Response to MRWS consultation into proposals for a GDF from Mike Taylor attendee at DECC/NGO forum 27th November 2013.

Preamble The Government had previously looked at MRWS but following the decision of Cumbria County Council to reject continuing with the process government is now consulting again. Cumbria CC reasons were primarily concerned with uncertainty of the geology and hydrology within the county.
The proposal as I understand it would give a small district council the authority to engage in the process for handling the nations waste. Thus overturning the normal waste management hierarchy i.e. County council being the waste disposal authority and highway authority. I wish to draw to the attention of DECC that the 1983-1985 Layfield inquiry for Sizewell B stated "Government should ensure that feasible and safe disposal sites are identified in good time before they are needed. An important step in preparation for the identification of such sites is the acquisition of detailed information on rock formations in particular areas of the UK including hydrogeological conditions" . Nearly 30 years on we are no nearer to finding a solution. It is obvious that to ensure any chance of success that the process must be open, honest, democratic and wide ranging. **Making a policy to fit a potential host area is simply not credible.** To attempt to enable two district councils to push forward a GDF in an area where the County Council has already declared the geology unsound is frankly incredible. In the meantime the storage and management of all legacy waste particularly at Sellafield is recognised as utmost priority by ONR and must be managed and planned for in the best possible way taking account of all our national and international obligations. The reprocessing of spent fuel should be curtailed as should dissolution of Intermediate level waste or FED from Magnox sites. Government is determined to state that the issues of waste management for new build is sorted out but in fact new build waste, being far hotter, is unlikely to be able to be co disposed with legacy waste. Hugh Richards' papers "Nuclear waste too hot to handle" and "the Poisoned Chalice" are required reading to get to any understanding of this hugely complex subject. Either way the issue of spent fuel management has a very great impact on the economy and justification under the "ionising regulations" for the proposed new reactors. There should be no co disposal without proof that this will work. We could encourage reducing of the risks at Sellafield by possibly encouraging more storage on the generating sites e.g. on EDFs AGR sites after closure of Thorp from 2018. Sizewell B will have a Dry fuel store by 2015. **This of course means facing the fact that reactor sites will have long term storage for HLW and ILW wastes.** One advantage of this approach may be that the ILW will have decayed to Low level waste by the time of any onward movement to a GDF. Comments in the consultation paper about protecting future generations from managing this waste can be considered as misleading, since it is quite clear that even if a GDF is found, disposal to it would be over generations and we were told that the design life of radioactive waste stores is 100 to150 years! Another example where the policy demands utmost honesty and an acceptance that the impacts are cross generation even if a GDF is found in our lifetime. However I believe that the chances of achieving a GDF are so low that we should be considering above ground storage as a policy. This will have the added advantage of allowing the packages to be monitored. If this conflicts with the desire for new build and agreements in the DECC/EdF contracts on waste disposal costs so be it.

My answers to the questions taken as bullet points. The questions are not repeated.

Question 1.
Public support.

I believe it is essential to build public confidence through honest and open debate and this would need a clear understanding of issues including the following:-

- Is this disposal or retrieval? Out of sight should not be out of mind. The science and engineering would have to be proven before disposal could be considered.
- Should be based on sound science, security of packaging and a secure site with suitable geology and hydrology. An experienced geologist/hydrologist with worldwide experience of these "stores" considered that there was probably no location in the UK suitable for deep geological disposal. A peer review of British Geological Survey data was essential. Either way he believed that probably half a dozen boreholes over half a dozen sites (subject of course to planning approval and EA permitting) was an essential prerequisite. This would be costly but would rule out unsuitable sites. Future proof i.e. not at risk of flooding or over heating. Resistant to seismic shock including from fracking. Preferably accessible by a suitable rail system.
- A National awareness campaign is essential to make communities and individuals aware of the issue of managing radioactive waste for the nation. This has to be honest, open and concentrate on the issues and not the "benefits"
- It was a shock to learn that the Dryfuel store contents and by implication, all the fuel used in nearly 20 years generation at Sizewell B are not considered by DECC as waste! Even though EdF have confirmed that this spent fuel will not be reprocessed. Clearly there has to be some understanding and clarity of this issue.
- In view of the above comment a thorough understanding of waste types, volumes and radioactivity levels would need to be contracted into.
- Requires truthful and open debate in any volunteer community involving all members of the community. Right of withdrawal at all stages.
- Widest possible democratic input from town, parish, district, county and regional council, regulators and NGOs.

Subject to satisfactory consideration of the above we believe any community should have the right of withdrawal at all stages based on a clear contract.

Question 2
The process.

- I consider that sound science is a precursor to a satisfactory outcome should one be achievable. I believe the process has to include the widest possible community and relevant regulators and any other interested parties must be part of the process at all times. I could go as far as to say that politics must play a minor part in the process, the project is far too important for the nation and must have a consensus

of all political parties. Peer review of the process and science at all stages is considered essential.

