Japanese Earthquake and Tsunami: Implications for the UK Nuclear Industry

Charles Temple

HM Superintending Inspector (Nuclear Installations)

Head of Discipline – Radiological Protection (RP), Emergency Preparedness and Response (EP&R)

Presentation overview

- About ONR
- ONR Chief Inspector's Reports
- Conclusions/Recommendations relating to RP/EP&R
- RP/EP&R Specific Lessons Learned

RP – Radiological Protection; EP&R – Emergency Preparedness and Response

About ONR

 ONR became an agency of the Health and Safety Executive on 01 April 2011

 The new body brings together the regulation of nuclear safety, security, safeguards and safe transport of radioactive materials.

 ONR's mission is to secure the protection of people and society from the hazards of the nuclear industry

ONR Chief Inspector's Reports

- Secretary of State's Request:
 - Identify lessons to be learnt by the UK nuclear industry
 - Co-operate and co-ordinate with international colleagues, to include EC 'stress test' requirements
- Interim report published May 2011 www.hse.gov.uk/nuclear/fukushima/interim-report
- Final report published October 2011 : www.hse.gov.uk/nuclear/fukushima
- 17 conclusions and 36 recommendations

ONR Chief Inspector's Reports Key Conclusions / Recommendations

Interim report conclusion 1

No reason for curtailing operation of NPP or other nuclear facilities in the UK.

Interim Report Recommendation 2

UK Government to consider reviewing the Japanese response.

Interim Report Recommendation 3

Nuclear Emergency Planning Liaison Group to review UK's national nuclear emergency arrangements.

- Key Issues: Radiation monitoring
 - Central Government Response
 - Emergency Services' Capacity and Capability
 - Extendibility

Office for Nuclear Regulation

ONR Chief Inspector's Reports Key Conclusions / Recommendations

Interim Report Recommendation 6

ONR to consider ... programme of emergency exercises overseen by the regulator.

Key issues: - Prolonged event (including Recovery)

- Extendibility

- Security

- Central Government Response

Interim Report Recommendation 7

ONR to review regulatory response arrangements.

Final Report Recommendation 7

Government to review .. environmental dose measurements and means for predicting dispersion and public doses and environmental impacts.

Office for Nuclear Regulation

Radiological Protection (RP) Specific Lessons Learned 1

- Event Mitigation and Recovery
- Doses to Intervention Personnel
- Vulnerability of RP Equipment
- Public Protection Countermeasure Zone
- Distribution of Potassium Iodate Tablets

Radiological Protection (RP) Specific Lessons Learned 2

- Monitoring, Decontamination & Medical Assistance of Evacuees, Casualties and Intervention Personnel
- Countermeasures Against Ingestion
- Longer Term Protective Actions

The Way Forward

 UK Government, nuclear industry and regulators will continue to support international efforts to improve the process of review and implementation of IAEA and other relevant nuclear safety standards in the light of the Fukushima Dai-ichi accident.

Further Weightman Report in the Autumn

Thank You

www.hse.gov.uk/nuclear/

(search for 'Office for Nuclear Regulation')