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Dear José

# New nuclear power stations: Generic Design Assessment Design Acceptance Confirmation for the AP1000<sup>®</sup> Reactor

The Office for Nuclear Regulation (ONR) has undertaken a Generic Design Assessment (GDA) of the Westinghouse Electric Company AP1000<sup>®</sup> nuclear reactor during the period April 2007 to March 2017, in accordance with the process identified in *New Nuclear Power Stations: Generic Design Assessment: Guidance to Requesting Parties*<sup>1</sup>.

On 14 December 2011 ONR issued an Interim Design Acceptance Confirmation (iDAC) for the AP1000<sup>®</sup> nuclear reactor. This identified 51 GDA Issues that needed to be resolved before ONR could consider granting a final Design Acceptance Confirmation (DAC). Since then, Westinghouse have provided additional safety submissions to address these Issues.

ONR has assessed this information and has written to confirm that it provides adequate responses, and that all the GDA Issues have been closed. The conclusions of our assessment are provided in the report New Nuclear Reactors: Westinghouse Electric Company AP1000® Nuclear Reactor - Summary of the GDA Issue Close-Out Assessment of the Westinghouse Electric Company Nuclear Reactor, dated March 2017 which will be published on the ONR website on 30<sup>th</sup> March 2017. <a href="https://www.onr.org.uk/new-reactors">www.onr.org.uk/new-reactors</a>.

On the basis that all the GDA Issues identified in the iDAC have now been closed, ONR is content to issue a DAC for the AP1000® nuclear reactor.

The DAC for the AP1000® nuclear reactor (ONR-GDA-DAC-17-001) is enclosed with this letter. It remains valid for a period of ten years from the date of issue. The status of the DAC is as set out in *Generic Design Assessment: Guidance to Requesting Parties*<sup>1</sup>.



The DAC does not guarantee that ONR will grant permission for the construction of a power station based on the AP1000® nuclear reactor design at a particular site in Great Any organisation intending to build and operate an AP1000® reactor in Great Britain must first obtain from ONR a nuclear site licence, as required under the Nuclear Installations Act 1965. Subsequently, Consents must be obtained for construction of that installation in accordance with the conditions attached to that licence. In addition, that organisation will need to comply with the requirements of the Nuclear Industries Securities Regulations 2003 (as amended) as they apply to the relevant site. However, ONR will, during the period for which it remains valid, take the DAC into consideration in assessing the adequacy of any licensee's safety and security case for requesting consent for the start of construction for an AP1000® nuclear reactor at a site licensed in Great Britain.

Signed

**Dated** 

28/03/2017.

**Dr Richard Savage** 

Chief Nuclear Inspector Office for Nuclear Regulation

### References

1. Nuclear power station generic design assessment – guidance to requesting parties. Version 3. ONR. September 2016. http://www.onr.org.uk/new-reactors/ngn03.pdf

#### **Enclosures**

1. ONR-GDA-DAC-17-001 - Design Acceptance Confirmation for the AP1000® Nuclear Reactor



### GENERIC DESIGN ASSESSMENT

**DESIGN ACCEPTANCE CONFIRMATION** 

## FOR THE WESTINGHOUSE ELECTRIC COMPANY AP1000® NUCLEAR REACTOR

The Office for Nuclear Regulation (ONR), in accordance with the document Nuclear Power Station Generic Design Assessment – Guidance to Requesting Parties. Version 3 September 2016, hereby gives Westinghouse Electric Company a Design Acceptance Confirmation (DAC) for the AP1000® nuclear reactor.

### This DAC:

- (a) is given following the assessment of the material included in the GDA Submissions described in the Annex; and
- (b) supersedes the Interim Design Acceptance Confirmation given by ONR(HSE) for the AP1000® nuclear reactor on 14 December 2011.
- (c) does not guarantee that ONR will grant permission for the construction of a power station based on the AP1000® nuclear reactor design at a particular site in Great Britain. Any organisation intending to build and operate an AP1000® reactor in Great Britain must first obtain from ONR a nuclear site licence, as required under the Nuclear Installations Act 1965.
- (d) is valid for a period of ten years beginning on the date on which it is issued.

Signed

Date of Issue 28TH MARCH 2017

**Dr Richard Savage** 

Chief Nuclear Inspector
Office for Nuclear Regulation





# Annex to the Design Acceptance Confirmation for the AP1000® Nuclear Reactor GDA Submissions

For the purposes of the DAC, the generic design of the AP1000® reactor and the generic safety and security provisions are described in the following submissions:

- 1. AP1000® Pre-Construction Safety Report, UKP-GW-GL-793, Revision 1, January 2017
- 2. AP1000® Design Reference Point for UK GDA, UKP-GW-GL-060, Revision 10, January 2017
- 3. AP1000® Master Submission List for UK GDA, UKP-GW-GLX-001, Revision 2, March 2017