

GDF siting process consultation  
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### **Review of the Siting Process for a Geological Disposal Facility**

EDF Energy welcomes the opportunity to respond to the Government's consultation which reviews the siting process for a Geological Disposal Facility for higher activity radioactive waste.

EDF Energy, through its subsidiary EDF Energy Nuclear Generation Limited, is the owner and operator of eight nuclear power stations which between them provide around one sixth of the country's electricity needs. The spent nuclear fuel from these power stations is initially stored safely and securely on site pending final disposal or despatched to Sellafield in Cumbria for treatment or interim storage, pending final disposal. Higher activity (intermediate level) wastes are stored on power station sites pending final disposal. As a result of these activities, EDF Energy clearly has an interest in the successful implementation of the Government's strategy for disposal of higher activity wastes and spent fuel.

In addition, EDF Energy, through its subsidiary NNB Generation Company Limited, proposes building two new nuclear power stations, each with two reactors. If the construction of these new power stations goes ahead, spent fuel and higher activity waste will also need to be disposed of eventually, although not until after the power stations cease generation.

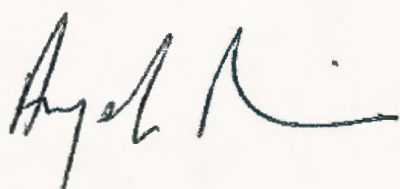
Managing radioactive waste safely and planning for future disposal is an important priority for Government. EDF Energy welcomes the initiation of the debate, through this consultation, to identify a practical way forward for the disposal of the UK's higher activity radioactive wastes and spent fuel.

EDF Energy is committed to developing sustainable energy solutions, and therefore it is important that the sustainability of the waste management pathways for both current operations and new build can be demonstrated.

Our detailed responses are set out in the attachment to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Nigel Knee on or myself.

I confirm that this letter and its attachment may be published on DECC's website.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Angela Pearce".

**Angela Pearce**  
**Corporate Policy and Regulation Director**

## Attachment

### Review of the Siting Process for a Geological Disposal Facility

#### EDF Energy's response to your questions

**Q1. Do you agree that a test of public support should be taken before the representative authority loses the Right of Withdrawal? If so, what do you think would be the most appropriate means of testing public support, and when should it take place? If you do not agree with the need for such a test, please explain why.**

1. EDF Energy supports the proposal in the revised process that, at some point towards the end of the "focusing" phase, there should be a demonstration that those within the area potentially affected support that area volunteering to host a GDF. Because this point will not be reached for at least a decade, we think it could be a mistake to prescribe the precise approach to be followed now. Instead we suggest that the test of community support be something that could be determined nearer to the time at which it is required.
2. We believe that the Representative Authorities should not be restricted on the way they test community support, but should be encouraged to draw on a number of parallel and complementary processes open to them. One such process which we believe should feature strongly is the pre-application consultation process under the Planning Act 2008 regime. EDF Energy particularly supports the proposal to classify any GDF as a nationally significant infrastructure project (NSIP) as this ensures an intensive and rigorous pre-application process, one which has been tried and tested on a number of significant projects to date. This approach allows the 'developer' (in this case Radioactive Waste Management Directorate (RWMD)) and other key statutory consultees (such as the regulators the Office for Nuclear Regulation (ONR) and the Environment Agency (EA)) to engage in meaningful dialogue with the public - particularly those most immediately affected by both the benefits and impacts of the proposals. This is the most appropriate way of ensuring that potential impacts of any proposals are fully understood. Given that, this process takes place during the development of any final application proposals and includes an Environmental Impact Assessment (EIA), this by its very design provides a good way to identify and respond to public issues and gives all involved a reasonable indication of public opinion.
3. We also welcome the use of the principle of subsidiarity (paragraph 2.26) and agree that the District Council (DC), or equivalent<sup>1</sup>, would be best placed to act as

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<sup>1</sup> This may be a Borough Council or a single tier authority in some areas.

the 'Representative Authority', as a democratically-elected body representing the host community and therefore the people potentially most affected by the proposals. The existing mechanisms of local government to scrutinise proposals under the Town and Country Planning Act 1990 within the democratically-elected council chamber could be applied as a test of public support. We believe that alongside the significant engagement required under the Planning Act 2008, these processes could help the Representative Authority determine whether or not the requisite community support had been achieved for the GDF to be hosted. A key advantage to using the NSIP planning process is that during the pre-application consultation phase the Representative Authority, in collaboration with other interested local authorities, will be key consultees for which it would be expected that a Statement of Community Consultation would be established. This allows the local authorities to help shape the engagement process and ensure that best efforts have been made to adequately engage the community, particularly with relation to hard to reach groups.

4. Equally, the DC may wish to consider formulating a Local Impact Report (LIR) alongside the 'consultative partners' to formalise their understanding of the public issues raised and therefore the level of support identified. It should also be noted that the developer would also be required to provide a consultation report to demonstrate they had fully considered the issues raised by the public.

