

# CABINET AGENDA



**Monday, 15 February 2010**

**at 9.00 am**

**in Committee Room B, Civic Centre, Hartlepool**

MEMBERS: CABINET:

The Mayor, Stuart Drummond

Councillors Hall, Hargreaves, Hill, Jackson, Payne, and Tumilty

**1. APOLOGIES FOR ABSENCE**

**2. TO RECEIVE ANY DECLARATIONS OF INTEREST BY MEMBERS**

**3. MINUTES**

- 3.1 To receive the Record of Decision in respect of the meeting held on 8 February 2010 (*to be circulated in advance of the meeting*)

**4. BUDGET AND POLICY FRAMEWORK**

No items

**5. KEY DECISIONS**

No items

**6. OTHER ITEMS REQUIRING DECISION**

- 6.1 Consultation Response - Draft National Policy Statement For Nuclear Power Generation (And Other National Policy Statements) – *Director of Regeneration and Neighbourhoods*

**7. ITEMS FOR DISCUSSION**

No items

**8. ITEMS FOR INFORMATION**

No items

**9. REPORTS FROM OVERVIEW OF SCRUTINY FORUMS**

No items

# CABINET REPORT

15 February 2010



**Report of:** Director of Regeneration & Neighbourhoods

**Subject:** CONSULTATION RESPONSE - DRAFT NATIONAL POLICY STATEMENT FOR NUCLEAR POWER GENERATION (AND OTHER NATIONAL POLICY STATEMENTS)

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## SUMMARY

### 1. PURPOSE OF REPORT

To consider and respond to the consultation documentation issued by the Government in relation to the National Policy Statement for Nuclear Power Generation (EN-6) - nominating a site in Hartlepool as a suitable location for the deployment of a nuclear power station by the end of 2025 - and other National Policy Statements

### 2. SUMMARY OF CONTENTS

The report explains that the Department of Energy and Climate Change has published for public consultation a suite of six National Policy Statements (NPSs) on energy related issues, one of which (Draft National Policy Statement for Nuclear Power Generation: EN-6) sets out the need for nuclear power in the country's energy mix and includes Hartlepool as a potential suitable location for a new nuclear power station.

The report ( **Appendix A** refers) summarises the coverage of the National Policy Statements and some potential implications for Hartlepool and the wider Tees Valley. These have been identified in consultation with the Tees Valley JSU, and the agreement of other TV local authorities through the Tees Valley Unlimited Planning and Economic Strategy Board, as the basis of a formal response to the relevant Government department.

In particular however the suggested formal response of Hartlepool Borough Council to the NPS for Nuclear Power Generation (EN-6) is considered in relation to the potential development of a new power station in Hartlepool. The report (plus associated **Appendices B,C & D**) outlines the results of the "communication strategy" previously agreed by Cabinet which has been

undertaken in order to stimulate public debate and help inform the Council's position on the nuclear power proposals.

### 3. RELEVANCE TO CABINET

The Executive has responsibility for matters deemed to be sensitive which are non-key decisions.

### 4. TYPE OF DECISION

Non - Key

### 5. DECISION MAKING ROUTE

Cabinet 15<sup>th</sup> February 2010

### 6. DECISION REQUIRED

That Cabinet:-

- a) Endorse the comments (at **Appendix A**) agreed with other Tees Valley local authorities on the National Policy Statements, including the proposed consultation responses to individual questions, for forwarding to the relevant Government department
- b) Agree the contents of the report as the basis of a Hartlepool Borough Council response to the NPS for Nuclear Power Generation (EN-6) and in particular (**Appendix G**) the proposed consultation responses to individual questions, for forwarding to the relevant Government Department
- c) Authorise the Director of Regeneration & Neighbourhoods, in liaison with the Mayor, to make any minor alterations to the proposed responses to individual questions, to allow further dialogue if necessary with the Tees Valley JSU in relation to the NPS consultation.

**Report of:** Director of Regeneration & Neighbourhoods

**Subject:** CONSULTATION RESPONSE - DRAFT NATIONAL POLICY STATEMENT FOR NUCLEAR POWER GENERATION (AND OTHER NATIONAL POLICY STATEMENTS)

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## 1. PURPOSE OF REPORT

- 1.1 To consider and respond to the consultation documentation issued by the Government in relation to the National Policy Statement for Nuclear Power Generation (EN-6) - nominating a site in Hartlepool as a suitable location for the deployment of a nuclear power station by the end of 2025.
- 1.2 To also consider and respond to other National Policy Statements in conjunction with the Tees Valley JSU and other Tees Valley local authorities.

