

Application for development consent in respect of 'The Sizewell C Project':

Transboundary screening

The UK Planning Inspectorate wrote to the Department of Housing, Planning, and Local Government on 8th July 2020 regarding the proposed construction of a new nuclear power station at the Sizewell C site in Leiston, Suffolk, England. The Secretary of State has received an application for development consent (DCO) in respect of 'The Sizewell C Project', a new nuclear power station in Suffolk, on the East coast of England, United Kingdom (UK).

The Proposed Development has been identified as a project within the scope of paragraph 2 of Appendix 1 to the Espoo Convention and EU Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment ("the EIA Directive"), as implemented by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations").

Prior to receiving the application, the Secretary of State undertook a screening assessment in October 2019 to identify if there were likely significant adverse transboundary effects on the environment in your state. This concluded that the Proposed Development is not likely to have such effects. Following receipt of the DCO application, the Secretary of State has now re-screened the Proposed Development to reconsider if there is the potential for likely significant adverse transboundary effects in your state. The Secretary of State remains of the view that the Proposed Development is not likely to have such effects.

EPA assessment:

The Sizewell C site is located on the east coast of England and is over 520 km from the east coast of Ireland. A report from the Radiological Protection Institute of Ireland (RPII) in 2013, "*Assessment of the potential radiological impacts on Ireland of the UK's proposed nuclear power plants*", concluded that the routine operation of the proposed nuclear power plants (including Sizewell C) would have no measurable radiological impact on Ireland or the Irish marine environment. In this report it was estimated that the total annual radiation dose to a person in Ireland after 50 years of constant and continuous discharges to air from the operation of a new nuclear power at the Sizewell C site (0.001 $\mu\text{Sv/y}$) was well within the radiation dose limit for a member of the public (1000 $\mu\text{Sv/y}$ or 1mSv/y).

As well as assessing routine operations, the 2013 RPII study also assessed the radiological impact on people in Ireland from five potential accident scenarios. For this assessment the Wylfa site, being the closest of the eight locations identified by the UK Government for construction of new nuclear power plants, was identified as the accident location which would

give rise to the 'worst case' in terms of radioactive contamination and radiation dose in Ireland. Apart from the amount of radioactivity released to air, weather was found to be the most significant factor in estimating the impact on Ireland. In cases where the weather conditions at the time of the accident gave rise to the radioactivity released being carried directly to Ireland it was found that food controls and/or temporary agricultural protective actions would be required for a period ranging from days and weeks to many years depending on the severity of the accident.

The Sizewell C site is over 400 km further away from Ireland than the Wylfa site. In the 2013 RPII study it was estimated that the concentrations of radioactivity in the air and radioactive contamination on the ground on the east coast of Ireland following unit accidental releases from Sizewell C were approximately one order of magnitude lower than those from Wylfa. However, a severe accident at Sizewell C (combined with unfavourable weather) which resulted in radioactive contamination in Ireland could also lead to food controls and agricultural protective actions being introduced. Indeed, the 2016 report '*Potential Economic Impact of a Nuclear Accident - An Irish Case Study*' by the Economic and Social Research Institute found that if there was an accident at a nuclear power plant in north-western Europe which resulted in no actual contamination in Ireland, there would still be an impact on Ireland in terms of reputational losses, particularly in relation to tourism and export markets, in the region of €4 billion. This indicates the need to maintain arrangements under the national emergency plan for such an accident, despite the low probability of it occurring.

Therefore, while there is no measurable radiological impact expected from the expected routine environmental releases from Sizewell C, given the potential transboundary effects in Ireland of a severe (albeit unlikely) nuclear accident at the Sizewell C site it is recommended that Ireland register as an interested party in the in the examination process.

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