
NORTH AYRSHIRE COUNCIL

21 January 2020

Cabinet

Title:	Radiation Emergency Preparedness, and determination of the Detailed Emergency Planning Zone (DEPZ) for Hunterston A and B Nuclear Power Stations
Purpose:	To agree the extent of the Detailed Emergency Planning Zone (DEPZ) for Hunterston A and B Nuclear Power Stations, and to make governance arrangements for new Council duties imposed under the Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR)
Recommendation:	Cabinet agrees to (1) amend the Scheme of Delegation to Officers to delegate public information duties under REPPIR 2019 to the Head of Democratic Services and remaining operational functions to South Ayrshire Council as lead authority for the Ayrshire Civil Contingencies Team; (2) determine the DEPZ for Hunterston A as 0km as recommended by the Operator, and (3) determine that the boundary of the DEPZ for Hunterston B should include all households currently within the DEPZ, as shown delineated in black on the plan attached to the report.

1. Executive Summary

- 1.1 The Radiation Emergency Preparedness and Public Information Regulations) 2019 came into effect on 22 May 2019 and imposes new duties on the Council.
- 1.2 Many of the duties are operational in nature, including revision of the Hunterston B Nuclear Power Station Off Site plan which will require to be revised to adhere to the regulations by 21 May 2020. This report deals with the delegation of such functions. Any functions which involve the determination of policy would, in terms of the Council's existing Schemes of Administration and Delegation to Officers, be for Cabinet. This includes the following duty.
- 1.3 The Regulations require the Council to determine the boundaries of the DEPZ (Detailed Emergency Planning Zones) around Hunterston A and B. Subject to certain provisos these must be 'on the basis of' the Operators recommendations contained in their 'Consequences Report'. Currently the boundary is 2.4km from Hunterston B, whereas the respective Consequences Reports propose a boundary of 2km for Hunterston B and 0km for Hunterston A. The Council has

limited powers to extend the boundary, but in the case of Hunterston B it is recommended that there are advantages in retaining the existing 2.4km boundary.

2. Background

2.1 The new REPPIR legislation became part of UK law on 22 May 2019, as part of the UK's commitment to continuously improve preparedness in line with international best practice. It applies to all nuclear sites across the UK and is not specific to Hunterston A or B.

2.2 The revised regulations place the following new duties onto local authorities:

2.2.1 The duty to determine the size and shape of the DEPZ around the site now lies with the local authority (it was previously with the Office for Nuclear Regulation (ONR) as regulator).

To quote the REPPIR Code of Practice:- "The DEPZ must be based on the minimum geographical extent proposed by the operator in their Consequences report and should:

- a. Be of sufficient extent to enable an adequate response to a range of emergencies; and
- b. Reflect the benefits and detriments of protective action by considering an appropriate balance between:
 - i. Dose averted, and
 - ii. The impact of implementing protective actions in a radiation emergency across too wide an area.

In defining the boundary of a detailed emergency planning zone, geographic features should be used for ease of implementing the local authority's off-site emergency plan. Physical features, such as roads, rivers, railways or footpaths should be considered as well as political or postcode boundaries, particularly where these features and concepts correspond with other local authority emergency planning arrangements."

2.2.2 Each nuclear site requires an Outline Planning Zone (OPZ). The extent of this is set in the regulations, being 30km in relation to Hunterston B and 1km relating to Hunterston A. The latter reflects the non-operational and decommissioned nature of Hunterston A.

"The presence of an outline planning zone should assist the local authority in planning for extremely unlikely but more severe events. The central aim of the outline planning zone is to support the decision making of emergency responders in the event that detailed or generic arrangements are not sufficient. Outline planning is about identifying what protective actions may be needed at a strategic level, where those capabilities could be obtained from and the anticipated time frame over which they will become available rather than having them in place ready to mobilise without delay". (REPPIR Code of Practice)

2.2.3 To provide prior warning and information to the public living within the both the DEPZ and the OPZ.

“Prior information should be supplied in an appropriate manner and in an accessible format to members of the public who are in the detailed emergency planning zone, without their having to request it, so far as reasonably practicable.