## 2. BACKGROUND

- 2.1 At the meeting of Cabinet on 14<sup>th</sup> December 2009 the Executive was made aware of the NPS consultation process instigated by the Government in relation to the following suite of NPS energy-related documents :-

- The draft Overarching National Policy Statement for Energy (EN-1)
- The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)
- The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)
- The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)
- The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)
- The draft National Policy Statement for Nuclear Power Generation (EN-6)

(Note: There is also a Ports NPS issued for consultation, reference to which is included within **Appendix A**)

2.2 At that meeting it was resolved (Minute ref 134 Dec 14<sup>th</sup> 09 refers) :-

That Cabinet notes :-

- a) the Government is undertaking a consultation process until 22<sup>nd</sup> February 2010 on the Nuclear Power Generation (EN-6) and other energy-related National Policy Statements
- b) that Hartlepool is included amongst a list of nine other sites elsewhere in England & Wales within the NPS as a suitable potential location for deployment of a new nuclear power station by the end of 2025
- c) the proposed way forward in terms of measures the Council may wish to take to publicise the consultation and help inform its own response to the Government
- d) the intention to report back to Cabinet in February 2010 to enable a formal response to the consultation to be made

2.3 Within the report it was further indicated that officers were also liaising with colleagues in other Tees Valley local authorities, via the Joint Strategy Unit and Planning Managers Group, about responding jointly to the NPS consultation documents. This has resulted in a report being submitted to the Planning and Economic Strategy Board of Tees Valley Unlimited as the basis of a response to Government, details of which are included as **Appendix A**.

2.4 Each of the TV local authorities have led on the specifics of a particular NPS, with Hartlepool, for obvious reasons given the possible location of a new nuclear power station adjacent to the existing one in Hartlepool, leading on the NPS for Nuclear Power Regeneration. The Tees Valley JSU and other local authorities are also aware of the Mayor's intention, subsequently endorsed by Cabinet, to encourage a full and open debate that would help inform the Council's position on the nuclear power proposals within Hartlepool.

2.5 The communication strategy agreed by Cabinet to achieve this public engagement was as follows :

Information provision

- Establishment / creation of a dedicated web-site
- Inclusion on web-site of relevant DECC documents / links to these
- Inclusion on web-site of Economic Assessment / Environmental Impact and other relevant studies
- Ensuing on-line comment and debate to inform Council position / response
- Appropriate PR to launch website and links from Council / Partnership web facilities

- Relevant documents made available for public inspection and comment at key locations e.g. Civic Centre, Bryan Hanson House, Hartlepool Central Library, all branch libraries in Hartlepool
- Use of Viewpoint Panel to ask energy-related questions

#### Events/meetings

- Raising the government's consultation as a topic for information/debate at a range of meetings already scheduled, in early 2010
- Meetings to include the Hartlepool Partnership, Neighbourhood / NAP Forums, Business Forum, Economic Forum and Environment Partnership
- Recording comments at such meetings to inform the Council's own thinking
- A "Question Time" style event with an "expert" panel representing a cross-section of views

### 3.0 KEY OUTCOMES OF THE COMMUNICATIONS STRATEGY

3.1 **Appendices B, C and D** accompanying this report detail the main findings, comments and / or proceedings arising from the three key public opinion-gathering aspects of the communication strategy, namely:

- the on-line questionnaire (**Appendix B**)
- Viewpoint Panel (**Appendix C** – Interim results, final analysis to follow)
- Question Time event (**Appendix D**)

#### On-Line Questionnaire Summary Results (Appendix B)

A range of questions (10) were asked through the on-line questionnaire and overall a total of 160 responses were received. For those questions which were measurable, being choice / option specific, the following results were achieved:

**1. Before you looked at this website, were you aware that a new nuclear power station might be built in Hartlepool?**

	Count	Results
Yes	158	99%
No	2	1%

**2. Which of these statements best describes what you think about this plan?**

**Count Results**

Generally I support a new nuclear power station being built in Hartlepool	132	83%
Generally I am against a new nuclear power station being built in Hartlepool	24	15%
I don't have a strong view about a nuclear power station being built in Hartlepool	4	3%

