Respondent Details	
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The consultation document sets out the Government's proposed approach to the longer term management of the UK's plutonium stocks for public scrutiny and consultation. Comments on any aspect of this issue are welcome, but the key questions posed in this consultation are:

No	Question
Q1	Do you agree that it is not realistic for the Government to wait until fast breeder reactor technology is commercially available before taking a decision on how to manage plutonium stocks?

Response	Yes. As the former Head of Engineering of UKAEA based at Dounreay, I am very familiar with fast reactor technology and its problems. While fast reactors have long term potential, the need for a solution to the Plutonium issue in the short term is compelling and essential in the context of "Sustainability,"
Q2	Do you agree that the Government has got to the point where a strategic sift of the options can be taken?
Response	I do. My perception of government position to date has been to defer a decision. I think that sufficient work has now been done and sufficient options identified, for the UK to take a bold step in deciding on this matter.
Q3	Are the conditions that a preferred option must in due course meet, the right ones?
Response	I believe so. The fundamental requirement is to take a potentially dangerous material and put it beyond use. If in the process, useful energy can be extracted then this seems the best way to proceed. In addition, burning Plutonium is genuinely putting it beyond use. Storage, immobilisation and co-location with Spent Nuclear Fuels merely make its use more difficult.
Q4	Is the Government doing the right thing by taking a preliminary policy view and setting out a strategic direction in this area now?
Response	Yes. The nuclear industry needs to have a stable waste platform. At present, the disposition route for Plutonium is not known and therefore neither is the back end cost of dealing with Spent Nuclear Fuel. Taking a strategic view now will reduce unknowns and make the true cost of nuclear power more credible and less open to uninformed and sometimes mischievous criticism.
Q5	Is there any other evidence government should consider in coming to a preliminary view?
Response	The development of the Fast Reactor is a reality and is being pursues as part of the GEN IV development. There could be merit in maintaining a watching brief on this topic. That said, much of the research has been conducted in Japan and the recent events at Fukushima are likely to slow this down. The Fukushima event is also worthy of consideration as I understand

	that some of the fuel in their cooling ponds was MoX fuel. This may not affect the final outcome of the event but should be taken into account.
Q6	Has the Government selected the right preliminary view?
Response	My interpretation of the preliminary view is that we either continue to store, use as MoX or dispose of directly alongside unprocessed Spent Fuel. On this basis, the preference for actually destroying the Plutonium by fissioning it is certainly the better view. What is certainly true is that it makes no sense to continue to operate the Thorp Plant in order to make more of a difficult to manage or to make a product that no-one wants. The issue of the disposition of the existing Plutonium is therefore closely bound up with the reprocessing questions for the current Uranium Dioxide fuelled reactors. MoX may not, however, be the only answer. See response to Q7 below.
Q7	Are there any other high level options that the Government should consider for long-term management of plutonium?
Response	I agree that destroying the Plutonium by fission is the best approach as this is the only treatment that genuinely removes it. The history of MoX fuel internationally in general and in the UK in particular has been somewhat mixed. In the mean time, Lightbridge, Corporation of the United States, has developed a fuel design that could genuinely destroy Plutonium and could do so at a cost less than that of making MoX fuel, so bringing the benefits of MoX without the cost involved. The fuel design has been under development for many years and there are still some years of testing to go before it becomes commercially available. It was originally developed to make proliferation resistant nuclear fuel, based on the Thorium cycle. During the development process, a metal fuel design has emerged that does not suffer from the metallurgical problems normally associated with metals nuclear fuels. I am not a deep expert in fuels and will leave it to Lightbridge, who will be responding separately to this consultation, to describe the fuels and its benefits in more detail. While the fuel is still some 6-10 years

	away, I believe that if a decision to press ahead with a new MoX plant is taken, the opportunity should at that time be taken to ensure that its design does not foreclose on the use of the plant to make this metal fuel in the future. In addition, Lightbridge will not make this fuel itself but will licence its production. This means that the metal fuel using Plutonium can be made in the UK with the attendant job opportunities in an area where there is a need for such employment.