Defendant
First
Scott
23 September 2013
Exhibit GS/1

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT

CO/5020/2013

BETWEEN:

THE QUEEN (on the application of AN TAISCE,
THE NATIONAL TRUST FOR IRELAND)

Claimant

-and-

SECRETARY OF STATE FOR ENERGY
AND CLIMATE CHANGE

Defendant

-and-

NNB GENERATION COMPANY LIMITED

Interested Party

WITNESS STATEMENT OF GILES SCOTT

I, GILES SCOTT of 3 Whitehall Place, London, SW1A 2AW will say as follows.

1. I am the Head of National Infrastructure Consents at the Department for Energy and Climate Change ("DECC"). I and my team are responsible for advising the Secretary of State for Energy and Climate Change ("the Secretary of State") on applications for planning consent for major energy infrastructure in England and Wales, including nuclear power stations. I have held this role since February 2010. Before that I was a Senior Inspector conducting hearings and inquiries into electricity and gas proposals for DECC / DTI. I previously worked for 12 years in the electricity industry as an engineer and manager. I am a Chartered Town Planner and Chartered Electrical Engineer.

2. I am duly authorised to make this statement on behalf of the Secretary of State in response to this claim for judicial review. I make this statement based on my own knowledge, documents held by DECC, and information provided by colleagues within DECC, the Planning Inspectorate ("PINS"), the Office of Nuclear Regulation ("ONR"), and the Environment Agency. Insofar as the matters referred to in this statement are within my own knowledge, they are true. Insofar as they are not within my own knowledge, they are true to the best of my knowledge and belief. There is now produced and shown to me and marked GS/1, a bundle of documents to which I shall refer in the course of this statement. Documents in the Claimant's bundle are referred to in the form CB/pg ***.

3. The Claimant's challenge is directed to the Secretary of State's decision, taken on 19 March 2013, to make a development consent order under the Planning Act 2008 to permit the construction of a new nuclear power station at Hinkley Point C. The Secretary of State is under a duty to consult with other EEA states if the Secretary of State is of the view that a development is *"likely to have significant effects on the environment"* in another EEA state. I understand that the Claimant contends that the Secretary of State's decision was unlawful because in deciding whether or not the development was likely to have significant effects on the environment in Ireland, the Secretary of State should have taken into account what might happen in the event of a catastrophic accident occurring when Hinkley Point C was operational.

4. In summary, the Secretary of State did have regard to accidents before deciding that trans-boundary consultation was not necessary. This was because he concluded, in light of the factors set out below, that such accidents were not likely to occur, i.e. there was no real risk of such an event arising.

5. This witness statement is structured as follows.

(1) A: Development of policy on new nuclear power stations and National Policy Statement EN-6

(2) B: the regulatory justification for the reactor technology intended to be utilised at Hinkley Point C

(3) C: the nuclear regulatory regime

(4) D: the Euratom Treaty

(5) E: the application for a development consent order, the Environmental Statement and screening opinions

(6) F: Communications with the Irish Government

(7) G: Representations from the Republic of Austria

(8) H: The Claimant's representations to the Secretary of State and the Secretary of State's Decision to grant development consent order

(9) I: Conclusion

A. Policy for new nuclear build

(1) Development of policy on new nuclear power stations

6. It has been Government policy since the publication of the White Paper *"Meeting the Energy Challenge: A White Paper on Nuclear Power"* in January 2008 that companies should be able to build new nuclear power stations, that Government will take whatever facilitative actions are necessary to allow this to happen, and that new nuclear power stations will be subject to the same regulation of safety, security and environmental matters which applies to existing nuclear installations..

7. In May 2007, the Government launched a consultation to examine whether nuclear power could play a role in meeting long-term energy challenges: see the consultation document, *The Future of Nuclear Power, The Role of Nuclear Power in a Low Carbon Economy.* In response to this consultation, in January 2008, the Government published a White Paper entitled *"Meeting the Energy Challenge: A White Paper on Nuclear Power"*. **[CB/Tab 6/pg 459].** In this White Paper, the Government concluded that nuclear power should play a part in the UK's future energy mix alongside other low-carbon sources. The Government concluded that it would be in the public interest to allow energy companies the option of investing in new nuclear power stations and that the Government would take active steps to facilitate this. The steps included:-

(1) Making use of the provisions in the then Planning Bill (now the Planning Act 2008) to ensure that nuclear development projects are treated like other

critical infrastructure projects and are dealt with effectively through the use of a National Policy Statement.

(2) Undertaking a Strategic Siting Assessment and Strategic Environmental Assessment;

(3) Meeting the requirements of EU and UK law that new nuclear practices should be required to demonstrate that their benefits outweigh any health detriments ("the Justification Process"), see section B below.

(4) Ensuring that the regulators (the Nuclear Installations Inspectorate ("NII"), now the Office for Nuclear Regulation and the Environment Agency) are adequately equipped to review new build nuclear reactor designs through a process of Generic Design Assessment, ahead of site-specific proposals ("the GDA").

8. The 2008 White Paper considered the safety and security of nuclear power. The Government noted that this was of paramount concern, and that the UK had an effective regulatory framework in place to ensure that the risks are effectively managed and minimised. The consultation process had revealed public concern about safety, security and health impacts, as well as threats from terrorism. The Government was satisfied that new nuclear reactors could be managed as effectively as existing nuclear power stations, and indeed, that new nuclear reactors are designed to be safer than those currently operating. The White Paper noted that there are risks, but the Government considered that these are very low and that the regulatory arrangements, which are effective and proportionate, address those risks (see paragraphs 37- 39).

9. The Government also examined the environmental impacts that arise at different stages of the nuclear life cycle, covering landscape and construction, water use and thermal discharge, mining and milling of uranium ore, and preparation of fuel for nuclear power, and the management of nuclear waste. The Government recognised and appreciated the concerns raised about the potential for accidents and their environmental consequences, but remained satisfied that stringent regulation provided adequate environmental safeguards to assess and mitigate the impacts. The Government also stated that it would carry out a Strategic Environmental Assessment as part of the Strategic Siting Assessment (paragraph 58).

10. The Planning Act 2008 made provision for National Policy Statements. The effect of section 104 of the Planning Act 2008 is that the Secretary of State must decide an application for an order granting development consent in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies - i.e. deciding the application in accordance with the NPS (i) would lead to the UK being in breach of any of its international obligations; (ii) would lead to the Secretary of State being in breach of any duty imposed on him by or under any enactment; or (iii) would be unlawful by virtue of any enactment. Further, there is no obligation to decide the application in accordance with the NPS if the Secretary of State is satisfied that the adverse impact of the proposed development would outweigh its benefits or any prescribed condition is met.

11. In November 2009, the UK Government published its draft Energy National Policy Statements. The Draft National Policy Statement for Nuclear Generation (EN-6) set out the Government's policy on the role of new nuclear power in the energy mix, the Government's view that effective arrangements will exist for managing and disposing of radioactive waste from new nuclear power stations, and a list of ten sites in England and Wales which the Government considered to be potentially suitable for the deployment of new nuclear power stations before the end of 2025. The list of potentially suitable sites was arrived at through a Strategic Siting Assessment process. An Appraisal of Sustainability ("AoS") of the draft NPS was also carried out. The main purpose of an AoS is to examine the likely social, economic and environmental effects of designating the NPS. If potential significant adverse effects are identified, the AoS recommends options for avoiding or mitigating such effects. The AoS of draft EN-6 incorporated an assessment in accordance with the requirements of the European Directive on Strategic Environmental Assessment.

12. Public consultation on these drafts took place between November 2009 and February 2010. The Appraisal of Sustainability assessed the environmental impacts of the Nuclear NPS. The focus was on the effects associated with England and Wales although consideration was given to any significant effects for the rest of the UK and transboundary effects. Relevant member states were being consulted on the draft

Nuclear NPS and its accompanying AoS (S.4.9). The draft recognised that there was a possibility of trans-boundary effects in the event of a significant unintended release of radioactive emissions, e.g. as a result of an accident. However, the draft stated that the risk of such an accident is judged to be very small because of the strict regulatory regime in place in the UK (see paragraph 7.2.45).

13. The consultation responses were considered, and the draft National Policy Statement for Nuclear Generation (EN-6) was subsequently revised in October 2010, when the number of planned sites was reduced to eight **[GS/814-989]**. A revised Appraisal of Sustainability was also produced in October 2010. Consultation on these drafts closed in January 2011. Consideration was given in the revised AoS to any significant effects for the UK and any trans-boundary effects. At S.4.15, the AoS stated:-

> *"It was concluded that significant transboundary effects are unlikely. Due to the robustness of the UK's regulatory regime, there is a very low probability of an unintended release of radiation and routine radioactive discharges from new nuclear power stations will need to be within authorised limits."*

14. The AoS noted that the Euratom Treaty would also require the UK, at the site application stage, to submit to the European Commission information to enable it to determine whether the implementation of the plan is liable to result in the radioactive contamination of the water, soil or airspace of another Member State. I discuss the Euratom Treaty further below at Section D.

15. Chapter 7 of the AoS sets out the key findings of the AoS of the revised draft Nuclear NPS with potentially suitable sites. Chapter 7.2 sets out a summary of findings by sustainable development topic. A number of topics that could have an effect on the environment were considered – e.g. air quality, soils, geology and land use, water quality and resources, radioactive and hazardous waste and flood risk. At paragraph 7.2.69 to 7.2.73, the conclusions on whether there would be any significant trans-boundary effects were stated:-

> *"7.2.69 The Appraisal of Sustainability was informed by the views of both the Environment Agency and the Nuclear Installations Inspectorate, who advised that due to the robustness of the regulatory regime, there is a low probability of an unintended release of radiation. It is therefore considered that significant transboundary effects are unlikely.*

7.2.70 Radioactive releases are strictly controlled in accordance with limits laid down in permits issued by the NII and the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2010. This regulatory system ensures that permitted radioactive discharges are within authorised limits.

