

International Commission on Radiological Protection
280 Slater Street
P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
CANADA

25 October 2019

Dear Sir / Madam,

EDF Energy's Response to the ICRP's Consultation on Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, storage and energy supply to end users. We have around five million electricity and gas customer accounts in Great Britain, including residential and business users. Together with our partner CGN, EDF Energy is constructing Hinkley Point C (HPC), a 3.2GW new nuclear plant with two European Pressurised Water Reactors (EPRs), capable of meeting 7% of the UK's electricity needs. With CGN, we are in the process of developing plans to build a near identical plant to HPC at Sizewell C (SZC) in Suffolk.

We are responding to the Consultation on Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident. ICRP 109 and the Draft Guidance provide some useful direction around Emergency Exposures to responders in both Large Nuclear Accidents and those within the Design Basis of a Nuclear Facility both during the urgent/ immediate phases and recovery phase.

Noting the new build ambitions of a number of countries it would be useful to set out criteria to inform the design of Emergency Facilities on the reactor sites. For instance, those facilities housing Emergency Responders involved in managing the urgent and immediate response to a radiological incident (on a nuclear site), both during smaller radiological releases such as a spent fuel drop, and in a Large Nuclear Accident.

Specific comments:

Section 2.3.2 This section contains only limited guidance on early phase actions, and perhaps could be renamed 'The Optimisation of Protective Actions in the Recovery Phase'.

Figure 2.2 There is no feedback loop identified, which is required by section 2.3.1 and paragraph 63. There is also no guidance for the relative weighting of the radiological and non-radiological impacts.

Line 801 Typo - ICRP (not ICPR)

- Paragraph 81 This paragraph could make clear that the 1 mSv/ y value is above the previous background radiation level.
- Section 3.2.1 Paragraphs 91 and 92 should include exposure from water courses, such as spray deposition, tidal contamination etc.
- Section 3.3 This section needs to acknowledge that emergency responders will also receive exposures as members of the public when they finish their work for the day as they may live in the affected areas (whether or not they are residents already).
- Section 3.3 Paragraphs 109 and 115. The exposure of emergency responders must be assessed and recorded - this should not be optional.
- Section 3.3 Paragraphs 109/ 113 and 116. Pregnant women and young persons must not be involved as emergency responders.
- Table 3.1 It is not clear from the table if the <100 mSv and exceptional circumstances apply to on-site teams.
- Line 1369 Typo - Ingestion of contaminated food may be a significant exposure pathway.

Yours sincerely

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EDF Energy