**Q2. Do you agree with the proposed amendments to decision making within the MRWS siting process? If not, how would you modify the proposed phased approach, or, alternatively, what different approach would you propose? Please explain your reasoning.**

5. EDF Energy supports the amendments put forward to separate the process into a "siting engagement programme", a 'learning' and a 'focus' phase. We agree that allowing more open-ended timescales enables communities to fully explore issues without facing unnecessarily prescriptive hold points that can generate pressure to take decisions at a point when the requisite information may not be available. Equally important is to ensure throughout these phases that the 'Right of Withdrawal' is clearly set out and understood.
6. The "offer" phase (during which Government will seek to engage interest among a number of local communities in exploring the possibility of hosting a GDF) is a critical one. Potentially interested communities will need to understand the overall process better and their representatives be provided with the information to reassure the community that their involvement will lead to some benefit and can be justified. Even during this early phase we believe the process would benefit from the involvement of RWMD and key agencies such as the ONR, EA, and Public Health England. The most important requirement is that during this phase

communities are provided with sufficient opportunity to understand and discuss the impacts and benefits of engaging. This learning then needs to be maintained and steadily expanded during the subsequent “learning” and “focusing” phases. By the stage that a decision needs to be taken on whether or not to volunteer to host the GDF (i.e. towards the end of the “focusing” stage), the local community and their Representative Body should be well-placed to reach an informed decision. We believe that the process proposed should provide ample scope for this.

7. We also welcome the principle of subsidiarity and agree that the District Council (DC) (or equivalent) would be best placed to act as the ‘Representative Authority’, as a wholly democratically-elected body representing the host community and therefore the community most immediately affected by the proposals.
8. Consideration should be given to how District Councils (or equivalent) will work together, and who would lead the Steering Group, where proposed sites may fall within more than one authority’s border.

**Q3. Do you agree with this approach to revising roles in the siting process set out in the White Paper? If not, what alternative approach would you propose and why?**

9. EDF Energy agrees that Government should lead a national awareness campaign and offer phase. However, other organisations need to be prepared and able to participate during these two phases in order to answer specific questions and clarify their roles. Both the RWMD and NDA need to be involved from an early stage during the national awareness phase to ensure a consistency of approach throughout the process and to ensure potential interested communities have a clear understanding of these organisations respective roles and responsibilities. Similarly, the regulators such as ONR and EA need to explain their important roles which should help to reassure communities that any proposal for a GDF at a specific site will be properly scrutinised through the licensing, permitting and planning processes.
10. During both the “learning” and the subsequent “focusing” phases it will be critical that RWMD engages effectively with the local communities and addresses their questions and concerns. We suggest that for every area that expresses interest in participating in the GDF process, RWMD should identify a local lead who is able to build a relationship with that community. RWMD will need to be supported by Government and must be prepared to respond to the issues raised and by doing so build trust with each community. It will be important during the early stages of engagement with communities for RWMD to invite views and listen to and understand the concerns of the local community.

11. The principle suggested in paragraph 2.84 will be important so that communities gain impartial advice and scrutiny of the various sources of information (e.g. from RWMD) that they will be presented with throughout the siting process. Given that Committee on Radioactive Waste Management's (CoRWM) primary task is "to provide independent scrutiny of the Government's and Nuclear Decommissioning Authority's proposals, plans and programmes to deliver geological disposal" [paragraph 6 on CoRWM's Proposed Programme Of Work 2013-2016 – April 2013], and that their membership is drawn from a wide cross-section of disciplines, it would seem sensible and cost-effective to expand CoRWM's remit rather than establishing a new group to carry out peer review. Irrespective of who is charged with carrying out peer review activities, the criteria under which reviewers or reviewing organisations are chosen should be clearly defined to ensure relevant expertise and impartiality.

**Q4. Do you agree with this proposed approach to assessing geological suitability as part of the MRWS siting process? If not, what alternative approach would you propose and why?**

12. EDF Energy agrees that assessing geological suitability is a key stage in the MRWS siting process: the deep underground disposal concept is based upon the idea that the geology plays an important role in assuring the confinement of the disposal packages that are emplaced within them, for very long periods of time, until they reach a low level of radioactivity. The geology medium is therefore a key part of the disposal system and a preliminary assessment must be undertaken at an early stage of the process.
13. A greater understanding of the geology requires intrusive surface-based investigations. If a number of different communities volunteer to participate in this process the cost of geological investigations may be substantial. A process for phasing work between sites, in order to optimise these investigative costs, may be required before any subsurface intrusion. It should be noted that the extent of investigation and time required for such work will need to be assessed on a site-by-site basis as it will depend on the extent of existing knowledge and the complexity of the local geology.
14. In addition, understanding the geology at an early stage in the siting process will help the local communities to be convinced beyond reasonable doubt of the feasibility of hosting the GDF.
15. This will only be possible if information related to geology is readily available and presented in a form accessible to non-specialists.



