

## **Question 1**

### ***What are your overall views on EDF Energy's proposals to build a new power station at Sizewell C and associated development?***

The plan to build Sizewell C and D is completely flawed because the site is on a high risk flood plain. In 2008 (updated in 2010), The Cabinet Office's National Risk Assessment highlighted the magnitude of risks related to coastal flooding, inland flooding and severe weather. A major coastal flood event is regarded as one of the most significant risks to the UK (The UK Climate Change Risk Assessment 2012 Evidence Report, 1.1 Present day risks and vulnerability in the UK)

EdF Energy appears to be confident that it can predict what will happen to the Sizewell coast between now and 2130, I cannot find anyone else who shares this confidence. All of the respected climate change models stress the uncertainty of the long term projections.

Marine Climate Change Impacts Partnership UKCP09 Marine and coastal projections summary:

*"The marine scenarios do not attempt to quantify a probability of future changes and cruder estimates of the minimum uncertainty range are made (together with some discussion of a low probability, high impact scenario range, H++) where possible. There are several reasons for this. Firstly, gaps in our understanding of marine processes (e.g. deep ocean mixing processes, which affect ocean circulation and mean sea level) mean that current models may not simulate the full range of possible futures. Secondly, even where we might estimate the range of possible futures there is an insufficient number of model simulations (e.g. of climate driven changes in waves) to credibly fill in the range between the projected highest and lowest values. Finally, insufficient work has been carried out in the marine community on suitable observational constraints for projections of global and local marine and coastal climate change."*

UK Climate Change Risk Assessment 2012 Evidence Report:

*"Climate monitoring, climate modelling and risk assessment methods have improved significantly over the last two decades but there are still limits to our understanding of future climate risks. For example we do not know how fast greenhouse gas emissions will rise, how great the cooling effects are of other atmospheric pollutants or how quickly the ice caps may melt. These and other uncertainties result in a wide range of possible rates of warming and sea level rise. ...Projecting changes in climate for specific regions is still a significant challenge for the current generation of climate models. In particular there is a growing body of evidence suggesting that loss of Arctic sea ice may have major consequences for climate in mid latitudes (Petoukhov and Semenov, 2010; Budikova, 2009; Francis et al., 2009) that are not fully represented in existing models."*

### **Water Use**

According to the Essex and Suffolk Water Resources Management Plan 2010-2035

*"The Essex and Suffolk supply areas are located within some of the driest areas of the country and as such face particular challenges including general lack of new intrinsic water resources, growing demand, and uncertainty from climate change."*

the plan goes on to state:

*"The Company has amongst the lowest levels of leakage in the UK and is an acknowledged industry leader in water efficiency and water conservation."*

Given their prowess at efficiency and conservation, and the lack of new resources, it would appear that there is little scope for Essex and Suffolk water to find extra supplies of water.

According to the UK Climate Change Risk Assessment 2012 Evidence Report:

*"More severe droughts are possible in the UK even under current climate conditions and would have far greater consequences for public water supplies, industry, agriculture and the environment than the recent examples of UK drought"*

The existing Sizewell B plant uses about 800 cubic metres of mains water a day - estimated to be about 7percent of the total demand in the local catchment area. From these figures, Sizewell C and D will take up at least another 14 percent. Suffolk has recently suffered 18 months of drought, and the Essex and Suffolk Water management plan makes no mention of the new build at Sizewell

The water management plan only lasts until 2035, so how can local people be confident that there will be enough good quality fresh water for their use once the power station is built. Will the power station take priority over the needs of agriculture and local people? It is impossible to see how this will not happen – so will local people be faced with hosepipe bans, and low quality or bottled water while the power station continues to use hundreds of cubic metres per day? There is already a belief among local residents that their water supplies are compromised when there is an outage at the power station. During power station outages, Sizewell B can require more water than usual which puts additional strain on the water supply.

## **Emergency Planning**

Having up to 5,600 construction workers on site will have implications in the event of an incident at Sizewell which results in an evacuation being necessary. Little attention has been given to the density of the population in the vicinity of the site already. How all of the residents of Leiston would be evacuated is currently uncertain, and introducing another 5,600 people into the area will mean a mass evacuation from the power station will be extremely difficult. EdF Energy needs to have a properly worked out plan which can be scrutinised by the public which shows how the workers will be taken off-site. We also need to know whether this will impede the evacuation of the local people. – who will get priority in the event of an accident? Will local people be told to stay at home and shut their doors and windows while workers are evacuated?

