 20% reduction in carbon dioxide emissions by 2010 is only a “first stage towards what will be needed in the long term”. Again, the 2002 report of the Government’s Performance and Innovation Unit (reviewing energy policy) recognises that a cut in carbon dioxide emissions of 60% by 2050 could be achieved as a bearable cost, but would require large changes to energy systems and to society.

35. The proposed Robin Rigg Wind Farm must be seen in the context of climate change issues and the policies and commitments relating to climate change described in the previous paragraphs.
36. With the Government’s targets for limiting and reducing harmful gaseous emissions come targets for renewable energy development. These were outlined in paragraphs 13 and 24. The UK Government, and the Scottish Ministers, intend that the 2010 target of 10% generation of electricity from renewables will be rigorously encouraged through an instrument known as the Renewables Obligation. In Scotland the Renewables Obligation (the ROS) will:

“oblige all licensed electricity suppliers in Scotland to obtain Renewables Obligations Certificates sufficient to cover a specified proportion of the electricity supplied to their customers in Scotland”.

37. The details of the ROS are set out in Section 2.5 of the Environmental Statement. It is sufficient for the purposes of this Memorandum to note that the Renewables Obligation for electricity suppliers will rise year on year until at least 2010 (from 3% initially to slightly more than the target figure of 10% in 2010). Large-scale hydroelectricity schemes are excluded from the ROS, and cannot therefore contribute to the 10% target in terms of new generation capacity.

38. The proposed wind farm at Robin Rigg would be competitive within the ROS market. In addition it will make significant contribution to the 10% generation target by 2010. From figures given within paragraph 2.5.1.6 of the Environmental Statement it is clear that the proposed Robin Rigg Wind Farm will contribute around 25% of the total output needed to meet the 2010 target.

ALTERNATIVE APPROACHES

39. The project is proposed within navigable waters. These works have the potential to obstruct public rights of navigation and fishing and the purpose of the Bill is to address the interaction of the project and existing navigation and fishing activities, to ensure that the works are properly regulated. (Although the construction period for the works will be short, the turbines themselves will be in being for many years and will have a continuing potential to interfere with navigation and fishing interests.)

40. So that the project is properly regulated in the context just mentioned, it is necessary to seek specific authority to erect and maintain the works in navigable waters. Section 34 of the Coast Protection Act 1949 requires a consent to be obtained for works such as the proposed wind farm, but it does not give statutory authority for the works, and such authority is needed to create a defence against proceedings in the court for infringements of navigation and fishing rights.

41. The reasons why the view has been taken that section 34 cannot confer the necessary statutory authority are set out in the next five paragraphs.

42. Section 34 is expressed as a restriction, rather than as conferring any statutory authority. By contrast the standard licensing provision in harbour authority local legislation makes express reference to the public rights of navigation. For instance, article 41 of the Comhairle nan Eilean Siar (Ardveenish) Harbour Revision Order 2000 authorises the authority to grant a licence to construct works “notwithstanding any interference with public rights of navigation”. In this sense a Coast Protection Act consent is more akin to a grant of planning permission which the courts have held does not confer statutory authority.
43. A limited interpretation of section 34 is entirely consistent with the long title of the 1949 Act which says, in relation to Part II, that the Act is “to provide for the restriction and removal of works detrimental to navigation”. This language is hardly apt to describe powers to override or extinguish public rights of navigation. The purpose of Part II was clearly to impose an additional restriction on offshore and tidal works, rather than to override public rights. The enactment which section 34 replaced, the Public Harbours Act 1806 (repealed by section 34(5)), provided only for notice to be given of works and clearly therefore conferred no statutory authority.

44. It would be strange if Parliament had intended to provide a means of extinguishing public rights without requiring procedural safeguards. Section 34(2) however leaves it entirely to the Minister’s discretion what notice is to be given of an application and what opportunity is to be given for objections. This is entirely in keeping with an administrative process rather than one resulting in the extinguishment of public rights (contrast the safeguards contained in the Harbours Act 1964 or the Transport and Works Act 1992 in relation to Orders under those Acts authorising works in navigable waters).

45. Section 3(1)(b) of the Transport and Works Act 1992 (which specifically authorises the making of Orders relating to the carrying out of works interfering with rights of navigation in England and Wales) would have been unnecessary if statutory authority to interfere with rights of navigation was conferred by a Coast Protection Act consent.

46. The promoters concluded that there was no way of obtaining statutory authority for the obstruction of navigation and fishing other than through the promotion of a Private Bill in the Scottish Parliament. In particular, for reasons given in the preceding five paragraphs, it was concluded that consent under section 34 of the Coast Protection Act 1949 (which controls works constructed below mean high water which might obstruct or cause a danger to navigational interests) would not confer any statutory authority.