7.2.71 The Environment Agency works with operators to ensure that these discharges are not only within the statutory limits but as low as reasonably achievable. The UK is also a contracting party to the OSPAR Convention on the Protection of the Marine Environment of the North East Atlantic. The revised radioactive discharges strategy published in 2009 demonstrates how the UK is continuing to meet the objectives of the Convention's Radioactive Substances Strategy. This includes the objective of progressive and substantive reductions in concentration of radionuclides in the marine environment resulting from discharges, so that by 2020 they add close to zero to historic levels.

7.2.72 The Euratom Treaty will also require the UK, at the site application stage, to submit to the European Commission information to enable it to determine whether the implementation of the plan is liable to result in the radioactive contamination of the water, soil or airspace of another Member State. This determination will include consideration of both planned disposals and accidental releases of radioactive substances. Permission to make radioactive discharges and disposals would not be given by the Environment Agency unless a favourable opinion has been received from the European Commission. Therefore, the regulatory regime will ensure that the current and future situation, with regard to radioactive disposals and waste in the UK and EU transboundary effects, will be maintained in accordance with international agreements.

7.2.73 There is a risk of an accidental release of radioactive emissions associated with new nuclear power stations which are built in line with the revised Nuclear NPS. However, the risk of such an accident is judged to be very small because of the strict regulatory regime in the UK. The nuclear regulatory bodies will need to be satisfied that the radiological and other risks to the public associated with accidental releases of radioactive substances are as low as reasonably practicable and within the relevant radiological risk limit. As part of the site licensing process, a potential operator will be required to demonstrate that the nuclear facility is designed and can be operated such that several levels of protection and defence are provided against significant faults or failures, that accident management and emergency preparedness strategies are in place and that all reasonably practicable steps have been taken to minimise the radiological consequences of an accident. Further detail about the regulatory regime is set out in Chapter 3 of this report."

16. The summary of the revised AoS findings is found at paragraph 7.6. The AoS concluded that:-

"The construction of new nuclear power stations, in line with the revised draft NPS, is not likely to have any significant transboundary effects. The AoS identified the possibility of transboundary effects in the event of a significant unintended release of radioactive emissions e.g. as a result of an accident. The AoS has been informed by the views of both the Environment Agency and the Nuclear Installations

Inspectorate, who advised that due to the robustness of the regulatory regime, there is very low probability of an unintended release of radiation. This is based on expert judgment and experience supported in the case of the new nuclear power reactor designs by the regulators' findings so far from Generic Design Assessments."

17. On 18 July 2011, the House of Commons debated and approved the six National Policy Statements for Energy. This included the overarching NPS for Energy (EN-1), together with five technology specific NPSs for the energy sector. NPS EN-6 covers Nuclear Power Generation. On 19 July 2011, the Secretary of State designated the NPSs under the Planning Act 2008.

(2) NPS EN-6

18. Part 1 of EN-6 contains the introduction. Paragraph 1.7 describes the Appraisal of Sustainability, and paragraph 1.74 summarises the main findings of the Nuclear Appraisal of Sustainability. This confirmed that:-

> *"Significant trans-boundary effects arising from the construction of new nuclear power stations are not considered likely. Due to the robustness of the regulatory regime there is a very low probability of an unintended release of radiation, and routine radioactive discharges will be within legally authorised limits."*

19. Part 2 of EN-6 sets out the assessment principles. It explains the relationship between the Regulatory Justification process and the planning regime; and sets out the role of the regulators in the Infrastructure Planning Committee's consideration of applications for new nuclear power stations and the interaction that will be required between the IPC and relevant regulators (see paragraph 2.1.2). Paragraph 2.7 sets out the relationship between the regulatory framework for nuclear power stations and the planning regime. Paragraph 2.72 states that as with other major energy infrastructure, the regulators play an important role in ensuring the safety, security and protection of people and the environment in relation to the design, construction, operation and decommissioning of nuclear power stations and the transport of nuclear material. The Nuclear Regulators are the Environment Agency, the Office for Nuclear Regulation and the Department for Transport (whose role as regulator has since been taken over by the Office for Nuclear Regulation).

20. Paragraph 2.73 states that the licensing and permitting of nuclear power stations by the nuclear regulators is a separate regulatory process which nuclear power stations have to undergo. It goes on to emphasise that:-

> *"To avoid unnecessary duplication and/or delay and to ensure that planning and regulatory expertise are focused on the most appropriate areas, when considering a development consent application the IPC should act on the basis that:*
>
> - *The relevant licensing and permitting regimes will be properly applied and enforced; and*
> - *It should not duplicate the consideration of matters that are within the remit of the Nuclear Regulators;*
> - *It should not delay a decision as to whether to grant consent until completion of the licensing or permitting process.*

21. Paragraph 2.74 states that certain matters are for consideration of the Nuclear Regulators and the IPC should not duplicate the consideration of those matters itself. Such matters include the Generic Design Assessment and the site licensing and environmental permitting processes. The Nuclear Regulators are also responsible for the various matters in paragraph 3.5.3, including seismic risk, capable faulting, emergency planning, meteorological conditions and proximity to various underground operations.

22. The interaction of the development consent process and the role of the regulators continues throughout EN-6, and is applied to considerations of good design, climate change adaptation, radioactive waste management:-

(1) Paragraph 2.8 considered the concept of good design. In applying these principles to applications for the development of nuclear power stations, the need to ensure the safety and security of the power station, and the need to control the impacts of its operations, must be given substantial weight given the importance of these factors to the operation of a nuclear power station. Paragraph 2.8.4 emphasises that the GDA, site licensing and environmental permitting processes will consider certain aspects of design, which the IPC should not replicate.

(2) Paragraph 2.10 considers climate change adaptation. The GDA process looks at the capability of the power station's generic design features to take into

account the effects of climate change. The subsequent site licensing and environmental permitting processes ensure that new nuclear power stations will be located, constructed, operated and decommissioned with the long term impacts of climate change in mind. Paragraph 2.10.5 states that:-

"The relevant Nuclear Regulators will assess the evidence provided by applicants that external hazards to the proposed nuclear power station have been considered. This will include consideration of the reasonably foreseeable effects of climate change over the lifetime of the power station."

The IPC should have regard to advice from the Nuclear Regulators, in particular the ONR and the EA in relation to climate change impacts and their views on the adaptation measures proposed. Where issues of climate change adaptation fall within the role of the Nuclear Regulators (whether as part of the GDA, site licensing or environmental permitting) the IPC should act in accordance with section 2.7 of EN-6.

(3) Paragraph 2.11.6 considers radioactive waste management. It states that the UK has robust legislative and regulatory systems in place for the management of all forms of radioactive waste that will be produced by new nuclear power stations. The IPC should act on the basis that the relevant licensing and permitting regimes will be properly applied and enforced (as per section 2.7 of EN-6).

(4) Paragraph 3.13 considered proximity to civil aircraft movements. All nominated sites were assessed in relation to their proximity to civil and military aircraft movement and were found to be potentially suitable. The IPC were advised where necessary to seek the advice of the ONR to ensure that the security arrangements sufficiently safeguarded the safety of the site. Paragraph 3.13.3 noted that the Air Navigation (Restriction of Flying)(Nuclear Installations) Regulations 2007 afforded protection from aviation activity by the establishment of a Restricted Area at each nuclear power station. Any aviation activity within a Restricted Area is limited to that specifically permitted by the regulations.

23. Annex C to EN-6 sets out why the sites in question have been found to be potentially suitable. Annex C includes the analysis and conclusions drawn from the Site Selection Assessment criteria, and reflect advice received from specialists and the regulators. They also reflected key points made during the opportunity for public comments on nominations between 2009 and 2011. Section C5 to the Annex considers Hinkley Point.

(1) Criterion D1 (flooding, storm surge and tsunami) is considered at §C.5.19 to C.5.31. Hinkley Point passed this criterion. While there is a low risk of flooding at the site, based on the findings of the Environment Agency and the AoS, it is reasonable to conclude that any new nuclear power station on the site could potentially be protected against flood risk throughout its lifetime, including the potential effects of climate change, storm surge and tsunami.

(2) Criterion D4 (proximity to civil aircraft movements) is considered at §C.5.44 to C.5.47. The Civil Aviation Authority advised that it is potentially reasonable to conclude that any likely power station development within the site boundary can be protected against risks from civil aircraft movement. The ONR has agreed with this advice. Further, nuclear power stations in the UK receive some protection from aviation activity through establishment of a Restricted Area at each individual station. This is established through legislation, being the Air Navigation (restriction of flying) (Nuclear Installations) Regulations 2007. At §C.5.46, it is stated that Hinkley Point met this criterion:-

> *"Given the advice above it is reasonable to conclude that any likely power station development within the nominated site boundary can be protected against risks from civil aircraft movement..."*

(3) At §C.5.15, it is noted that the ONR and the Environment Agency are currently undertaking a process of GDA of new nuclear reactor designs. GDA allows the generic safety, security and environmental implications of new nuclear reactor designs to be assessed up front. The GDA process takes into account all reasonably foreseeable external threats. This includes

meteorological phenomena, the effects of climate and landscape change, geological disturbance, seismic activity, flooding and aircraft impact.

(4) §C.5.96 onwards consider health risks arising from development at Hinkley Point. It is recorded that the AoS has found that the rigorous system of regulation of routine discharges from any new nuclear power station at Hinkley Point should ensure that there are no unacceptable risks to the health of the local population under normal operating conditions. §C.5.98 states that the AoS also concludes that there is a "very small risk" of adverse health impacts arising from an accidental release of radiation, but the multiple safety features within modern nuclear plants makes such an event "exceedingly unlikely". Section 3.13 of the NPS sets out that the risk of an accident resulting in exposure to radiation for workers, the public and the environment is "very small" because of the UK's strict regulatory regime.

24. Under the Localism Act 2011, the Infrastructure Planning Commission was replaced in 2012 by the Major Infrastructure Planning Unit within the Planning Inspectorate, and final decisions were to be made by UK Ministers.