### 3. Do you think that a new nuclear power station will bring any benefits to Hartlepool?

	Count	Results
Yes	138	86%
No	16	10%
No strong opinion	5	3%
Don't know	1	1%

### 4. What do you think the benefits might be?

This question has been answered 130 times. Full details of all the responses can be found in **Appendix B**. The main themes of these comments can be summarised as being:

- Support for jobs and local employment opportunities
- Income into local economy
- Source of sustainable energy
- Low carbon power

### 5. Do you have any concerns about a nuclear power station being built in Hartlepool?

	Count	Results
Yes	30	19%
No	119	76%
No strong opinion	7	4%
Don't know	0	0%

### 6. What concerns do you have?



This question has been answered 25 times. Full details of all the responses can be found in **Appendix B**. The main themes of these comments can be summarised as being:

- Storage & disposal of nuclear waste
- Safety of Nuclear Power
- Impact on environment
- Impact on health – especially cancer
- Proximity to other industries e.g. oil and gas

**7. Are you aware of the government's plans for nuclear waste - how it will be transported, stored and disposed of?**

	Count	Results
Yes	125	81%
No	30	19%

**8. Do you have any concerns about the plans for nuclear waste?**

	Count	Results
Yes	24	19%
No	84	68%
No strong opinion	14	11%
Don't know	2	2%

**9. What concerns do you have?**

This question has been answered 21 times. Full details of all the responses can be found in **Appendix B**. The main themes of these comments can be summarised as being:

- Long term solution not in place
- Creation of problem for future generations
- Effects on environment
- Effects of potential accidents
- Potential terrorism threat

**10. Do you have any other comments about the possibility of a new nuclear power station being built in Hartlepool?**

This question has been answered 101 times. Full details of all the responses can be found in **Appendix B**. The main themes of these comments can be summarised as being:

- Hartlepool has a power station already so no issues with having another one
- The current power station has operated safely over its lifetime to date
- Employment opportunities
- Economic benefits to Hartlepool
- The need for more power
- Loss of existing station would have a negative impact on Hartlepool
- More consideration should be given to alternative forms of renewable energy
- Potential risks to health, environment and communities
- Disposal of nuclear waste has not been resolved
- Local views need to be listened to before decision is made

#### Viewpoint Panel Summary Results (Appendix C)

- 3.2 The same range of questions as those for the on-line survey were also asked of the Viewpoint Panel with a closing date for responses of 29<sup>th</sup> January 2010. At the time of writing this report the findings of the Viewpoint consultation have only have just been received so are included in the report at **Appendix C** without further detailed analysis. In broad terms, however, the results of the viewpoint survey do tend to reflect the outcomes of the on-line survey and are based upon 884 actual completed questionnaires, weighted up to 1200 responses.

#### Question Time Event (Appendix D)

- 3.3 Local people were also given the opportunity to pose questions to a panel of experts over the proposals to build a new nuclear power station in Hartlepool at a Question Time event staged at Hartlepool's Maritime Experience. Introduced by the Mayor, the proceedings were chaired by Joy Yates – Editor of the Hartlepool Mail - with panel members from Hartlepool Power Station, Newcastle University, Green Peace and the Department of Energy & Climate Change (DECC). There were a total of 72 attendees with people invited to submit questions / raise issues in advance of the meeting, which were then captured and condensed into 8 specific questions for the panel to consider and respond to, before each question then being opened up for audience debate.
- 3.4 In response to the request by Cabinet to consider ways to involve young people in the nuclear debate, three young people as representatives of Hartlepool Youth Parliament and Hartlepool Grant Givers (all aged 15) were invited to attend the Question Time event. Feedback from these young people was positive, having had their questions / concerns responded to in a non-patronising way by the

panellists, and indicating that the groups that they are part of would welcome continued involvement in the debate.

- 3.5 A comprehensive set of meeting notes capturing the very many wide-ranging issues that were debated is included as **Appendix D**. Overall the Question Time event was very well received, with the general view expressed by Panellists / attendees (whether pro, anti or undecided / neutral about nuclear power) in the summing up, or immediately post-event, being one of appreciation and satisfaction that they had been given the opportunity to express their opinions openly and frankly.