**Q5. Do you agree with this proposed approach to planning for a GDF? If not, what alternative approach would you propose and why?**

16. EDF Energy supports the proposals made in the consultation for a revised approach to planning. Any GDF would clearly be a nationally significant infrastructure project, and should therefore be included within the scope of developments that are covered by the Planning Act 2008.
17. It will be important for the Government to develop a National Policy Statement for disposal of higher level radioactive wastes, which would form the basis for decision-making on any applications made for development consent. The advantage of this approach is that it provides an open and transparent approach and objective decision-making. It also requires thorough pre-application consultation with statutory bodies, other interested parties and those living in the vicinity of any proposed development.

**Q6. Do you agree with this clarification of the inventory for geological disposal – and how this will be communicated with the volunteer host community? If not, what alternative approach would you propose and why?**

18. EDF Energy owns radioactive wastes and nuclear materials which will continue to be safely stored and managed until suitable ultimate disposal routes are established. As an organisation we continue to engage with other owners and UK Government to explore potential options that could be available to safely manage the inventory of radioactive wastes and nuclear materials in the future, including the option for safe disposal.
19. We support the view, as highlighted in the Managing Radioactive Waste Safely White Paper<sup>2</sup>, that for some radioactive materials not currently classified as waste (e.g. Spent fuel, Uranium and Plutonium), an option should be maintained to manage these materials through geological disposal, if they are declared as waste in future.
20. As part of operations of our power stations, and as required by the terms of the nuclear site licences issued by the ONR, we have a high degree of control and measurement of legacy waste and nuclear materials that exist now. We have to rely on estimates of future inventory based on tools and techniques established over many years. Nevertheless, there remains uncertainty in the precise inventory that may arise in each category of waste. We therefore support further work by

<sup>2</sup> Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal, June 2008, Cm 7386

Government to specify the character and quantity of waste and nuclear material that would be disposed to a GDF and to provide the detail of volumes, radioactivity content and manner of current storage, in a way which can be understood by potential host communities.

21. The current inventory provided and updated on triennial basis through the UK Radioactive Waste Inventory programme should be the basis of the information communicated. This is based on auditable information provided by operators and regulatory bodies.
22. We agree with Government on the amended approach taken for the revised Baseline Inventory classification into waste and material types. The baseline assumption for spent fuel and ILW arising from a new build programme of 16GW(e) of light water reactors is reasonable at this stage. However, it should be noted that the Nuclear NPS does not limit the amount of new nuclear development and that the Government's 2050 Pathway Analysis suggests scenarios in which more than 16GWe capacity would be required.
23. We are in agreement with the UK Government general policy that radioactive waste should not be imported to or exported from the UK except in specifically defined and limited circumstances. We however note for clarification that small quantities of nuclear material and waste are exported to number of countries for examination and experimental testing. On completion of the examination and tests, the relevant waste quantities are re-imported into the UK for management as part of the baseline inventory.

**Q7. Do you endorse the proposed approach on community benefits associated with a GDF? If not, what alternative approach would you propose and why?**

24. A clearer indication of the potential benefits available to communities from their engagement in the GDF siting process through to the point where they may ultimately to host the facility will we believe encourage more communities to express interest and, through doing so, become more informed of the issues for their communities. This greater clarity will also help to ensure that a more balanced debate can be pursued within any interested community. To this end, and as stated in the response to Question 1, we support the use of the Planning Act 2008, whereby the GDF will be classified and treated as an NSIP. This is particularly useful as it enables RWMD to fulfil the role of the 'developer', and NDA to advocate for GDF as a national strategy (paragraph 2.72), ensuring the public are properly engaged both on the need for the development and the rationale behind the specific design of the proposals as they develop.



- 25. NSIPs can provide considerable socio-economic benefits to communities (in terms of employment, investment and supply chain spend) and we agree that this should be clearly highlighted by Government during the offer to interested communities (paragraph 2.18). However, this will be equally important during the national awareness campaign (paragraph (2.14) – even though the information that can be provided will be at a more general level. This enables communities to properly balance the benefits with the potential impacts.
- 26. It is important when developing any 'community funds' that the principles that underpin the UK planning process, whereby planning permissions cannot be bought and sold, should be protected. Therefore, we believe that the scope, utilisation and allocation of any community funds should be clearly defined through legislation (paragraph 4.15).

**Q8. Do you agree with the proposed approach to addressing potential socio-economic and environmental effects that might come from hosting a GDF? If not, what alternative approach would you propose and why?**

- 27. EDF Energy agrees with the approach to addressing social and environmental impacts as this will enable information to be discussed at an early stage better informing interested communities. The use of the process within the Planning Act 2008 should make this possible. More important, the role of RWMD and other statutory consultees will be key in presenting the findings from these assessments in both the learning and (particularly) the focusing stage. They will also need to carefully manage expectations during this period as information on specific issues will not necessarily emerge immediately as survey work is staged over time.

**Q9. Do you have any other comments?**

- 28. No further comments at this stage, although EDF Energy is keen to continue participate further in this important work, in the national interest.

**EDF Energy**  
**December 2013**