B. Regulatory Justification for EPR

25. The Basic Standards Directive, European Council Directive 96/29/Euratom requires Member States to ensure that all new classes or types of practice resulting in exposure to ionising radiation are "justified" (by their economic, social or other benefits in relation to the health detriment they may cause) in advance of being first adopted or first approved. This process has been implemented in UK law by the Justification of Practices Involving Ionising Radiation Regulations 2004. In relation to nuclear power in the UK, the Justifying Authority for the implementation of the regulatory justification is the Secretary of State. In June 2008, the Nuclear Industry Association made an application for a regulatory justification decision in relation to the class or type of practice set out below.

26. Extensive consultation took place before the Secretary of State took a decision under the Regulations (including a technical consultation on the Regulatory Justification process in May 2007, a public consultation on the NIA's application between December 2008 and March 2009, and a public consultation on the Secretary of State's proposed decision between November 2009 and February 2010). In October 2010, the Secretary of State concluded that the class or type of practice being:-

> *"the generation of electricity from nuclear energy using oxide fuel of low enrichment in fissile content in a light water cooled, light water moderated thermal reactor currently known as the EPR designed by AREVA NP"*

is Justified under the 2004 Regulations. The decision was taken by the making of The Justification Decision (Generation of Electricity by the EPR Nuclear Reactor) Regulations 2010, SI 2010/2844. The reasons for the Secretary of State's decision are found at **[GS/1-176]**.

27. The Secretary of State concluded that the significant potential economic, social and other benefits of the EPR outweighed the potential detriments, which will in any case be minimised by an effective regulatory regime (paragraph 1.60). The Secretary of State considered any potential radiological health detriment, radioactive waste, environmental detriment and the risk of detriment from an accident or terrorist incident at an infrastructure project. The Secretary of State considered that the risk of such incidents should be seen in the context of the regulatory regime which is intended to prevent accidents and protect against terrorist attack. The Secretary of State considered the advice of regulators and other advisory bodies on the measures in place, and noted that no events have occurred relating to a civil nuclear power station in the UK with off-site consequences or where all the safety barriers inherent in the design were breached. The Secretary of State also noted the regulators' assessments under the GDA process that there were at that stage no safety or security shortfalls that would rule out the construction of the EPR on UK. The regulators would undertake a more detailed assessment of the EPR as part of the GDA process and before permitting the start of construction, the regulators would have to be satisfied that the operators have taken all reasonably practicable steps to reduce the risk of accidents and their radiological consequences (as to which, see Section C below).

28. At paragraph 1.59, the Secretary of State concluded that:-

> *"In summary, the Secretary of State is conscious of the extent of damage and health detriment that a release of radioactive material from an EPR would have. However, he has confidence in the regulatory regimes for safety and security of civil nuclear installations and materials in the UK. The regulatory bodies are all independent, experienced and held in high regard around the world. He is also conscious that the EPR includes inherent safety and security features, based on years of international experience with nuclear power stations and which will be subject to approval by the UK regulators. He therefore considers that the likelihood of an accident or other incident occurring at an EPR giving rise to a release of radioactive material is very small."*

29. Further regulatory and planning processes would apply to reactor designs and nuclear power stations before, during and after construction and operation. These further processes were to address more detailed issues about the design of the EPR, including issues relating to proposed siting at a particular location. The decision that the EPR was justified under the Regulations did not mean that the reactor design and the nuclear power station would pass through the subsequent processes successfully.

C. The Nuclear Regulatory Regime

(1) Outline of the Nuclear Regulatory Regime

30. Before April 2011, the main nuclear regulatory bodies were the NII, a division of the Health and Safety Executive, and the Environment Agency in England and Wales and the Scottish Environment Protection Agency in Scotland. The agencies regulate radioactive discharges from nuclear power stations and have responsibilities for ensuring that workers, the general public and the environment are protected against exposure to radioactivity. Nuclear security was the responsibility of the Office for Civil Nuclear Security, also part of the HSE. It placed strict obligations on operators and required site security plans to be regularly reviewed.

31. The ONR was formed on 1 April 2011 as an agency of the Health and Safety Executive. ONR is comprised of HSE's former Nuclear Directorate, including the Office for Civil Nuclear Security and the UK Safeguards Office, as well as and Radioactive Materials Transport Team (formerly within the Department for

Transport). Bringing these regulatory functions under one organisation was a necessary step in achieving the Government's aim of establishing ONR as an independent statutory corporation.

32. Before any new nuclear power station may be constructed, commissioned or operated in the UK, the operator must be granted a number of regulatory licences, permits and other consents. The most significant of these are a Nuclear Site Licence ("NSL") issued under the Nuclear Installations Act 1965, regulated by the ONR, and environmental permits issued under the Environmental Permitting Regulations regulated by the relevant environment agency (in England, the Environment Agency).

33. The NSL includes a standard set of 36 conditions which require the licence holder to implement detailed arrangements covering construction, operations, accumulation and disposal of radioactive waste, management systems and decommissioning. The environmental permit sets limits on radioactive discharges and disposal of gas, liquids or solids to the environment and requires continuing optimisation to minimise these. There is a memorandum of understanding between ONR and the Environment Agency to ensure a consistent and seamless approach between the control of radioactive wastes within the licensed site and any subsequent discharge or disposal.

34. NSL and environmental permits are only granted after a rigorous assessment of the plant design and the operator's management system and arrangements, so as to ensure that radiation doses comply with the regulatory principle of "As Low As Reasonably Possible"("ALARP"), and that Best Available Techniques ("BAT") are used to minimise waste generation and discharges to the environment.

(2) Generic Design Assessment

35. The last nuclear power station to be commissioned in the UK was Sizewell B in 1995. Any new nuclear power station in the UK will be a new design. ONR and the Environment Agency have developed a process of generic design assessment ("GDA") for new reactor designs. Under the GDA process ONR assesses the safety and security of the generic design of a type and make of reactor in advance of

regulation and it being constructed on a specific site. Guidance on the GDA process is found at **[GS/177-210]**.

36. ONR uses its Safety Assessment Principles for Nuclear Facilities ("SAPs"), together with the supporting Technical Assessment Guides ("TAGs") to guide its regulatory decision making. **[GS/211-351]**. To ensure consistency with international requirements, the SAPs are benchmarked against the standards established by the International Atomic Energy Agency ("IAEA"). The SAPs specifically address factors such as external and internal hazards (including earthquakes, aircraft impact, extreme weather, terrorist or other malicious acts) and containment design in the event of a severe accident, whatever the cause. ONR inspectors are guided by the SAPs when reaching a judgment on the acceptability of the safety of the proposed design.

37. GDA is carried out in steps, with increasing detail at each step. It allows the UK regulators to assess the implications of a new design, to identify issues and influence the design, before an application is made to build a nuclear power station at a particular site. The GDA process takes into account all reasonably foreseeable external threats. This includes meteorological phenomena, the effects of climate and landscape change, geological disturbance, seismic activity, flooding and aircraft impact. If ONR is content with safety and security aspects of the generic design, it will provide the requesting party with a design acceptance confirmation ("DAC"). The provision by ONR of a DAC will mean it is confident that, based on its assessments of the generic submitted safety and security documentation, a power station based on that design is capable of being built and operated in the UK in a way that is safe and secure.

38. EDF/Areva were the 'requesting party' for the UK EPR, and submitted the design for GDA to the ONR and the Environment Agency in or around July 2007. The GDA was a four step process. Step 1 (August 2007 to September 2007) involved initial discussions between the designers and the regulators to agree requirements and how the process would be applied. Step 2 (September 2007 to March 2008) consisted of an overview of the fundamental acceptability of the proposed reactor design concept to identify design aspects or safety shortfalls that could prevent construction in the UK.

Step 3 (June 2008 to November 2009) involved a system design safety and security review of the proposed design. Step 4 (December 2009 to 2011) involved a thorough and detailed examination of the evidence given by the safety analysis and included inspection of safety plans, including the generic pre-construction safety report. This generic pre-construction safety report was not specific to Hinkley Point C.

39. Chapter 16 of the pre-construction safety report contains a "Severe accident analysis" **[B/1]**. This is a detailed 297 page document setting out the approach to severe accident control and the multiple layers of defence mechanisms within the EPR, leading to the conclusion that a severe accident is considered "highly unlikely" **[B/3]**. The summary states that:-

> *"The plant's safety concept meets advanced regulatory requirements so that, on one hand, accident situations with core melt which would lead to large early releases are practically eliminated and, on the other hand, low pressure core melt sequences necessitate protective measures for the public, which are very limited both in area and in time.*

40. Chapter 13 of the pre-construction safety report addresses "External Hazards Protection". The chapter sets out details of the protection provided to ensure that the safety related functions of the design meet the safety objectives and are not unacceptably affected as a result of external hazards such as (i) earthquakes; (ii) aircraft crash (accidental and malicious); (iii) hazards associated with the industrial environment and transport routes (external explosion, off-site fires, movement of toxic or corrosive gases); (iv) external flooding; (v) extreme weather conditions; and (vi) lightning and electromagnetic interference. **[GS/]352-425]**.

41. The impact of the earthquake, and the tsunami that struck the NE coast of Japan on 11 March 2011 on the Fukushima nuclear power station was very serious, and led to the release of significant quantities of radioactivity. The UK's Chief Inspector of Nuclear Installations, Dr Weightman, was asked by the Secretary of State to advise on the implications of the events in Japan for the safety of the UK's nuclear industry. His final report was published in September 2011, and contained 17 conclusions and 38 recommendations.

42. The ONR and the Environment Agency completed the planned assessment of the UK EPR generic design in December 2011. A summary of the detailed design assessment of the EdF/Areva nuclear reactor was published on 14 December 2011. A copy of the executive summary of this report is exhibited at **[GS/434-445]**. The report concluded that ONR was largely satisfied with the safety and security aspects of the reactor generic design, and that they believed that the reactor could be suitable for construction on licensed sites in the UK. There were a number of GDA Issues that remained to be addressed, and EdF/Areva had produced a credible resolution plan for each. The assessment was based on a number of detailed technical reports, including reports entitled (i) *Generic Design Assessment – New Civil Reactor Build, Step 4: Civil Engineering and External Hazards Assessment of the EDF and Areva UK EPR Reactor ("External Hazards")*; and (ii) *Step 4 Fault Studies - Containment and Severe Accident Assessment of the EDF and Arevea UK EPRTM Reactor ("the Severe Accident Assessment")*. I exhibit a copy of the executive summaries of these reports at **[GS/434-469]**.