#### 4.0 PLANNING, ENVIRONMENTAL AND ECONOMIC CONSIDERATIONS

- 4.1 Prior to the above communication strategy, and as has previously been reported to Cabinet - and other Members via the 'Member's Seminar Programme' - officers had already worked alongside the Economic Forum and the Environment Partnership (of the Hartlepool Partnership) with a view to ensuring there is a well informed debate both from an economic as well as environmental perspective about the impacts of a new nuclear power station. Two separate reports were produced and publicised, both of which are now included as appendices within this report as follows :-

- **Appendix E** : Executive Summary of the Economic Impact Assessment (full report available on the Council and Hartlepool Partnership web-sites)
- **Appendix F** : Environmental Implications of New Nuclear Power Stations (August 2009)

- 4.2 Reference was also made to these documents in the Cabinet meeting on 1<sup>st</sup> May 2009 when it was resolved (Min Ref. 274)

That :

*the nomination of a site for a new nuclear power station at Hartlepool merits further investigation by the Government in its preparation of a draft Nuclear National Planning Policy “ and that*

*“It was noted that studies were, in the meantime, being undertaken locally to assess the economic and environmental impacts of a new nuclear power station at Hartlepool, and the findings of the studies would help inform public debate in the lead up to, and during, the longer and wider stage of public consultation in Autumn 2009”.*

- 4.3 Since then, officers have subsequently considered the details of the National Policy Statement (EN-6) - which is different from the other published draft NPS in that, in addition to policy guidance, it makes reference to ten specifically identified

sites each suitable for the location of a nuclear Power Station - and would offer the following comments :-

- The overall strategy of reliance on a mix of energy sources, including nuclear, coupled with a continued focus on reducing consumption and increasing energy efficiency, is seen as the most robust way of securing supply and reducing carbon emissions. Within that mix, the case for a nuclear component as presented in the NPS is accepted, but regard does need to be paid to the danger of the debate about nuclear energy distracting attention from measures to bring forward other sources of supply
- The NPS sets out the broad range of site assessment criteria requirements which had previously been consulted upon. The description of the site at Hartlepool appears accurate and the siting criteria comprehensive and appropriate.
- The criteria for the Hartlepool site include those relating to flood risk, the relationship to other hazardous installations and the potential adverse effects on internationally protected nature conservation sites. Officers consider that such issues can be addressed by mitigation measures and do not present insurmountable problems. (**Appendix F** looks in more detail at Environmental considerations)
- The NPS draws attention to the limited size of the ownership boundary particularly as it will need to include land requirements for provision of a sea outfall pipe through the SPA
- The references in the NPS relating to storage on site need to be expanded so as to clarify the long term provision of storage.
- Generally, perhaps, particularly in relation to low level waste, the issues in the NPS are not considered to raise any particular difficulties in view of the existence of the currently operating nuclear power station in Hartlepool – but see further comments on this matter below.
- The NPS focuses on the interim storage and geological disposal of higher activity waste in particular spent fuel. It states that all higher activity wastes will have to be stored until a geological disposal facility (GDF) can accept the waste. It assumes that facilities will be built at each new build site for this purpose up until a point where it could be disposed of in a GDF that may be developed as part of the Managing Radioactive Waste Safely (MRWS) programme. The NPS confirms that the Government recognises that it has a responsibility to deal with long-term higher activity waste management and is committed to geological disposal as the technical solution, such that it will seek to develop alternative ways to implement a

solution if the current framework as set out in the MRWS white paper, ultimately proves to be unsuccessful.

The Government is committed to the voluntarist and partnership approach to site selection work for a GDF through the MRWS programme. There is an assumption that new built spent fuel will be disposed of at the GDF. It should be noted however that this may not be welcomed by potential host communities and their decision making bodies. The CoRWM process looked at legacy management and the baseline inventory of radioactive waste to be disposed of at the GDF included the legacy wastes and not the waste from new build. The MRWS white paper did however conclude that “the Government considers that it would be technically possible and desirable to dispose of both new and legacy waste in the same geological disposal facilities and that this should be explored through the MRWS programme.”

- The NPS does not discuss low level waste (LLW) management but asserts that the Government considers that arrangements already exist for the effective management and disposal of wastes in these categories, as demonstrated by the experience of dealing with such wastes from existing nuclear power stations. The waste document states that LLW from new nuclear stations “will be handled in a manner similar to current practices...” and concludes that the Low Level Waste Repository (LLWR) or an alternative disposal route will be available for new build operational LLW.

The NPS is correct in as far as that there are established, effective arrangements already in existence for the management and disposal of LLW. However this assumes that the implementation of the LLW strategy opening up new disposal routes will be straightforward. It is possible that some elements of the UK’s LLW strategy such as disposal to landfill and incineration are likely to attract local opposition and that it is possible that some proposed facilities will not secure the necessary planning permissions and this puts a question mark over the availability of alternative waste treatment and disposal routes.