## **Fuel Storage**

The plans to keep the spent fuel from Sizewell in cooling ponds is alarming. In Germany, since the 1970s all fuel has been kept in containment buildings because it is recognised that spent fuel ponds could be vulnerable to a terrorist attack. The IAEA suggests that fuel should be moved to dry storage as this is a safer method of storing it. The USA government is considering allowing machine guns to be installed at nuclear sites in the USA to protect the cooling ponds.

When I visited the Sizewell C consultation with a friend we were told that there is no conceivable terrorist threat to the fuel ponds. If this is the case, then why is Sizewell a designated site under the terrorism act (SOCPA). It is quite disturbing that Sizewell employees cannot conceive of a terrorist threat. It shows a distinct lack of imagination. I realise that there are the nuclear police at the site, but last time we visited Sizewell, it took over ½ an hour for the nuclear police to arrive. The chap apologised for his tardiness, explaining that he “was the only one on today”.

The space on the Sizewell C and D plan set aside for cooling ponds is not big enough to store all of the waste from Sizewell C and D. What will happen if the area for cooling ponds proves not to be adequate. Will EdF Energy seek to take more of the AONB to turn into a waste fuel store? If not where do they intend to put the extra cooling ponds. It is perfectly possible to work out how much waste will be created over the lifetime of Sizewell C and D. (it has been calculated at 3,500 tons). There are recommended methods for storing waste in cooling ponds, so I would like to know what the density of the fuel rods in storage is going to be and the area required for cooling ponds.

## **Question 2**

### ***What are your views on the proposed temporary developments at the Sizewell C development site?***

I understand the jetty is not necessarily temporary. Parts of it will be permanent and these may have a big impact on coastal erosion/accretion. The information in the consultation is unclear as to which bits are permanent and which are temporary, so it is impossible to comment on it. I believe that this is an example of EdF Energy being disingenuous. Why not call it a permanent jetty with some temporary parts?

At the moment a big space is marked out for the jetty and we are told it will be somewhere within that space -but it may take up the whole space or just a bit of it. How big is the jetty actually going to be – is it going to be a jetty or a harbour? I would like to know more about the impact that it will have on the sediment flow.

I attended a presentation given by EdF Energy on the subject of coastal processes, and I was not

impressed. Most of the answers given by Colin Taylor, EdF Energy marine manager, consisted of "we don't know enough about it, we haven't done enough tests yet". And yet a lot of the information he gave us has been known to scientists since the 1980s (Sizewell- Dunwich banks field study topic report 7, a study of nearshore sediment transport processes, IOS 1983). If EdF Energy don't know how the seas flow round Sizewell, then they shouldn't be planning to build the power station there until they know more. To decide to build it and then work out if its going to actually work is the wrong way round to do it.

More information is needed before the public can comment on the temporary structures. For example there is a marked difference between accommodation for 2,000 and 3,000 people, and in the east Anglian daily times, accommodation for up to 3,600 workers was mentioned. How many is it to be for? I don't think the accommodation should be a temporary building. It is a very wasteful use of resources to build something that large for temporary use. I would prefer it if the building/s could be permanent and then turned over to the community for some use. I am not keen on the idea being one huge block. A series of smaller buildings will be better and will fit into the surroundings in a more harmonious manner. I question the use of the term temporary. It is thought that the construction will take 9 or 10 years if all goes according to plan. If the construction mirrors that in Olkiluoto or Flamanville which are both behind schedule, the temporary structures could be in place for 20 years anyway.

I don't believe that a landscape strategy can restore the damage done to the coast. It is an intricate rare habitat supporting several protected species. I don't believe EdF Energy when they say they will restore it because I think that they will need more land to store 3,500 tons of waste from Sizewell C.

### **Question 3**

***Our proposals include a new visitor centre for Sizewell. There are three potentially suitable locations for the visitor centre:***

I don't think any of the locations are suitable for the visitors centre. If EdF Energy are genuine in their declarations of wanting to boost the local economy, why not site the visitors centre in Sizewell village.

EdF Energy should be minimising the impact they have on currently undeveloped land, so the lovers lane development is not appropriate.

#### ***Option 2: Sizewell Beach***

It is quite difficult to tell from the poor quality maps in the online PDF where on the beach the proposed site for the visitors centre is. If it is going to be put in the car park, this is the least worst option, but it certainly should not take up further space on the beach. People come to the beach to walk their dogs and enjoy what's left of the natural beauty. This would not be enhanced by a visitors centre.