43. The reports concluded that:-

(1) The approach used for the protection of safety critical structures systems and components against the threat from aircraft crash has been examined, including a review of the codes and standards used. In particular, the design of the Air Plane Crash (APC) protective shell for the nuclear island has been assessed in some detail. The regulators were satisfied that the design of the APC shell is satisfactory to withstand impacts from military and commercial aircraft such that essential safety functions can be maintained.

(2) The design against accidental and malicious aircraft impact has been found to be satisfactory (para 981).

(3) Overall, the regulator was broadly satisfied that the claims, arguments and evidence presented to support the containment thermal hydraulics response and severe accidents analysis within the Pre-Construction Safety Report ("PCSR") and supporting documentation submitted as part of the GDA

process, presents an adequate safety case for the generic UK EPR reactor design.

44. The regulators issued an interim Design Acceptance Confirmation and an interim statement of design acceptability for the UK EPR design on 14 December 2011. This identified 31 GDA issues that needed to be resolved before ONR would consider granting a final DAC and the Environment Agency would grant a final Statement of Design Acceptability. This included the resolution plans for addressing the implications of the Fukushima accident.

45. In the year following the interim DAC, EDF and AREVA provided additional safety submissions and proposed additional modifications to address these issues. On 13 December 2012, ONR confirmed that the GDA issues had all been closed, and ONR was content to issue a DAC for the UK EPR nuclear reactor. A Statement of Design Acceptability was also issued by the Environment Agency. A copy of ONR's "GSA Issue close-out assessment of the EdF/AREVA nuclear reactor" is attached at **[GS/990-1063]**.

46. The provision by ONR of a DAC for a design means that it is confident that, based on the EdF/Areva generic safety and security submissions, the design is capable of being built and operated in the UK, on a site bounded by the generic site envelope, in a way that is safe and secure. The DAC confirms that the regulators are satisfied that the evidence demonstrates that risks to workers and the public have been reduced ALARP, in conformity with the overarching legal requirements in the Health and Safety at Work Act that would apply if the design was to be constructed in the UK.

(3) Nuclear Site Licence

47. Powers to licence and regulate nuclear licensed sites rests with the Health and Safety Executive by virtue of the Nuclear Installations Act 1965 ("the 1965 Act"). Licensing and regulatory functions are carried out by ONR on the HSE's behalf. The 1965 Act provides that no site may be used for the purposes of installing or operating a nuclear reactor unless a licence has been granted by ONR and is in force. The three key themes that ONR address in assessing a licence application are:-

(1) the capability, organisation and resources of the applicant corporate body;

(2) the nature of the prescribed activities and the relevant safety case; and

(3) the nature and location of the site.

48. The ONR has published an overview of the nuclear regulatory regime and the processes for licensing nuclear sites in the publication *Licensing Nuclear Installations* **[GS/470-547]**. The 1965 Act requires ONR to attach to each nuclear site licence such conditions as it considers necessary or desirable in the interests of safety or with respect to the handling, treatment and disposal of nuclear waste. Licence conditions provide the basis for regulation by ONR. They generally require the licensee to make and implement adequate arrangements to address the matters identified, including detailed safety standards and safe procedures. Under the licence conditions, arrangements and actions by the licensee having significance for nuclear safety are subject to expert assessment by ONR and may require prior regulatory permission before work commences or changes are implemented.

49. The GDA process assesses the safety case for the generic design of a specific type and make of reactor. GDA is non site specific, but gives a prospective new build operator a clear indication of whether the design would in principle meet regulatory requirements in the event that a licence application is made for the installation of a nuclear power station based on that design. GDA does not replace the licensing process but makes a significant contribution to ONR's assessment of a licence applicant's safety case.

50. The prospective operator of a new nuclear facility will need to identify the site on which it proposes to build a nuclear power station or other installation. There are three main aspects on which the ONR must be satisfied before granting a nuclear site licence:-

(1) The site-specific safety case must show that the nuclear facility would have robust defences against a range of local external hazards, including seismic disturbances, extreme weather events such as flooding, airplane strikes, loss of power/cooling efficiency etc.

(2) The location must be suitable for the establishment of an adequate emergency plan;

(3) The proposal must conform with government siting policy.

51. The licensing process is divided into steps, shown in Table 1 at pg 34 of ONR's *Licensing Nuclear Installations*. Step 4A details how ONR assesses an application. ONR will consider matters such as:-

(1) An assessment of the safety case – this may draw upon a generic safety case for which ONR has issued a DAC but will include additional information relating to site specific aspects of the application;

(2) Assessment of the licence applicant's organisation – ONR must be assured that the applicant has suitable and sufficient organisational structures, resources and competencies to lead and manage for safety effectively

(3) Assessment of the site – ONR will apply SAPs ST1 to ST7 which set out the key safety factors by which it judges the acceptability of any proposed site

(4) Waste management and disposal

(5) Security requirements – ONR will not grant a licence until it is satisfied that appropriate measures are in place to manage both physical and information security.

52. At the conclusion of its assessment of the licence application, ONR will draft a report which sets out the findings of its assessment and make a recommendation to the Chief Inspector of Nuclear Installations as to whether a nuclear site licence should be granted. Prior to granting a licence, ONR needs to be satisfied that the applicant's choice of site is suitable for the proposed installation, that it has appropriate security of tenure on the land to be licensed, that it understands the hazards and risks of the activities that it proposes to carry out, that the site safety case is sufficiently developed to demonstrate that these risks can be adequately managed, and that the applicant has the organisational capability to lead and manage for safety effectively.

53. The Interested Party made an application for a Nuclear Site Licence to install and operate a nuclear installation at its site at Hinkley Point on 29 July 2011. The application documents consisted of a 514 page document, including a detailed

section on the Interested Party's Forward Work Plan for the continued development of the organisation and the PCSR and arrangements for later phases of the project, such as commissioning and operation. The Interested Party stated that it intended to use the GDA PCSR as the basis for developing the site specific PCSR that will present the safety case for constructing and subsequently installing and operating the two reactors. ONR did not require production of a site-specific PCSR before a nuclear site licence was granted, so long as a number of key topics were covered and a schedule for submission of further PCSR was agreed **[B/833]**.

54. The ONR carried out a detailed assessment of the Interested Party's application. The Project Assessment Report is dated 31 October 2012 and is found at B/814. ONR concluded that the Interested Party has put in place an organisational capability and associated arrangements suitable for licence granting. The review of the elements of the safety report against key site specific criteria related to site licensing found the site to be suitable for the proposed development. Section 7 details ONR's assessment of the Hinkley Point C Safety Report and notes that ONR specialists in a wide range of disciplines had reviewed the early batch of safety report submissions, and had concluded that the site was suitable and there was no impediment to granting of a NSL. ONR noted that the Interested Party would need to carry out substantial further analysis in several technical areas before ONR will give permission for first nuclear safety-related construction. A number of further reports were produced that fed in to this conclusion. Examples include:-

(1) "Fault Studies and Severe Accident Analysis Topic Report for Licensing",, which concluded that from the perspective of fault studies and severe accident analysis, there is no impediment to issuing an NSL **[B/9896]**.

(2) "External Hazards Assessment to Inform Nuclear Site Licensing of Hinkley Point C" which presented the findings of the ONR external hazards assessment of the Interested Party's application for an NSL. This concluded that of the 30 or so hazards that had been identified as relevant to the Hinkley Point site, most have already been covered by the GDA "envelope" (i.e. there is nothing site specific about them, and so they are not considered significant from a site licensing point of view.) Others are

significant, such as seismic hazard, capable faulting hazard, extreme high sea level and hazards where the GDA envelope has been exceeded. A much more comprehensive assessment of external hazards issues would be needed to support "permissioning" at a later date (see below). The assessment concluded that, while there remained much external hazards work still to be done by the Interested Party, sufficient knowledge of the Hinkley Point site was now available to be confident that the key topics can be met. It was therefore recommended that a NSL be granted for the Hinkley Point C site.

55. The 1965 Act imposed an obligation on ONR to consult with the Environment Agency before granting a new NSL. The consultation was carried out and the Environment Agency confirmed that the granting of the NSL would not prejudice any legal process under the Environmental Permitting (England and Wales) Regulations 2010 or other environmental legislation (para 143, B/845).

56. The Nuclear Site Licence was granted by the ONR on 26 November 2012 and came into force on 3 December 2012 **[GS/548-567]**. Schedule 2 set out the detailed licence conditions that the Interested Party must comply with. The conditions require the Interested Party to submit various documents and safety cases to the ONR for approval, and provide that the Interested Party shall not commence construction, installation or operation of the plant or process without the consent of the ONR (see, for example conditions 12 (emergency arrangements), condition 13 (terms of reference for nuclear safety committee), condition 14-15 (safety cases to justify safety during each stage), condition 19 (construction or installation of any new plant which may affect safety), condition 20 (commissioning), condition 23 (operating rules).

(3) ONR Consents and Permissions

57. Once a nuclear site licence is granted, the licensee must comply with the relevant provisions of the 1965 Act and all the conditions that ONR has attached to the nuclear site licence. Granting a licence does not in itself give the Interested Party permission to begin nuclear safety related construction on the site. Under the licence

conditions, arrangements and actions by the licensee having significance for nuclear safety are subject to expert assessment by ONR and may require prior regulatory permission before work commences or changes are implemented. This is known as the "permissioning" regime. ONR uses the Safety Assessment Principles outlined above when considering whether to grant permission or consent under the NSL.

58. ONR use the primary power contained in site licence condition LC 19(4) to specify that the licensee should not commence nuclear safety-related construction without a regulatory consent.