Prior information should be available in an appropriate manner and in an accessible format to members of the public in the outline planning zone. If members of the public request such information they should be directed to it or provided with access to a hard copy if requested.” (REPPiR Code of Practice)

2.3 Determination of the DEPZ

The DEPZ is the area close to the site where protective countermeasures are to be applied in the event of an off-site release from Hunterston B. These protective countermeasures are:

- Sheltering
- Taking stable iodine tablets
- Evacuation

2.4 All residents living within the DEPZ currently receive a calendar every year advising them of what to do if an emergency is declared. NHS Ayrshire and Arran also ensure that the residents have a supply of stable iodine tablets. The administration of stable iodine in tablet form is carried out to reduce or prevent uptake of radioactive iodine by the thyroid. EDF provide a telephone warning service whereby residents can register to be notified by telephone if an emergency is declared.

2.5 Previously, the DEPZ was decided by ONR, as independent regulators of the nuclear industry. REPPiR states that in determining the boundary of the DEPZ, the local authority must do so “on the basis of the operator’s recommendation” in their Consequences Report. The Council may extend that area in consideration of—

- (a) local geographic, demographic and practical implementation issues;
- (b) the need to avoid, where practicable, the bisection of local communities; and
- (c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator.

The local authority and operator may also agree that if there are other arrangements in place which sufficiently mitigate the consequences of any radiation emergency, that no detailed emergency planning zone is necessary.

2.6 The Council have received Consequence Reports from both Operators. REPPiR defines the factors which must be taken into account in any such Report. EDF Energy has considered a wide range of accident scenarios in the hazard evaluation process and its recommendations are based on the scenario of shortest time to release, the largest quantity of radioactivity and the longest duration of release in the determination. The EDF Consequences Report recommends the distance of the DEPZ should be 2km from Hunterston B.

- 2.7 The Council has also received a Consequences Report from Magnox in respect of Hunterston A. As the boundary of the wider OPZ is set at 1km, this Report states that there is no requirement for a DEPZ for Hunterston A. This reflects the non-operational and decommissioned nature of this site. In practice, as Hunterston A and B are next to each other, a 2 or 2.4km boundary for 'B' will result in an area around 'A' being within a DEPZ.
- 2.8 Whilst the legislation is clear that local authorities should base their DEPZ area on the Consequences Report, the Council has also sought and received from PHE (Public Health England) their independent advice on the DEPZ distance for Hunterston B. PHE provide independent radiation advice to councils across the UK. The PHE advice agrees with that of EDF and states that the protective countermeasures are only required to a distance of 2km from Hunterston B.
- 2.9 The current DEPZ is a 2.4km circle around the site, which dates from when Hunterston A was an operating nuclear power station. In 2016, ONR determined that Hunterston A (by then a decommissioning site) was no longer considered a risk under the REPIR 2001.
- 2.10 There are currently 50 households within the current 2.4km DEPZ. This would reduce to 32 households within the recommended 2km DEPZ. However, if a 2km boundary was to be imposed, this would now be aligned with physical features such as the A78. This would mean that with the exception of 10 properties all of those included previously within the 2.4km DEPZ would be included in the new 2km DEPZ. Appendix 1 shows the boundary of the existing 2.4km boundary and a 2km boundary
- 2.11 Consultation was carried out by ACCT by writing to all residents within the DEPZ. At that stage indications from EDF were that the Consequences Report would recommend a DEPZ of 1km, rather than the 2km now proposed. Only one resident from within the DEPZ commented, seeking further information. They advised they would prefer not to be included in the DEPZ area but would still like to receive both the calendar and the stable iodine tablets. In addition, the Chair of the Site Stakeholders Group has written to North Ayrshire Council and ONR expressing her wish that the DEPZ is extended to include all of Fairlie. Fairlie is 3.5km from the site, which is beyond the area which could be reasonably considered for inclusion within the DEPZ, in terms of the considerations relevant to the Consequences Report. Fairlie is however included in the OPZ, as discussed in the following paragraph.
- 2.12 Outline Planning Zone (OPZ)

The current OPZ is set at 10km however, this is now being extended to 30km for all operational civil nuclear power station sites. In the case of Hunterston B this zone now includes the local authorities of East Ayrshire, South Ayrshire, Argyll and Bute, Renfrewshire, East Renfrewshire and Inverclyde. Following best practice advice from DECC (Department of Environment of Climate Change) in 2015, the OPZ planning was increased to 20km. Accordingly the current plan already includes information relating to our immediate neighbouring councils (East Ayrshire, South Ayrshire and Argyll and Bute. This will be extended to include other council areas out to 30km. These councils will provide the following information to support planning for the OPZ:

