Office for Nuclear Regulation

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Rt Hon Chris Huhne Secretary of State for Energy and Climate Change Department of Energy and Climate Change 3 Whitehall Place London SW1A 2AW

HM Nuclear Installations Inspectorate
MIKE WEIGHTMAN
HM Chief Inspector

30th September 2011

Dear Secretary of State,

Japanese Earthquake and Tsunami: Implications for the UK Nuclear Industry

In response to your request of 14th March, I have pleasure in sending you my final report on the implications of the Fukushima accident for the UK nuclear industry. This follows my Interim Report, which was published in May.

As indicated in my Interim Report, this Final Report has a broader scope, covering all types of nuclear installations in the UK. Both reports link into other work underway or planned, which seeks to learn lessons at an international level from the events at Fukushima. This includes the European Council "Stress Tests" and the work of the IAEA and the OECD's Nuclear Energy Agency.

This report looks in more detail at the evidence and information gathered from the accident, and analyses it to identify possible improvements to nuclear safety and regulation in the UK. There are, of course, still some uncertainties about the detailed knowledge of events; some of these may never be resolved given the extreme nature of the accident and the widespread loss of instrumentation. Such uncertainties do not prevent us, however, from knowing enough to draw conclusions and lessons for the UK nuclear industry.

My view remains that the direct causes of the Fukushima nuclear accident, a magnitude 9 earthquake and the associated large tsunami, are far beyond the most extreme natural events that the UK would expect to experience. In addition, I am satisfied that our approach to design basis analysis, which requires designers and operators to demonstrate that adequate protection is in place for natural events of a very remote nature, mean that the UK nuclear industry is adequately protected.

However, this does not mean that more cannot be done. The quest for improvements to the standards for the design of nuclear facilities and their operation must never stop. Seeking to learn from events, and from new knowledge and experience, both nationally and internationally, must continue to be a fundamental feature of the culture of the UK nuclear safety system, for both operators and regulators.

It is in this context that I offer my conclusions and recommendations in the enclosed report.

Yours sincerely,

Dr Mike Weightman, FREng, FInstP, CPhys, CEng HM Chief Inspector of Nuclear Installations and Executive Head of ONR