59. Following the grant of the licence, work continued on the PCSR to support the stages of construction. On 8 April 2013, the Interested Party published its pre-construction safety report for its proposed development at Hinkley Point C. This document, along with other justifications will inform ONR's decisions on consents and permissions needed ahead of the next stages in the Hinkley Point C project. Work continues on the pre-construction safety report to date, and a further report will be issued before regulatory consent will be considered. The pre-construction safety report is a very lengthy document and is not exhibited here. However, I do attach Chapter 13 (Hazard protection, including airplane strikes) **[GS/352-425]**.

60. Chapter 2 of the summary provides basic details about the design of the reactor. Chapter 3 provides a helpful summary of the safety features of the reactor. Nuclear reactor safety requires that at all times three basic safety functions should be fulfilled – (i) control of the nuclear chain reaction and therefore of the power generated; (ii) cooling of the fuel, including removal of residual heat after the chain reaction has stopped; and (iii) containment of radioactive products. They safety features to ensure those functions are met include:-

(1) Three protective barriers - a series of strong, leak-tight physical barriers, between the radioactive materials and the environment to contain radioactivity in all circumstances;
(2) Defence in depth - ensuring the effectiveness of the protective barriers by identifying the threats to their integrity and by providing successive lines of defence to protect them from failure. Three levels of defence are

provided. Even if a failure of all three levels is postulated, resulting in a "severe accident" situation, there is a fourth level of defence to minimise the consequences of such a situation.

(3) Design choices for reducing the probability of accidents that could cause a core melt. This includes the design of the safeguard systems and civil works structures to minimise the risks from hazards such as earthquakes, flooding, fire and aircraft crashes. The safeguard systems are designed on the basis of a quadruple redundancy. Each system consists of four subsystems, or "trains", each one capable by itself of fulfilling the entire safeguard function. The four redundant trains are physically separated from each other and located in four independent buildings. Protection against an aircraft crash has been further strengthened, in that the reactor building and two of the trains are protected by a double concrete shell. The thickness and reinforcement of the outer shell provide sufficient strength to absorb the impact of a large commercial aircraft. The two other safeguard buildings are remote and separated by the reactor building, which prevents them from being simultaneously damaged. If an aircraft crash were to occur, at least three of the four trains of the safeguard systems would be protected.

(4) Design choices for limiting the consequences of severe accidents so that even if a core melt accident were to occur, there would be only very limited effects outside the reactor site. The aim is to practically eliminate situations which could lead to early radiological releases such as high-pressure core melt ejection from the reactor pressure vessel, high energy corium/water interactions, hydrogen detonations inside the reactor containment and by pass of the containment. The integrity of the reactor containment is ensured through retention and stabilisation of the molten corium inside the containment and cooling of the corium. Further design enhancements were carried out in response to Fukushima to protect against even such extreme events.

61. The pre-construction safety report is currently being assessed by the ONR and the Environment Agency. The PCSR will be expected to demonstrate that the site-specific design meets the targets set out in the SAPs (which have targets for risk of

radioactive releases due to faults/accidents) and that all risks have been reduced ALARP before concluding that the PCSR is adequate to support granting consent for the start of construction. I am told by ONR that if the SAPs and ALARP are met, the risk of accidents involving significant radioactive releases will be very low indeed.

62. If consent is issued for the construction stage, a schedule will then be agreed for the submission of further safety documentation throughout the period of installation, commissioning and operation. Pre-commissioning safety reports will be prepared by the Interested Party and assessed by ONR before any further consents to move to the next stage are granted. A pre-operational safety report will be required and assessed by ONR before any permission is granted to start operations on the site.

63. Nuclear sites are also subject to a high level of inspection. Highly skilled and specialist nuclear safety inspectors are appointed. They enforce the relevant requirements of the 1965 Act, including compliance with licence conditions, and other health and safety legislation relevant to nuclear and radiological safety issues at licensed nuclear sites. Throughout each of the stages highlighted above, ONR will have continued inspection and regulatory oversight of the plant, the safety case, and compliance with the conditions attached to the NSL. Regulation of nuclear safety issues under the NSL is an on-going process throughout the lifetime of the nuclear plant.

(4) Environmental Permits

64. The Environment Agency regulates several aspects of the operation and construction of nuclear power stations in England:

(1) The disposal of radioactive waste, including discharges of gaseous and liquid radioactive wastes, requires a permit under the Environmental Permitting (England and Wales) Regulations 2010 ("EPR10").
(2) The discharge of aqueous effluents (such as from cooling, or dewatering during construction) requires a permit under EPR10.
(3) Certain conventional plant (for example combustion plant used as auxiliary boilers and emergency standby power supplies, and incinerators used to

dispose of combustible waste) may require a permit under EPR10. Some combustion plant may also need a permit under the Greenhouse Gas Emissions Trading Scheme Regulations 2005.

(4) The disposal of waste by depositing it on or into land, including excavation materials from construction, and other waste operations may require a permit under EPR10.

(5) The abstraction of water (for example, for cooling or process use) from inland waters or groundwater, except in some specific circumstances, requires a licence under the Water Resources Act 1991 ("WRA91"). Inland waters include rivers, ponds, estuaries and docks, amongst others.

(6) The construction of new or enhanced flood defence structures, or modification of existing ones, requires flood defence consent under WRA91.

(7) The Environment Agency and the Health and Safety Executive together form the competent authority for *The Control of Major Accident Hazards Regulations 1999* ("COMAH99"). On-site storage of certain substances may fall under these regulations.

65. The Environment Agency has a significant role with regard to flood and coastal erosion risk management. In addition to its regulatory role with regard to permitting work on or near flood defence structures and facilities such as sea walls and river banks, it is responsible for developing and maintaining the national flood and coastal erosion risk management strategy for England. As a statutory consultee in the planning process the Environment Agency provides advice to planning authorities on the flood and coastal erosion risk arising from proposed developments.

66. On nuclear licensed sites the risks of flooding are treated as a potential external hazard and are addressed in the safety case developed by the operator for the site. This is regulated for nuclear safety by ONR.

67. I am told by colleagues in the Environment Agency that the Interested applied for the three key environmental permits that are required for operation of Hinkley Point C in July and September 2011. The applications were for Environmental Permits to:

(1) Dispose and discharge radioactive waste from normal operation of the proposed station;

(2) Operate combustion plant (standby diesel generators); and

(3) Discharge trade effluent, including cooling water, arising from operation of the station

68. The Environment Agency consulted on each of the applications in autumn 2011 and, having carefully considered all the responses to those consultations, consulted on its draft decisions, including a draft Habitats Regulations Appropriate Assessment during summer 2012.

69. I am told that the Environment Agency carefully considered all of the responses it received to the public consultation on its draft decisions and, in March 2013, decided that all three permits should be issued. The Agency published decision documents at that time that provided its responses to the issues raised during consultation and set out its reasons why the permits should be issued. The Habitats Regulations Assessment was also published at that time. In summary, the Environment Agency issued the permits because it considered that the limits and conditions in the three permits are suitable to properly protect people and the environment. Operators are obliged to comply with the limits and conditions of their Environmental Permits; it is an offence not to do so.

70. The permit to dispose and discharge radioactive wastes from Hinkley Point C relates to the waste arisings from normal operation of the station. Normal operation in this context includes relevant operational fluctuations, trends and events that are expected to occur over the likely lifetime of the station. In granting the permit to the Interested Party, the Environment Agency took account of the Commission's opinions under Article 37 of the Euratom Treaty (see next section below)

D. Euratom Treaty

71. Article 37 of the Euratom Treaty states that each Member State shall provide the European Commission with such general data relating to any plan for the disposal of

radioactive waste in whatever form as will make it possible to determine whether the implementation of such plan is liable to result in the radioactive contamination of the water, soil or airspace of another Member State. The Commission must deliver its opinion within six months, after consulting the independent group of experts

72. In August 2011, the UK Government submitted general data (a detailed, 202 page submission) under Article 37 in respect of the operation of a new nuclear power station at Hinkley Point **[GS/568-769]**. Chapter 1 provided details of the site and its surroundings. Paragraph 1.1.4 set out the facility position in relation with other Member States, including the Republic of Ireland, together with demographic data for non-UK reference groups. Chapter 2 set out (i) the main features of the installation, (ii) the main operational and safety procedures (**pg 59 of 202**); and (iii) the reactor operating principles and safety provisions (**pg 66 of 202**).

73. Chapter 3 provides details about release from the installation of airborne radioactive effluents in normal conditions. Chapter 4 provides details about release from the installation of liquid radioactive effluents in normal conditions. It explains how robust waste minimisation and waste management techniques will ensure routine annual discharges at levels below the proposed annual limits. It sets out how discharges will be monitored, and contains an evaluation of the consequences of discharge to the closest Member State to Hinkley Point C, i.e. the Republic of Ireland. Chapter 5 provides details about the management and disposal of solid radioactive waste produced by the operation and eventual decommissioning of the EPR reactors at Hinkley Point C. This sets out the set of core principles that underpin the waste management strategy to be implemented at Hinkley Point C, and the precautions to be taken to contain and shield the waste. Chapter 7 sets out emergency plans and agreements for the exchange of information with other Member States. Chapter 8 is concerned with environmental monitoring.

74. Chapter 6 provides details about unplanned releases of radioactive effluents. It referred to the analysis of the Interim Report of the ONR's Chief Nuclear Inspector which investigated the implications of the Fukushima event for the UK's nuclear fleet, and highlighted any lessons learned. Chapter 6 reviews the various kinds of accidents which could potentially result in unplanned releases of radioactive

substances. Chapter 6 also sets out the plant safety principles which keep risks as low as reasonably practicable and limit the effects of any exposure to radiation (see paragraph 6.1.1), and the EPR safety process based on defence in depth over a number of levels.

(1) Paragraphs 6.1.4 onwards set out a list of internal faults and design basis accidents, together with the systems intended to control them, preventing unacceptable consequences for the plant or the environment.