CONSULTATION

47. The promoters engaged Natural Power Consultants, a firm based in Dumfries and Galloway specialising in renewable energy projects, to undertake a programme of consultations for the Robin Rigg proposal. It was recognised that for a project of this size, consultations would have to take place both at the local level and at the national level and both in Scotland and in England. In addition, it was recognised that the Solway Firth is an ecosystem which does not observe national boundaries.

48. Solway Firth Partnership (based in Dumfries) was organised for the purpose of co-ordinating policies and uniting stakeholders with an interest in the Solway, and of providing a forum in which the ecosystem’s management and commercial exploitation should be reconciled as far as possible. The group includes all statutory bodies operating within the Solway, together with individuals, businesses and voluntary groups with an interest in the area.

49. Natural Power reached agreement with the Partnership to use its comprehensive database of interested parties to set up a series of expert groups for initial discussions of the wind farm proposal. The profile of the groups included such statutory bodies as SNH and the local authorities, together with such commercial interests as fishing, tourism and economic
development. In these discussions, stakeholders were asked to comment on various aspects of the proposed development, including environmental and community impacts throughout the Solway region.

50. This was a two-way process, beginning with an initial meeting to decide the composition of the different specialist groups. Groups were set up to cover ecology, landscape, fishing, tourism and economic development. Approximately fourteen people were invited to join each group, with some overlap. Each group was sent the minutes from the others to ensure that all discussions were properly recorded. The groups met four times over a twelve-month period, and all have expressed an interest in continuing their involvement beyond the application stage, if consent is granted, into the construction and operations stages of the project.

51. In addition to the stakeholder consultation process described above, the promoters and Natural Power have held a series of meetings to raise public awareness of the proposed project. These included appearances at the Solway Firth Partnership’s annual conferences, and meetings with clubs, councillors and schools. Two public exhibitions of the project were also organised. These exhibitions were advertised in local papers, and covered by radio and television prior to the events. In Scotland the exhibition was held in Kirkcudbright Town Hall on April 26-27 from 12.00 noon to 9.00 pm on Friday and continuing on Saturday from 10.00 am to 4.00 pm. A series of displays were set up outlining the proposal, showing visual representations of the wind farm, and providing information on expected environmental impacts on marine life, birds and the ecology of the Solway. Experts were present to answer specific questions and a questionnaire was provided for people to express opinions on the proposal or seek additional information.

52. Over 500 people attended during the two days, of which 240 filled in questionnaires. A majority of around 67% expressed favourable opinions of wind farms in general and this proposal in particular. Around 16% expressed objections to the proposal, and the remaining 17% were undecided at the moment.

53. As a result of the consultations described above, the promoters have modified and expanded the scope and methodology of the surveys and analyses supporting the environmental impact assessment. In addition, they have made substantive modifications to the proposal itself, especially as regards the design of the proposed array.

54. Once the applications for consent are submitted, the promoters will attend a further series of meetings at the invitation of local groups to discuss the proposal. In addition, the promoters have set up a website at www.robinrigg.com which will provide a non-technical summary and other information on the proposal. Visitors to the web site will be able to register their interest on line and receive further information as requested. If the project receives consent, this website will continue to operate, and will be updated periodically to provide information on the progress of the project and operation of the wind farm. Visitors to the website will also be able to check on-site weather conditions via a web cam, and download the latest results of on-going survey work relating to the ecology of the Solway.
CONCLUSION

55. This memorandum has explained the objectives of the Bill, the lack of any alternatives to the promotion of the Bill, and the consultations carried out by the promoters in advance of the introduction of the Bill.

56. Given that the proposed Robin Rigg Wind Farm will be the first offshore wind farm in Scottish waters, and one of 18 offshore wind energy projects in the UK, it was felt appropriate to explain the rationale for what is proposed in some detail, and policy within the UK on Scotland deriving from that rationale. The Bill is part of a jigsaw of consents and authorities being sought by the promoters to enable significant addition to Scotland’s renewable energy generating capacity, an addition which will in turn assist significantly to fulfil the renewable energy objectives of Government policy.
This document relates to the Robin Rigg Offshore Wind Farm (Navigation and Fishing) (Scotland) Bill (SP Bill 1) as introduced in the Scottish Parliament on 15 May 2003

ROBIN RIGG OFFSHORE WIND FARM (NAVIGATION AND FISHING) (SCOTLAND) BILL

PROMOTERS’ MEMORANDUM

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