#### ***Option 3: Goose Hill***

This proposal is the worst one of all. The area of outstanding natural beauty apparently has to be sacrificed for Imperative Reasons of Overriding Public Interest. A visitors centre should not be considered to be part of the IROPI

### **Question 4**

***What are your views on EDF Energy's overall accommodation strategy?***

None of the accommodation proposals are suitable. They are too big, and the fact that they are temporary completely wastes resources. No mention has been made of infrastructure for water or sewage or parking facilities for this massive building. It would be much better to have smaller facilities which the local people could use after the construction of the power station has finished. I do not think that the claim made by EDF Energy, that accommodation for the construction workers is not suitable for families, is credible, as the Olympic village was successfully transformed into

housing after the games finished. Why shouldn't workers share 2 or 3 bedroom houses which can then be sold to the local community? If EDF Energy are to pay for accommodation blocks which are designed to be demolished, what would the difference in cost be to build proper homes that they could then sell for a return. I suspect that EDF Energy do not want to build permanent accommodation because according to the planning rules: *In some cases, planning permission for a temporary building or use may be granted even though an application for a permanent building on the same land would be refused.*

Is this why EDF Energy do not want to build proper homes? Which might actually give a tiny bit back to the community?

## **Question 6**

### ***What are your views on EdF Energy Energy's overall transport strategy?***

It is difficult to comment on EdF Energy's transport strategy as there is so little detail in their proposals. I am interested in the impact that the use of the port at Lowestoft may have on the town, but there is nothing in the consultation document other than the suggestion that the port may be used. Anyone who uses the A12 between Lowestoft and Sizewell knows that there is considerable congestion at times on that route. In general, I think the country roads between Sizewell and the A12 are unsuitable for HGV's, however we need more information from proper logistics studies which are made available to the public in full before coming to any conclusions.

## **Question 7**

### ***Park and ride and lorry park developments***

I don't think that greenfield sites should be used for the park and ride or for a lorry park. The proposal for an induction centre this near to the site is unnecessary. If EdF Energy expect workers to accept a 90 minute daily commute, why does the induction centre have to be this close to the site. There are existing empty buildings which could be used for functions such as induction. I do not trust EdF Energy when they state "We envisage that once Sizewell C had been built, we would remove the new infrastructure and restore the site to farmland. What certainty is there that this will happen. Can we have binding commitment that they will do as they "envisage"?"

## **Question 13**

### ***Transport: Rail***

I think it is a good idea to use rail for the freight. I think it would be useful if the rail could be used for permanent passenger access as well. This could at least bring some benefit to the people of Leiston. It is my understanding that the current rail is reserved for transporting nuclear materials, but if it considered safe to transport large amounts of freight along the line, I do not see why it is not feasible to carry passengers.

## **Question 15**

### ***Do you have any comments on our proposals, including our approach to education, training and local supply chain initiatives?***

EdF Energy have claimed that building Sizewell C could create 25,000 jobs. This claim is extremely misleading. EdF Energy expect that the average length of contracts for construction workers would be 1 year, and they calculated the number of jobs based on this. The 25,000 jobs are each for 1 year- if everyone worked for 2 years, the 25,000 is halved, 5 years and the figure is 5000 and so on. Using EdF Energys own figures, if the number of jobs is calculated from a persons normal working life of 45 years the number of jobs is equivalent to only 580 permanent jobs.

As the project moves through the stages of construction, groups of workers will be replaced by others from different trades. The short term nature of the construction employment (average 1 year) means that it would be unsuitable for young people wishing to develop a career in this

industry sector, as training is usually done via apprenticeships which normally take 2-3 years. People will be expected to prepare for jobs which may last for less time than the training takes.

There are important questions arising about the quality of construction jobs at nuclear sites. There are currently two reactors of the type proposed for Sizewell being built in Europe. One is at Flamanville in France and the other at Olkiluoto in Finland. Both have attracted severe criticism for carelessness over workplace rights and health and safety matters.

A major factor in the delays at the nuclear power stations under construction at Flamanville and Olkiluoto has been due to a shortage of experienced subcontractors. Given this fact, it is highly likely that a considerable proportion of the Sizewell new build will go to specialized subcontractors currently working on these and similar projects. Construction at Sizewell will begin sometime after construction at Hinkley. It is unlikely that EdF Energy are going to pay for further training of workers when there are trained experience workers who are coming to an end of their short term contracts at Hinkley.

A 2008 Greenpeace study of the Olkiluoto3 power station revealed that all significant subcontracts have been won by foreign companies and even in Olkiluoto itself, about a third of the workforce is Finnish and two thirds are foreigners. Polish and German workers account for 18 percent of the workforce, while 9 percent are expert welders from Croatia. A maximum of 25% of the investment in the plant stays in Finland.