(2) Paragraph 6.1.5 addresses multiple failure accidents and identifies the specific measures which may be manual actions intended to limit the risk of core melt associated with these scenarios

(3) Paragraph 6.1.6 considers core melt accidents. It states that the purpose of specific safety improvements made to the EPR is to reduce the risk of core melt accidents involving perforation of the reactor vessel, to one tenth of that associated with the existing reactors, for which the risk is already extremely low. The following paragraphs set out the practical measures contributing to the reduction in risk

(4) Paragraph 6.3 contains an evaluation of the radiological consequences of the reference accidents, including a severe accident scenario based on a core melt accident. The assessment considers the releases to atmosphere to reference groups in the vicinity of the facility, the Channel Islands and to the nearest member state, France. The estimated resulting radioactive doses to the public in the nearest member state from airborne radioactive material is extremely low in each case. The highest dose to an adult in the nearest member state (France) was a lifetime accumulated dose of 0.8 micro Sieverts. By way of comparison, the average whole body dose per annum in the UK from natural background radiation is 2,700 micro Sieverts. The predicted accident dose is therefore a very small fraction of the average natural background dose of radiation.

(5) Paragraph 6.3.2 considers release into an aquatic environment. Given the precautions that are taken to ensure that the containment remains sealed, no

design basis accident has been identified that would cause the continuous discharge of waste into the aquatic environment.

75. On 3 February 2012, the European Commission published its Opinion relating to the plan for the disposal of radioactive waste arising from the two EPR reactors on the Hinkley Point C nuclear power station **[GS/770-771]**. The Opinion stated:-

> *"On the basis of these data [submitted by the Government of the UK under Article 37] and the complementary information provided by representatives of the government of the United Kingdom at the meeting of the Group of Experts on 8 and 9 November 2011, the Commission has drawn up the following opinion.*
>
> 1. *The distance from the site to the nearest Member States is 185km for France and 250km for the Republic of Ireland.*
> 2. *Under normal operating conditions, the discharges of liquid and gaseous radioactive effluents are not liable to cause an exposure of the population in another Member State that is significant from the point of view of health.*
> 3. *Solid low-level radioactive waste is temporarily stored on site before transfer to disposal facilities authorised by the United Kingdom regulatory authorities. spent fuel elements and intermediate-level solid waste are temporarily stored on site, awaiting the future availability of a geological repository. Reprocessing of spent fuel is not envisaged.*
> 4. *In the event of unplanned releases of radioactive effluents, which may follow an accident of the type and magnitude considered in the General Data, the doses likely to be received by the population in another Member State would not be significant from the point of view of health."*

76. The Commission concluded that, both in normal operation and in the event of an accident of the type and magnitude considered in the General Data, the implementation of the plan for the disposal of radioactive waste in whatever form from the two EPR reactors on the Hinkley Point C nuclear power station is not liable to result in a radioactive contamination of the water, soil or airspace of another Member State that would be significant from the point of view of health.

77. The evidence provided to the European Commission, which was accepted by it, demonstrated that there is a very low probability of a severe accident occurring. Even if it did, only very small amounts of radioactive material, consisting of a very low dosage, would reach other member states. Any effects would not be significant.

78. The Government made a further submission to the Commission in January 2012, in response to a request for more information about the interim storage of spent fuel

and Intermediate Level Waste from the two reactors to be located at the site. Chapter 3 considers the release from the installation of airborne radioactive effluents in normal conditions. Chapter 4 considers the release from the installation of liquid radioactive effluents in normal conditions. Chapter 6 considers the unplanned releases of radioactive effluents and the design features in place to achieve fundamental safety functions. The risks and hazards considered included (i) internal faults – degradation of containment, exposure to ionising radiation, loss of power supply; (ii) internal hazards – fire, flood, missiles, chemical release; (iii) external hazards – earthquake, flooding, aircraft crash, missiles, fire etc .

79. On 30 May 2012, the European Commission published its Opinion, stating that **[GS/772]**:-

"In conclusion, the Commission is of the opinion that, both in normal operation and in the event of an accident of the type and magnitude considered in the General Data, the implementation of the plan for the disposal of radioactive waste in whatever form from the interim storage facilities for intermediate-level waste and spent fuel at the Hinkley Point C nuclear power station site, located in Somerset, United Kingdom, is not liable to result in radioactive contamination of the water, soil or airspace of another Member State that would be significant from the point of view of health."

E. Screening Matrices and the Application for a Development Consent Order

(1) Significant Trans-boundary Effects

80. Under the Planning Act 2008, development consent is required for development to the extent that it is or forms part of a nationally significant infrastructure project. The development at Hinkley Point C falls into this description, and an application was accordingly made under section 37 of the 2008 Act by the Interested Party. At the time of the application, the application was to be made to the IPC. The IPC was later abolished by the Localism Act 2011, and decisions were subsequently taken by the Secretary of State.

81. The United Nations Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context was adopted in 1991 in Espoo, and is known as the "Espoo Convention". Its objective was to promote environmentally sound and sustainable development, whilst also enhancing

international cooperation in assessing environmental impact, particularly in a trans-boundary context. The Espoo Convention has been implemented by the Environmental Impact Assessment Directive (Council Directive 85/337/EEC, as amended), and transposed into UK law through regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009. This has the effect that where the Secretary of State is of the view that a development is *"likely to have significant effects on the environment in another EEA state"* he must take specified steps to make information about the proposed development available to the other EEA state concerned and consult with that other EEA state. As part of his consideration of the application for a development consent order, the Secretary of State therefore had to consider whether the development was likely to have significant effects on another EEA state.

(2) Draft screening matrices and assessment of trans-boundary effects

82. The IPC had published Advice Note 12 on "Transboundary impacts consultation" **[C/1/vol 3]**. C6 noted the "precautionary approach" which suggested that unless there is compelling evidence to suggest otherwise, it is likely that the IPC may consider that nuclear power stations are likely to have significant transboundary effects. However, Advice Note 12 emphasises that the IPC has a discretion to determine likely significant effects in another EEA State, based in part upon the information supplied by the developer.

83. On 6 October 2011, the IPC received from the Interested Party a copy of their draft trans-boundary screening matrix, which they proposed to submit as part of their application. The screening matrix noted that the nearest EEA countries to the development were Ireland (230km to South West Ireland territorial waters) and France (160km to Cherbourg peninsula territorial waters). The screening matrix noted that airborne or waterborne spread of impact was possible, but the probability of any accident or incident leading to offsite radiological or other impacts was very low because the UK has an effective regulatory framework that ensures that risks are minimised and sensibly managed by industry. Accordingly, the Interested Party

concluded that significant trans-boundary impacts on the environment of other EEA states are not considered likely from either normal operation or accidents.

84. On 20 October 2011, the IPC prepared its own pre-application screening matrix **[GS/778-783]**.

85. The screening matrix recorded that through the design measures built into the development, the delivery of mitigation measures, effective control by the relevant regulatory bodies, conditions and monitoring, impacts on another EEA State will not be significant. The probability of a radiological impact was considered to be low on the basis of the regulatory regimes in place. The IPC concluded that transboundary impacts from accidents during operation or decommissioning will be so low as to be exempt from statutory control. Accordingly, the IPC concluded that on the basis of the information then available, the proposed development was not likely to have significant effects on the environment in another EEA State. No further action was needed under regulation 24 of the 2009 Regulations at this stage. The IPC noted that this duty continued throughout the application process and the matter would be kept under review. I am told by colleagues in PINS that the information provided by the developer and information about the general regulatory framework in the UK amounted to compelling evidence that Hinkley Point C would not have significant transboundary impacts.

86. On 31 October 2011, the Interested Party made the formal application to the IPC for the Development Consent Order under challenge in these proceedings. The application was made in respect of the construction of a European pressurised reactor nuclear power station at Hinkley Point. The application included a substantial body of information, including a comprehensive Environmental Statement, extending to 11 volumes of detailed information and technical appendices. Extracts from the Environmental Statement are found at **[B/2/307]**. These include detailed analysis of the impact of the development on the following areas:-

    (1) Chapter 12: Air quality – assessment of the potential non-radiological air quality impacts associated with the construction and operation of Hinkley

Point C. All the air quality impacts were local only (**[B/2/pg 313, Table 12.28, B/2/412]**

(2) Chapter 18: Marine water and Sediment quality – assessment of the potential impacts to marine water quality during the construction, commissioning and operation of Hinkley Point C. The assessment also considers sediment quality characteristics that could affect marine water quality. Table 18.27 summarises the impacts predicted and demonstrates that they are all assessed to be of local effect, and of minor adverse or negligible significance **[B/2/439, 524]**

(3) Chapter 19: Marine Ecology – assessment of the potential impacts of the construction and operational phases of Hinkley Point C on marine ecosystems at Hinkley Point and, where appropriate, the wider Bridgwater Bay and Inner Bristol Channel environment. The assessment concluded that with appropriate design and management of HPC construction and operation, all impacts upon marine ecological receptors can be rendered limited to no greater than minor adverse significance **[B/2/541, 717]**

(4) Chapter 21: Radiological impacts – assessment of the potential radiological impacts during the construction and operation of two UK EPR reactor units and associated facilities at Hinkley Point C. The assessment considered the impacted of permitted discharges of radioactive liquid and gaseous effluents and disposal of solid radioactive wastes from routine activities during the operation of the EPR reactor units. During operation, the generation of radioactive effluents and wastes will be minimised as far as is reasonably practicable. The contribution to total doses to individuals was assessed as being insignificant. Detailed mitigation techniques were also set out, as the design of the EPR represented the application of Best Available Techniques to reduce radiation. The assessments all showed that, when judged against a range of stringent internationally agreed criteria on the Radiological Protection of Human and non-human species, the assessed impacts from radioactive liquid and gaseous discharges from HPC and other impacts due to site operations such as waste storage and transport are all considered negligible without additional mitigation being required over and above that

already contained in the current design. Therefore, the residual impacts remain very low and a small percentage of the relevant dose limits and constraints (paragraph 21.8.12)**[B/2/738, 784, 792]**

87. Amongst the information provided in the Environmental Statement was an assessment of trans-boundary impacts (see Appendix 7E: Assessment of Transboundary Impacts **[B/1/pg 298]**. Appendix 7E notes that the impacts above are relevant impacts for transboundary assessment, but concludes that:-

> *"...the likely impacts determined through a thorough environmental impact assessment do not extend beyond the County of Somerset and the Severn Estuary."* (paragraph 7E.1.3)

88. Appendix 7E goes on to note that the nearest Espoo Convention states outside the UK are the Republic of Ireland (230km to Irish territorial waters off South Eastern Ireland) and France (160km to French territorial waters off the Cherbourg peninsula). They are therefore well beyond the areas in which impacts are likely (paragraph 7E.1.4). It was further noted that the extent of any possible adverse effects on nature conservation sites of European and national importance did not extend beyond the Severn Estuary, and therefore there was no possibility that any adverse effects would have a trans-boundary impact on another EEA area.