- Lack of confidence in the robustness of the National Policy statements for Nuclear power EN6 following later DEFRA assessments on Climate change and post Fukushima was highlighted .ie the study into EN6 is not thorough enough. This indicates that drawing up of similar policy statements for GDF disposal might not be adequate to satisfy community concerns and may not be helpful in identifying suitable sites. Either way any planning application even if done by the Planning Inspectorate would need to be a thorough process. There needs to be absolute confidence in the planning process. I consider there is an opaque planning process for nuclear new build which does nothing to inspire confidence that all issues are considered at the time of the planning application. Maybe a formal planning inquiry is essential. The ONR and Environment Agency must always be part of any team assessing suitable sites. A Planning Policy Guidance note should be produced by the relevant Government department.
- Requires truthful and open debate in any volunteer community involving all members of the community. Right of withdrawal at all stages.

Question 3
Revision of roles in the siting process.

I disagree with the policy as proposed. I believe including the suitability of geology and hydrology and other significant ecological and geographical features **as recommended by the Layfield inquiry** is a precursor to a voluntary process based on inclusiveness and honesty.

Question 4
Assessment of geological suitability.

As in question 3 I consider that the approach has to be science led, guided by a full inventory and understanding of the wastes and form a part of the National Awareness campaign.

Question 5.
The Planning process.

I would repeat my concerns about the National Planning Policy for Nuclear Power EN6 generally:-

- Lack of confidence in the robustness of the National Policy statements for Nuclear power EN6. Subsequent DEFRA assessments on Climate change have highlighted that some sites are not resilient to climate change or have siting issues as a result of Fukushima. .ie using EN6 to guide policy alone is not robust enough and may not be in the best interest of the country. My concern here is simply that drawing up of similar policy statements for GDF disposal might not be adequate to satisfy community concerns and may not be helpful in identifying suitable

sites. Either way any planning application even if done by the Planning Inspectorate would need to be a thorough process. The experience at Hinkley C where it is understood some issues had fallen through the gap between the main development and associated works showed that there needs to be absolute confidence in the planning process. At present there is, I consider, an opaque planning process for new build which does nothing to inspire confidence that all issues are considered at the time of the planning application. **Maybe a formal planning inquiry is essential for any GDF**. It is generally believed that although the Layfield Inquiry into Sizewell B was long running it did however give interested parties the opportunity to comment on all issues. There should be no rush to judgement on this issue.

- The ONR and Environment Agency must always be part of any group assessing suitable sites and a permanent part of the planning team.

Question 6.
Waste inventory.

I do not believe that new build waste could be safely disposed of nor do I consider that **disposal of any waste** is possible with any degree of certainty for the following reasons:-

- Government is determined to state that the issues of waste management for new build is sorted out but in fact new build waste, being far hotter, is unlikely to be able to be co disposed with legacy waste. Hugh Richards' papers "Nuclear waste too hot to handle" and "the Poisoned Chalice" are required reading to get to any understanding of this hugely complex subject.
- Is this disposal or retrieval? Out of sight should not be out of mind. The science and engineering would have to be proven over time before disposal could be considered. It is suggested that a trial site would be a possible way to prove some of the technology although the scale and size of a trial site may not be possible to be replicated for all the contents of a GDF.
- It was a shock to learn that the Dryfuel store contents and by implication, all the fuel used in nearly 20 years generation at Sizewell B are not considered by DECC as waste! Even though EdF have confirmed that the current spent fuel will not be reprocessed. Previous comments by DECC that the fuel from new build will be the same as Sizewell B **eventually** are potentially unhelpful and misleading since we understand that the safety case for Sizewell B would need to reviewed by ONR before any change of fuel type could be considered. Clearly there has to be some understanding and clarity of this issue.
- In view of the above comment a thorough understanding of waste types, volumes and radioactivity levels would need to be contracted into and not added to.

Question 7
Community Benefits.

A thorough understanding of what the benefit is for is essential. An understanding of the fairness and equity of current Community benefit schemes is considered necessary.

Possibly payment to the most local community should be through a Local Community Charity. An example for Suffolk is www.suffolkcf.org.uk I do not consider that the current Section 106 process adopted by the County Councils and some District Councils, or the scheme adopted for the Sizewell B Dry fuel store (benefits payable to the Suffolk Coast and Heaths Area of Outstanding Natural Beauty area **but not to the most local community)** is fair or equitable.

Question 8.
Socio economics and environmental factors.

I believe the process must screen out unsuitable areas and be open, honest and transparent in providing all the information with benefits and disbenefits. Any community accepting the nations' radioactive waste must be considered to be performing a service for the country and should be a beacon for enhanced well being as opposed to the negative connotations currently associated with nuclear waste and unfortunately evident in deprivation around exiting nuclear sites. I must emphasise again that the whole process has to be conducted openly honestly and transparently with all members of potential communities being made fully aware at the outset of all benefits, disbenefits and issues.

Mike Taylor
attendee at DECC/NGO forum 27th November 2013.
I also wish to endorse the comments made on behalf of the NGO forum.