*“Olkiluoto has been a complete disappointment for us. There have been fewer than 100 Finnish builders there. It is the view of our experts that huge amounts of cheap labour have been brought here from abroad to work inefficiently”, - Kyösti Suokas, co-chairman of the Finnish Construction Union.*

In relation to Flamanville, Yannick Rousselet from Greenpeace France said *‘There are 18 different nationalities working there and most of the work is done by sub-contractors. This means there is no job security and the pay is poor. Workers get shipped in and shipped out and have none of the benefits of permanent work.’*

He added: *‘People have been flooding into the area because they have heard that work is available but then they find there is nothing. This means that local unemployment has actually increased since construction at Flamanville began.’*

Short duration, capital intensive construction projects like that proposed at Sizewell C have been shown to seriously distort the local labour market. After the project is completed many migrant workers remain in the area compounding local employment problems. Even when an effort is made to hire local people the construction project can have a detrimental effect by competing with local firms for a limited number of skilled workers. Evidence suggests that major construction projects in rural areas prevent the growth of employment in more stable industries such as tourism, and increase unemployment over the longer term. The tourist industry in Leiston and Sizewell is going to be trashed over the many years of construction.

I don't think that there will be much work for the local supply chain because the components for the nuclear power plants have to be made to a very precise detail. Local suppliers do not have experience of manufacturing for the nuclear industry and therefore EdF Energy Areva are more likely to use suppliers who have worked on Olkiluoto3 , Flamanville or Hinkley. Many of the severe delays at Olkiluoto3 and Flamanville arose because of the shortage of qualified experienced nuclear plant equipment manufacturers, so it is inconceivable that EdF Energy would begin afresh with local suppliers rather than using people who have gained experience through supplying components for the new build currently under way.

## **Question 16**

### ***Do you have any comments about the consultation process so far?***

The Government has decided that Sizewell is only a potentially suitable site for development of a new nuclear power station. Unfortunately the Suffolk coastal district council and the Joint local authorities group is acting as if the word 'potential' is missing from the sentence. The attitude of the authorities is that the power station is coming so they might as well squeeze a few meagre

crumbs from it if they can. This has led to a one sided consultation with the authorities and EdF Energy working together to present the case for new build as if it is a done deal. People who are openly opposed to the power station were not allowed to attend so called community engagement event, and some of the events promoting Sizewell C appeared to be run jointly by EdF Energy and the council so it was difficult to have any faith in the councils impartiality.

The consultation focused very narrowly on the villages in the immediate vicinity of Sizewell This may be acceptable for other forms of power generation, where an accident is likely to have little impact on people living 30 kms away, but an accident at a nuclear power station has such devastating consequences over a huge area that it is imperative that the consultation is geographically broad. After Fukushima and Chernobyl the surrounding land is deemed uninhabitable for stretches of 25-30km. There were very few consultation exhibitions outside of the 10km radius. I attended one in Lowestoft. Although EdF Energy claim otherwise, It was arranged at short notice after being requested by a local Waveney District Councillor. EdF Energy had no intention of visiting Lowestoft at the start of the consultation period (I know because I phoned and asked) the Lowestoft consultation details appeared on the website less than a week before the 3 hour exhibition took place. It was advertised once in the back pages of the local paper which people have to pay for, but not in the local free paper which is distributed to everyone (this was apparently an oversight by EdF Energy). The consultation was not in the town centre and was not advertised in the library or with posters etc. EdF Energy gave a presentation to the council at 3pm (we were originally told this would be in the evening) The presentation was in private (we were originally told it would be open to the public). EdF Energy claim that Lowestoft is local because it is well within the 90 minute commute to Sizewell, but when it came to the consultation it was clear that EdF Energy were not interested in consulting people that far afield

The information that EdF Energy have put into the public domain is limited and vague. The consultation document mentions studies which have been done for, example the BEEMS (British Energy Estuarine and Marine Studies), and gives summaries of the findings, but when a colleague requested copies of the studies, he was told that the studies had not been cited in the consultation document, they had only been described. This is untrue.

I have found it almost impossible to obtain copies of the research reports that EdF Energy have claimed have been undertaken. If EdF Energy are confident in their research then they should allow the public to scrutinise it. CEFAS publish some reports done for EdF Energy, but none of the reports on coastal erosion or processes are made public. These are the reports which are of most interest as they concern the subject of sea level, storm surge and flooding. I do not accept EdF Energys summary of the report findings. Why should we believe them when they have been so disingenuous about everything else. If EdF Energy are genuinely confident about their findings, why don't they have links to all the studies and reports on their consultation website so that people really could have an informed debate.

The information given out by EdF Energy has been completely one sided and vague. At times EdF Energy have lied. On the mark Murphy show on radio Suffolk on 1<sup>st</sup> Feb 2013 Angela pierce, head of the Sizewell c project said emphatically that there will be no subsidy for nuclear power. Even the government have admitted that there will be subsidies for nuclear power.