89. The Assessment went on to note that:-

(1) Significant trans-boundary effects arising from the construction of new nuclear power stations were not considered likely by the Government: see paragraph 1.7.4 of EN-6, which states that due to the robustness of the regulatory regime there is a very low probability of an unintended release of radiation, and routine radioactive discharges will be within legally authorised limits.

(2) Evidence from annual reports on Radioactivity in Food and the Environment clearly showed that authorised discharges from nuclear power stations do not pose a significant risk to public health and that all public radiation doses remain well within legal limits (paragraph 7E.1.7)

(3) The Government's submission under the Euratom Treaty concludes that the radiological impact of accidental realises on the water, soil, air space and human health in other EU Member States is insignificant and does not require intervention under current UN IAEA guideline (7E.1.8)

(4) The Interested Party also relied on (i) radioactive substances discharge permit application that concluded that local effects of routine discharges were below internationally recognised screening levels; (ii) GDA documents concluding that local impacts would be within relevant regulatory limits and constraints; and (iii) the Reasons for the Secretary of State's Decision as Justifying Authority on the Regulatory Justification of the EPR reactor as providing additional evidence that significant effects on the environment of other nation states was not likely.

90. The Interested Party also completed an updated screening matrix with the environmental statement. This relied on the Secretary of State's conclusions that in light of the regulatory regime, the likelihood of an accident or other incident giving rise to a release of radioactivity is very small.

(3) Screening Decision

91. The application was accepted for examination by the IPC on 24 November 2011. On 17 February 2012, the Chair of the IPC appointed a Panel as the Examining Authority for the application.

92. On 11 April 2012, following acceptance of the application, the likelihood of significant trans-boundary effects was re-assessed by PINS in light of the detailed information provided in the Environmental Statement. The Screening Decision is found at **[B/3/805]**. The Screening Decision considered a number of factors including:-

(1) The Environmental Statement submitted by the Interested Party, particularly Appendix 7E (see above) **[B/3/805]**

(2) The distance to other EEA states (including 230km to Irish territorial waters) **[B/3/807]**

(3) Submissions made to the European Commission under Article 37 of the Euratom Treaty (see Section D above) **[B/3/809]**

(4) The Secretary of State's decision on the regulatory justification for the EPR in October 2010 (see Section B above)

(5) The statements in EN-6 and its underlying Appraisal of Sustainability to the effect that significant trans-boundary effects arising from the construction of new nuclear power stations are not considered likely; as due to the robustness of the regulatory regime there is a very low probability of an unintended release of radiation (Section A above).

93. Under the heading "Carrier" the Screening Decision referred to the Environmental Statement and noted that potential impacts identified are assessed as not extending beyond the county of Somerset and the Severn Estuary. It recorded that any residual effects on human beings and sensitive ecological species/habitats would be minimised and/or controlled through the imposition of appropriate licensing and monitoring conditions by regulatory agencies. On the basis that the licensing and monitoring conditions are effective, impacts will not be significant **[B/3/808]**. The Screening Decision went on to consider the following criteria:-

(1) Extent and magnitude: the extent and magnitude of impact is controlled through the design measures built into the development, the delivery of mitigation measures, effective control by the relevant regulatory bodies conditions and monitoring – as such, no significant impacts on other EEA States are anticipated. The safety design measures are outlined above **[B/3/809]**

(2) Probability: the probability of a radiological impact is considered to be low on the basis of the regulatory regimes in place. The UK Government's submission to the EU Commission under the Euratom Treaty showed that

transboundary impacts from accidents during operation of decommissioning will be so low as to be exempt from regulatory control **[B/3/809]**

(3) Duration and frequency: the duration and frequency of any impacts will be mitigated given the design measures built into the development, the delivery of mitigation measures and controlled by the relevant regulatory conditions including monitoring **[B/3/809]**.

94. The role of the nuclear regulators in the process is set out above at Section C. It is for the nuclear regulators to assess the safety case, including the extensive detail supplied as part of the PCSR. The nuclear regulators will only grant consent for the construction, commissioning and operation of Hinkley Point C if they are satisfied that the risk of radioactive releases from the nuclear power station meet the requirements in the SAPs, that they are ALARP, and that routine discharges are controlled and reduced using best available techniques.

95. The Screening Decision therefore concluded that on the basis of the current information available from the developer, the proposed development is not likely to have a significant effect on the environment in another EEA member state **[B/3/809, 810]**. I have again been told by PINS that they considered that the entirety of the evidence available about the reactor (including information submitted by the developer, and the GDA assessment process) together with information about the regulatory framework within the UK amounted to compelling evidence that Hinkley Point C would not have a significant transboundary impact.

F. Communications with the Irish Government

96. The UK Government has held regular and on-going discussions with the Irish Government – both at Ministerial level and between officials – to discuss the potential effects of the new nuclear programme.

97. On 13 November 2009, the Government sent copies of the NPS consultation to all other EU Member States, including Ireland. Member States were informed that the

Appraisal of Sustainability did not find that there would be any trans-boundary effects. There was a possibility of trans-boundary effects in the event of a significant unintended release of radioactive emissions, e.g. as a result of an accident. However, due to the robustness of the UK regulatory regime, there is a very low probability of an unintended release of radiation. In February 2010, the Irish Government responded to the NPS consultation, reserving its position on trans-boundary issues and raising concerns about the cumulative impact of the new build programme on the Irish sea. Further discussions took place in June 2010, where detailed information from the Appraisal of Sustainability was provided to the Irish Government. The Irish Government raised a number of enquiries about atmospheric releases, liquid releases and unplanned releases to both air and water. DECC replied on 25 June 2010, noting that the request for information was more appropriate for site specific proposals, rather than the strategic considerations expected for the plan level Appraisal of Sustainability. Nevertheless, DECC informed the Irish Government that the work so far undertaken on the GDA showed that the likely maximum doses were well within the pubic dose limit.

98. On 28 July 2010, a further letter was sent setting out the UK Government's position that the only potential trans-boundary effects would come from a significant unintended release of radioactive emissions, i.e. through an accident. For correspondence between the UK and Irish Governments, see **[GS/784-795]**. The AoS was informed by views of the regulators that due to the robustness of the regulatory regime, there is a very low probability of an unintended release of radiation – this is based on expert judgment and experience and supported in the case of the new nuclear power reactor designs by the regulators' findings so far from the GDA. The nuclear regulatory bodies will need to be satisfied that the radiological and other risks to the public associated with accidental releases of radioactive substances are as low as reasonably practicable and within the relevant radiological risk limit. The operator will be required to demonstrate that the nuclear facility is designed and can be operated such that several levels of protection and defence are provided against significant faults or fail, that accident management and emergency preparedness strategies are in place and that all reasonably practicable steps have been taken to minimise the radiological consequences of an accident.

99. The UK Government re-consulted on the draft NPS in October 2010, and produced a revised Appraisal of Sustainability. The revised Appraisal of Sustainability again concluded that the construction and operation of new nuclear power stations in line with the nuclear NPS was not likely to result in significant transboundary effects. The rationale for this conclusion was the same as that under the original Appraisal of Sustainability: see Section A above.

100. On 28 October 2010, the UK Government sent a copy of the revised NPS consultation to all other Member States, including Ireland, inviting responses. The Irish Government responded to this consultation by letter sent on 24 January 2011. The letter stated that the conclusion that there was a low probability of unintended release of radioactive emissions was due to the robustness of the regulatory regime, and that this conclusion was dependant on the outcome of certain regulatory processes and environmental impact assessments that will take place at future junctures in the implementation of the programme. The Irish Minister concluded that questions raised by the Irish authorities were better dealt with at the site specific stage. The Irish Government did not ask for formal trans-boundary consultations to be opened at this stage (i.e. at the Strategic Environmental Assessment level), but made clear that it is their view that their concerns are best pursued as part of the on-going dialogue between the two Governments on nuclear issues and through the process of trans-boundary consultation at project level. The UK Government shared that view.

101. In September 2011, the UK Government informed the Irish Government that the Interested Party was of the view that there will be no significant trans-boundary effects and that a trans-boundary consultation is not needed. The Irish Government were informed that the IPC were to consider this point when they received the application for development consent at Hinkley Point C. The Irish Government were advised to register an interest in the Hinkley Point development with the IPC. The Irish Government were subsequently also informed of the IPC's screening opinion that no trans-boundary consultation was required. However, I have been told by PINS that the Irish Government did not play any part in the examination process. Further, at no point did the Irish Government request a trans-boundary consultation arising out of the proposals in the NPS, or the specific proposals for Hinkley Point C.

102. The Irish Government asked the Radiological Protection Institute of Ireland ("the RPII") to carry out an assessment of the potential radiological impacts on Ireland from the programme of new nuclear plants in the UK, including Hinkley Point C. The report was published on 21 May 2013. The RPII concluded that the threat to human health was very low, that severe radiological effects in Ireland were unlikely as a result of building new nuclear power plants in the UK but that a socio-economic impact would be seen in the event of a very severe accident. The RPII's conclusions were as follows:-

(1) Routine discharges from the proposed nuclear power plants would be of no radiological significance for people living in Ireland, as radiation doses calculated were 10,000 times lower than the annual radiation dose limit for a member of the public;

(2) Five potential accident scenarios were assessed, all involving severe nuclear accident scenarios with radioactive release to the environment. 90% of the time, during the 48 hours after a potential accident scenario, radioactivity was not transported by wind over Ireland. The probability of severe accidents occurring ranged from 1 in 50,000 to 1 in 33 million per year. The potential impact on Ireland was found to be higher for the lower probability accidents. Where the chance of an accident was 1 in 50,000 the impact on Ireland was predicted to be relatively small. If the chance of an accident was 1 in 33 million per year, the impact would be greatest (but with a very low prospect of it happening).

