

Dear Sirs,

I am responding to your request for comments on your consultation document.

For your information I am a domestic energy consumer who has an interest in the long term integrity of UK energy supplies at reasonably competitive prices whilst taking reasonable measures to reduce the UK's CO2 emissions. I have no direct or indirect connections with the energy industry, though I did work for Shell prior to retirement several years ago.

#### Chapter 2, Question 1

The approach using scenarios is entirely appropriate. To simply assume a single scenario would have been entirely misleading. The scenarios you have chosen will, between them, encompass the great majority of likely actual outcomes. I do believe however that you should make a clear disclaimer statement that these scenarios are exactly that, and are not predictions of an actual outcome.

#### Chapter 2, Questions 4 & 5

In general I believe you have chosen the scenarios well for the reasons stated above. However I am concerned that you have assumed that faster implementation of Nuclear is associated with the 2 Green Scenarios. Whilst the present government (and possibly, though not certainly a future government) supports the concept of Nuclear being "green" there are many pressure groups who do not. Additionally it is apparent that Nuclear new build will not occur without substantive government guarantees and probably financial incentives. Proceeding with Nuclear (or not) will therefore be driven by government decision making (or failure to do so). Such decision making may well not be directly linked to a strong desire to go "green" but simply by political considerations such as risk of the lights going out versus possible negative electoral impact. Hence it is entirely possible to envisage a fast Nuclear build coupled to the main elements of the Dash for Energy scenario, or a slow (or even no) Nuclear build coupled to the Green Transition and Green Stimulus options. I believe these additional possibilities should be addressed.

#### Chapter 2, Question 6

The 2 Green Scenarios assume rapid increase in wind generation of electricity. It is apparent that the economics of wind power are poor (in the case of offshore very poor) and that there is no evidence that maturity of the technology is delivering significant reduction in costs going forwards. It is therefore entirely possible to surmise that if Nuclear progresses rapidly then the willingness to continue heavy subsidy of Wind will cease. This of course only affects scenarios from about 2020 onwards. Adoption of other renewable sources such as wave and tidal stream has very considerable uncertainty re both development of reliable hardware and cost (capital and operating). However your relatively modest assumptions for other renewables are not unreasonable.

#### Chapter 2, Question 8

LNG will almost certainly be the swing energy source at least for the next 10yrs. It is very hard to imagine any other source fulfilling this role. Russia probably has the capacity to do this (once additional pipelines are in place) but political risk probably precludes it.

#### Chapter 3, Question 4

The demand side will be certainly be influenced by-

- a) Price of energy. The UK high prices are driving out some energy intensive manufacturing such as Aluminium, Polyethylene etc. This is likely to continue but the rate at which this occurs will depend upon energy price relative to other countries.
- b) A strong government led initiative to improve energy efficiency, both domestic and business could yield energy savings of 10-15% by 2025 relative to 2010 for any given level of GDP.
- c) Electrification of transport systems will drive a limited increase in electricity demand, though for road transport at least this will mostly be overnight charging which will have very little impact on peak demand.

Best Regards,

Chris Fox