- Town populations
- Schools
- Healthcare facilities
- Care / Elderly homes
- Camping and Caravan sites
- Public footpaths, parks golf courses, large parks and stadia
- COMAH sites
- Reservoir and Treatment works
- Railway stations, ports and harbours

2.13 Prior Information to the Public

2.13.1 Previously, EDF provided prior information to the residents within the DEPZ in the form of a calendar and the residents are also given the opportunity to register with EDF to be contacted by telephone in the case of an offsite emergency (although this is not compulsory). Under REPPiR 19 this responsibility now falls to the local authority and would be undertaken by the Council's Communications team. All residents within the DEPZ will continue to receive the calendar and the stable iodine tablets.

2.13.2 With regards to the OPZ, the Council's Communications Team will work closely with colleagues in the other council areas to ensure the same messaging and public information is provided on their respective websites directing them to North Ayrshire Council's website for further information on how being inside the OPZ may affect them and how to access a copy of the public Hunterston Offsite Contingency plan.

3. Proposals

3.1 It is proposed that public information duties under REPPiR are delegated to the Head of Democratic Services and the remaining operational duties under REPPiR are delegated to South Ayrshire Council as lead authority for ACCT.

3.2 In relation to the DEPZ for Hunterston A, as the OPZ is set under the regulations as 1km, the only reasonable option is to set the DEPZ for Hunterston A as 0km. In practice this has little effect as a DEPZ for Hunterston B will include ground around Hunterston A.

3.3 In relation to the DEPZ for Hunterston B, the Council has a statutory duty to determine the DEPZ "on the basis of the Operator's recommendation as contained in their Consequences Report". This can be extended but any extension has to be justifiable having regard to the factors detailed in 2.5. In essence, there are two realistic options. Firstly, to go with the Operator's recommendation of 2km, the reasonableness of which has been confirmed by Public Health England. Alternatively, to retain the current households within the boundary, having regard to the communication and certainty advantages which such a long-standing boundary brings in an emergency. In both cases the boundary would now be aligned with geographic features, rather than being a simple circle around the site. As regards the suggestion from Fairlie Community Council that the DEPZ should be extended to include Fairlie, having regard to the role of the DEPZ and OPZ,

and the factors detailed in 2.5 which are relevant to determination of the boundary, there is no case for extending the DEPZ to this extent.

- 3.4 Risks arising from the operation of Hunterston B, in terms of REPPIR form part of the Operator's Hazard Evaluation which in turn informs the Operator's Consequences Report. However, such risks are not a relevant consideration for the Council in determining the boundary of the DEPZ. The council can only extend the DEPZ based on the factors detailed in 2.5.
- 3.5 On balance, it is recommended to retain the current households within the DEPZ, but to better align this with geographical features, as shown in the plan annexed to the report.

4. Implications/Socio-economic Duty

Financial

- 4.1 There are no financial implications as this work is chargeable to EDF under REPPIR.

Human Resources

- 4.2 None.

Legal

- 4.3 A primary purpose of this report is to address the new legal duties imposed under REPPIR.

Equality/Socio-economic

- 4.4 There are no significant equalities or socio-economic implications of this report.

4.4.1 Children and Young People:

There are no significant implications of this report.

Environmental and Sustainability

- 4.5 This report advises about new emergency planning duties in relation to Hunterston A and B, about the governance around these and determination of the DEPZ. It is important to recognise that this report is not about wider issues of the sustainability or environmental impact of nuclear power.

Key Priorities

- 4.6 Implementation of REPPIR will support the Council Plan theme of:
- Helping all of our people to stay safe, healthy, and active

Community Wealth Building

- 4.7 None

5. Consultation

- 5.1 There has been consultation with local Category 1 and 2 emergency planning partners, the Communications Manager, relevant officers in neighbouring authorities and residents within the DEPZ. There has also been consultation with Public Health England who are the authority who provide independent radiation advice to Councils across the UK.

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For further information please contact **Jane McGeorge, Civil Contingencies Coordinator**, on **01292 270463**.

Background Papers

- 1- REPPIR
- 2- Consequences Report for Hunterston A
- 3- Consequences Report for Hunterston B