(3) Even if there was any large accidental release of radioactivity to the Irish Sea equivalent in size to that of Fukushima , the resulting radiation dose to people in Ireland would be less than the annual radiation dose limit for the public.

103. I am told that ONR will consider any representations relating to the safety/security of the plant they are considering under the regulatory regime. If the Irish Government wish to raise concerns about ONR's assessment of the plant's

safety and security, those concerns will be considered. To date, no such concerns have been raised.

G. Exchanges with the Austrian Government

104. The Government of the Republic of Austria ("the Austrian Government") was also informed of the consultation on the NPS and the Appraisal of Sustainability, at Hinkley Point C. The Austrian Government responded in generic terms during these consultation periods. The Austrian Government wrote to the Department for Communities and Local Government on 18 September 2012. Following a press release regarding the European Commission's opinion under Article 41 of the Euratom Treaty on the construction of a new nuclear power plant at Hinkley Point, the Austrian Government "started to look into the issue" and requested information "to allow for an examination whether or not the project is likely to have significant adverse effects on Austria's environment". That request was forwarded to the Planning Inspectorate. The Planning Inspectorate replied on 8 October 2012 explaining why it had not undertaken transboundary consultation and stating that as its examination of the application had closed if the Austrian Government wished to raise any concerns under the Espoo Convention, it should contact the Secretary of State. On 19 October 2012 the Austrian Government wrote to the Secretary of State indicating that it wished to participate in the process of considering the application according to the Espoo Convention and the EIA Directive. On 16 November 2012, the Secretary of State provided the Austrian Government with a copy of the application documents and invited them to comment **[GS/796-813]**. Information was also provided about the extensive public participation that had already occurred in relation to the project, noting that just over 1,200 representations were made to the Examining Authority and 13 hearings were held. The Austrian Government was informed that the Secretary of State expected to reach a decision on development consent in relation to Hinkley Point C within three months of receiving a report from the Planning Inspectorate on or before 21 December 2012. The Austrian Government was asked to bear that timetable in mind in directing any comments Austria wished to make.

105. In January 2013, the Austrian Government, in response to the letter of 16 November 2012, wrote to inform the Secretary of State that it had decided to initiate public participation procedure in accordance with Article 7 paragraph 3 of the EIA Directive and Article 4 of the Espoo Convention. On 17 January 2013, the Secretary of State replied pointing out that he had a statutory duty to announce his decision on the application by no later than 19 March 2013. He therefore requested that comments from the Austrian consultation should be sent to him by 5 March 2013.

106. On 5 March 2013, the Austrian Government wrote to the Secretary of State enclosing comments received from the provinces and the public **[B/3/918]**. It also submitted a technical report assessing the likelihood and effects of a major accident at Hinkley Point C **[B/3/920]**. The technical report asserted that severe accidents with high releases of caesium-137 cannot be excluded, and there would be a need for official intervention in Austria after such an accident. However, the report recognised that the calculated probability of such an accident is below 1e-7/a (which means that such an accident would not be expected to occur more frequently than once in every 10 million years of reactor operation).

H. Decision to Grant development consent order and correspondence with Claimant

107. The Panel's examination of the application began on 21 March 2012 and was completed on 21 September 2012. The examination included a series of accompanied site inspections by the Panel, written evidence presented to the Panel and a series of issue specific hearings and open floor hearings held in the locality. A full list of the main events that occurred during the examination is at Appendix A of the Panel's report. The Planning Inspectorate prepared a report on the application on 19 December 2012. The Panel recommended that the Order be made.

108. The Secretary of State carefully considered the matters raised in that report, and the further representations he had received since that date. On 19 March 2013, the Secretary of State reached his decision on the application for a development consent order **[B/3/978]**. Except as indicated in section V and Annex C to the decision letter, the Secretary of State agreed with the findings, conclusions and recommendations of the Panel and the reasons for his decision are those given by the

Panel in support of their conclusions and recommendations. He concluded that an Order granting development consent for the proposals in the application should be made.

109. The Secretary of State carefully considered the points raised by the Austrian Government on 5 March 2013. The Secretary of State's conclusion on this point is set out at section 6.6.2 of the decision **[CB/3/B995-996].** He concluded that:-

> *"6.6.2(iii) The Austrian expert contends that in assessing the likely environmental effects of the HPC project, I should take into account the effects of very low probability, extreme (or severe) accidents. Effectively, the report says that unless it can be demonstrated that a severe accident (involving significant radiological release) cannot occur, then no matter how unlikely it is, I must consider its consequences as part of the development consent process, having regard, in particular, to the possible deleterious effects on Austria. However, in my view, such accidents are so unlikely that it would not be reasonable to "scope in" such an issue for environmental impact assessment purposes."*

110. The Secretary of State also considered submissions made by the Minister for the Environment in Northern Ireland, who expressed concerns about the environmental impact the HPC project would have on protected habitats in Northern Ireland. The Secretary of State referred to the Habitats Regulations Assessment carried out in respect of the application, which concluded that there would be no adverse effect on any European site as a result of the HPC project. At para 6.6.1(ii), the Secretary of State went on to conclude that:-

> *"That assessment was further borne out by the facts that the distance between the site of HPC and the range of its likely impacts are such that granting consent would have no impact on a European Site in Northern Ireland (over 300 miles distant) or in the Republic of Ireland (over 155 miles distant)."*

111. The Secretary of State also referred to the European Commission's assessment of HPC under the provisions of the Euratom Treaty, and its conclusion that, both in normal operation and in the event of an accident, the implementation of the plan for the disposal of radioactive waste in whatever form from the two EPR reactors at Hinkley Point C is not liable to result in a radioactive contamination of the water, soil or airspace of another Member State that would be significant from the point of view of health.

112. At section 6.7 of the decision, the Secretary of State recorded that his decision to make the Order is only one of a number of decisions that need to be made by Government or regulators before the HPC project can go ahead. This decision was a decision about the use of land. He re-iterated that the nuclear safety aspects of the project are regulated by the ONR and the Environment Agency, and that a nuclear site licence has been granted and the Generic Design Assessment process concluded (see para 6.7.1 to 6.7.2). Paragraph 6.7.3 states that:-

> *"Also relevant from the nuclear safety point of view is the Secretary of State's Regulatory Justification decision of 2010. I note that NPS EN-6, paragraphs 3.12.9 and 3.12.11 state that I should have regard to this when considering potential effects on human health and wellbeing and act on the basis that the risk of adverse effects resulting from exposure to radiation for workers, the public and the environment will be adequately mitigated because of the need to satisfy the requirements of the UK's strict legislative and regulatory regime as well as the ONR's implementation on the Government's policy on demographics. I am satisfied that, in light of the Justification decision and the further work done by ONR and EA as nuclear safety regulators in connection with the HPC project, there is no need to consider these issues further in the context of this application."*

113. Prior to the decision to make the 2013 Order, the Claimant took no part in the process which was considering whether to make a development consent order for Hinkley Point C. However, on 18 April 2013, the Claimant wrote to the Secretary of State, making what it termed "a rather extraordinary request" asking that the development consent be set aside and the decision making process re-visited **[CB/3/B1002]**. The Claimant expressed concerns about the Environmental Impact Assessment and decisions taken regarding trans-boundary consultation so that there was no consultation with Ireland or the Irish public. The Claimant asked the Secretary of State to confirm (1) whether Ireland had been formally consulted under Directive 85/337 as amended, under the Espoo Convention, or under the Aarhus Convention; (2) if so, evidence of the consultation and any response; and (3) if not, the basis on which the UK determined that such consultation was not required.

114. The Secretary of State replied on 26 April 2013 **[CB/3/B/1009]**. He confirmed that the Irish Government had not been formally consulted in relation to those matters set out in question 1 of the Claimant's letter. He explained the basis for this decision, and provided links to the trans-boundary screening report completed by

the Planning Inspectorate. This had concluded that the HPC development was not likely to have a significant effect on the environment of another EEA state, so that no trans-boundary consultation was undertaken. The Secretary of State referred to the information supplied by the developer, and the conclusions reached by the European Commission under the Euratom Treaty. He also emphasised to the Claimant that the safety and design features of the reactor were beyond the remit of the Planning Act process and were matters properly considered as part of the nuclear site licensing process.

115. The Secretary of State also noted that although the screening report concluded that the development was not likely to have a significant effect on the environment of another EEA state, it remained open to the governments of, or organisations in or members of the public of such states to take part in the examination process for the application for development consent for HPC. The Austrian Government did ask to be consulted, and the Secretary of State took those representations into account before making his decision. The Irish Government did not make any such request.

116. The Secretary of State confirmed that the UK Government does not intend to revisit the decision-making process on the Development Consent Order to facilitate further consultation on that decision. Nevertheless, there remained opportunities for organisations and individuals to comment on the potential effects of the HPC development in respect of the site specific design issues, as nuclear safety related construction cannot begin until the operator obtains a formal consent from the ONR. That consent will depend on the ONR's satisfaction with the adequacy of the relevant site-specific changes to the generically approved reactor design and the associated safety and security reports, as well as its being satisfied with the operator's organisational capability and technical readiness to begin construction. It was noted that such consent was not expected to be given until a period of some months, perhaps as much as a year, from 26 April 2013. The Secretary of State informed the Claimant that if they wished to participate in that process, they should subscribe to ONR's free email service which would keep them up to date on key ONR developments including anything regarding Hinkley Point C.

I. Conclusion

117. The Secretary of State considered the extensive evidence before him, and concluded that the development was not likely to have significant effects on the environment in another EEA State. For the reasons set out above, the Secretary of State concluded that there was no real risk of trans-boundary effects. He had regard to the possibility of severe accidents, but concluded that the risk of any such accidents was very low indeed due to the robustness of the regulatory regime in the UK.

I believe the contents of this statement are true

Signed: _____

Date: 23 September 2013