- It is recognised that further assessments under the Habitats Regulations will be undertaken if a specific project is brought forward.
- The NPS explains the relationship between the Local Planning Authority and the IPC. It is assumed that because there is an existing power station at Hartlepool the general matters of site selection and the more locally relevant issues should not give rise to problems in the working relationship between the LPA and the IPC. However there is uncertainty about how the Independent Planning Commission and the LPA processes do relate and more clarification is required in the NPS.

- The NPS could include more information on offsite infrastructure requirements. In particular it is suggested that more information should be given in the NPS on any improvements to the connection to the National Grid required. In addition, further information should be given about the inter relationship of the new plant and the old plant particularly at the decommissioning stage.
- The NPS does not indicate in detail how the NPS and more particularly the siting of a new nuclear power station should be reflected in the LDF process. In the case of Hartlepool the emerging Core Strategy will be able to incorporate appropriate policy guidance on a new station.
- Economic impact is also an important consideration. In terms of the economic benefit of a new nuclear power station, the economic impact assessment commissioned by the Economic Forum suggests that a new nuclear power station will create between 1,500 to 3,000 construction jobs over a five year period with a £75m per annum wage bill, this equates to a total of £375m.

The operation of a new nuclear power plant will create around 450 jobs for an anticipated 70 years. These are highly skilled long term jobs that are well paid and the average annual wage bill is £20m pa. This equates to around £1b in lifetime salaries. The contractor and other supplier chain benefits are likely to equate to £12m pa. The power station currently contributes around £7-8m to non domestic rates and this figure represents the likely scenario for a new station. **Appendix E** looks in more detail at economic impact considerations.

- 4.4 With respect to the draft NPS on Ports, the views expressed in the proposed Tees Valley response in **Appendix A** are endorsed. From the Hartlepool perspective the recent announcements about the potential for offshore related development to be pursued at Hartlepool docks and the developing activity at Able UK's Seaton port site illustrate the importance of having a clear strategic framework and certainty for future port development

## 5.0 CONSULTATION RESPONSE

- 5.1 Taking all of the above views into account, officers are of the opinion that the previously agreed stance by Cabinet in relation to a new nuclear power station for Hartlepool (namely that this does warrant further investigation) can now be strengthened to the extent that the Council could offer its support to such a proposal being included within the NPS (and that this opinion would be consistent with the majority view resulting from the local community consultation within Hartlepool).
- 5.2 As far as practicably possible the considerations outlined within this report have been reflected in the proposed formal response to the consultation questions

contained both in **Appendix A and G**. Further dialogue will be necessary however with the Tees Valley JSU to ensure consistency between both responses, and this may require some changes to the final response wording. Officers also suggest, given the valuable but wide-ranging and sometimes diverging views and opinions expressed through the local consultation, that it would also be appropriate to include the entirety of this Cabinet Report and the associated Appendices with the comments submitted to Government by the Council.

- 5.3 It should also be noted by Cabinet that during the course of the 'communication strategy' held locally in Hartlepool, efforts have also been made to publicise the ongoing NPS consultation, with the intention of encouraging individuals to also submit their own views to Government as appropriate.

## 6. RECOMMENDATIONS:-

That Cabinet :-

- a) Endorse the comments (at **Appendix A**) agreed with other Tees Valley local authorities on the National Policy Statements, including the proposed consultation responses to individual questions, for forwarding to the relevant Government department
- b) Agree the contents of the report as the basis of a Hartlepool Borough Council response to the NPS for Nuclear Power Generation (EN-6) and in particular (**Appendix G**) the proposed consultation responses to individual questions, for forwarding to the relevant Government Department
- c) Authorise the Director of Regeneration & Neighbourhoods, in liaison with the Mayor, to make any minor alterations to the proposed responses to individual questions, to allow further dialogue if necessary with the Tees Valley JSU in relation to the overall NPS consultation.

