Health and Safety Executive

NUCLEAR DIRECTORATE

GENERIC DESIGN ASSESSMENT – NEW CIVIL REACTOR BUILD

STEP 3 SECURITY ASSESSMENT OF THE EDF AND AREVA UK EPR

DIVISION 5 ASSESSMENT REPORT NO. AR 09/043-P

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EXECUTIVE SUMMARY

This report presents the findings of the security assessment of the EDF and AREVA UK EPR undertaken as part of Step 3 of the Health and Safety Executive's (HSE) Generic Design Assessment (GDA) process.

At present no significant issues have been identified that would preclude this design from being adequately secured against malicious capabilities, as identified in the UK protectively marked Nuclear Industries Malicious Capabilities Planning Assumptions document.

LIST OF ABBREVIATIONS

CBSIS	Computer Based Systems Important to Safety
EDF and AREVA	Electricité de France SA and AREVA NP SAS
GDA	Generic Design Assessment
HSE	The Health and Safety Executive
ND	The (HSE) Nuclear Directorate
NIMCA	Nuclear Industries Malicious Capabilities Planning Assumptions
NISR2003	Nuclear Industries Security Regulations 2003
OCNS	The Office for Civil Nuclear Security (Division 5 of ND)
RP	Requesting Party

TABLE OF CONTENTS

1 INTRODUCTION

1 This report presents the findings of the security assessment of the EDF and AREVA UK EPR undertaken as part of Step 3 of the HSE Generic Design Assessment (GDA) in keeping with the process described in the *'Guidance Document for Generic Design Assessment Activities*' dated January 2007 (Ref. 1).

2 This security assessment has involved the exchange of sensitive and protectively marked information between the Office for Civil Nuclear Security (OCNS), the Requesting Parties and foreign regulatory and security agencies.

2 NUCLEAR DIRECTORATE'S ASSESSMENT

2.1 Requesting Party's Security Assessment

3 In September 2009, EDF and AREVA supplied OCNS with protectively marked technical reports describing security measures on the UK EPR design.

2.2 Standards and Criteria

4 In making a security assessment of the EDF and AREVA UK EPR design, OCNS took into account information and standards in two protectively marked documents the Nuclear Industries Malicious Capabilities Planning Assumptions (NIMCA) (which is the United Kingdom's Design Basis Threat), and the Nuclear Industries Security Regulations 2003 Technical Requirements Document.

2.3 Nuclear Directorate Assessment

5 Following receipt of the protectively marked technical report describing security measures on the UK EPR design, OCNS is carrying out a detailed review of the submission to identify the areas of the generic design that require physical protection. By December 2009, OCNS should have a good understanding of these features and the philosophy of the design intent.

6 OCNS will extract relevant sections of the technical report to be forwarded to the GDA Safety Assessment Team by November 2009 for verification and validation. This will specifically concentrate on the identification of Vital Areas and Computer Based Systems Important to Safety (CBSIS). After the ND Safety specialists have validated and verified the Vital Area Identification work OCNS will apply technical security requirements to determine whether further physical protection is required on the generic design.

7 Following feedback from ND safety specialists, OCNS will engage in detailed discussions with EDF and AREVA to progress and conclude the development of generic conceptual security arrangements. This work will be completed by June 2011.

8 To date, no issues have been identified that might suggest that the EDF and AREVA UK EPR design is not capable of supporting the development of a robust security regime.

3 CONCLUSIONS AND RECOMMENDATIONS

9 At present no significant issues have been identified that would preclude this design from being adequately secured against malicious capabilities, as identified in the UK protectively marked NIMCA. Once a complete understanding of the security philosophy applied to the EDF and AREVA UK EPR design has been developed, OCNS will assess the impact of the validation of the Vital Areas by ND Safety Assessors before making a more definitive statement.

10 It is recommended that OCNS proceed to GDA Step 4 assessment of the EDF and AREVA UK EPR.

4 REFERENCES

1 *Guidance Document for Generic Design Assessment Activities.* Office for Civil Nuclear Security. Version 2 201206, January 2007.