## 7. CONTACT OFFICER

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**8. APPENDICES**

Appendix A: Tees Valley Response to National Policy Statements

Appendix B: 'On-Line' Consultation Results

Appendix C: 'Viewpoint' Consultation Results

Appendix D: Notes of Meeting 'Question Time' Event

Appendix E: Executive Summary of the Economic Impact Assessment

Appendix F: Environmental Implications of New Nuclear Power Stations (August 2009)

Appendix G: HBC Response to NPS for Nuclear Power Generation (EN-6)



## **TEES VALLEY WIDE RESPONSE TO NATIONAL POLICY STATEMENTS**

### **SUMMARY**

1. A number of National Policy Statements (NPS) have been issued for consultation by government:
  - Overarching Statement on Energy
  - Fossil Fuel Electricity Generating Infrastructure
  - Renewable Energy Infrastructure
  - Gas Supply Infrastructure and Gas and Oil Pipelines
  - Electricity Networks Infrastructure
  - Nuclear Power Generation
  - Ports
2. National Policy Statements, along with the Infrastructure Planning Commission (IPC) form part of the new planning regime introduced by the 2008 Planning Act to provide a faster, fairer, more efficient system for considering proposals for nationally significant infrastructure projects. In particular they will cut out often lengthy debates at public inquiries on the 'need' for types of energy or infrastructure. NPSs will show which forms of development are, or are not, in line with government policy. Applications for major infrastructure developments, above certain thresholds, will be determined by the IPC.
3. This report summarises the coverage of the National Policy Statements and highlights some potential implications for the Tees Valley. Key issues include:
  - No indication of priority areas for new energy infrastructure provision with the market largely deciding when and where new proposals will come forward
  - Insufficient weight given to the statutory development plan and its role in planning future infrastructure requirements
  - Possible conflicts between increasing fossil fuel generation capacity and the approach to planning for low carbon energy infrastructure
  - Little on the relationship between future infrastructure provision and potential development opportunities

## **1. PURPOSE OF REPORT**

- 1.1 The government has issued for consultation the first tranche of National Policy Statements (NPS). The purpose of this report is to summarise the content of the NPSs, consider any issues and implications for the Tees Valley, and agree a formal response to the relevant government department. The report also gives some background to the role of the Infrastructure Planning Commission (IPC) and how it will use NPSs to determine applications for nationally significant infrastructure projects.

## **2. BACKGROUND**

- 2.1 The 2008 Planning Act introduced a new planning system for applications for nationally significant infrastructure facilities. The new system covers applications for major energy generation, railways, ports, major roads, airports, and water and waste infrastructure. Under the new system, national policy on infrastructure will be set out in a series of National Policy Statements which can be reviewed by the Secretary of State if there is a change in circumstances. Smaller infrastructure projects which fall below the thresholds set out in the 2008 Act will continue to be dealt with under the existing planning system.
- 2.2 A new independent body, the Infrastructure Planning Commission (IPC), will examine and decide applications for new infrastructure development, using the criteria on national need, benefits and impacts set out in the NPS. The IPC can also consider other matters which it considers both important and relevant to its decisions.
- 2.3 National Policy Statements will vary in content depending on the type of infrastructure, the need for that infrastructure, and whether the government has determined that it should establish through the NPS where that infrastructure should be located. Only two NPSs will be location specific – Nuclear Energy and Airports – although other NPSs may set out criteria to be applied in deciding whether a location is suitable, or potentially suitable, for a specified type of development.
- 2.4 The aim of the new planning system is to produce a faster, fairer and more efficient system for considering proposals for nationally significant infrastructure projects. This will be achieved principally by eliminating the often lengthy debate at public inquiries on the 'need' for new significant infrastructure projects such as a nuclear power station. The 'need' element will be covered in the NPS which will show which forms of development are, or are not, in line with government policy.
- 2.5 There will be 12 National Policy Statements. The first 7 draft National Policy Statements were published for public consultation in November 2009 and consist of:
- Overarching National Policy Statement for Energy (EN-1)

- Fossil Fuel Electricity Generating Infrastructure (EN-2)
  - Renewable Energy Infrastructure – including wind farms, energy from waste, biomass plants (EN-3)
  - Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)
  - Electricity Networks Infrastructure (EN-5)
  - Nuclear Power Generation (EN-6)
  - Ports
- 2.6 National Policy Statements EN-1 to EN-6 have been published by the Department of Energy and Climate Change, and the Ports NPS by the Department for Transport.
- 2.7 The following National Policy Statements will be published for consultation in 2010 (Spring to Summer):
- National networks (e.g. strategic roads and railways, strategic rail freight)
  - Waste Water (e.g. sewage treatment infrastructure)
  - Hazardous Waste (e.g. high temperature incineration)
  - Water Supply (e.g. reservoirs)
- 2.8 The final NPS, which will be published in 2011, will deal with Airports.
- 2.9 Under the 2008 Planning Act the Secretary of State, in designating or reviewing an NPS, must have regard to the objective of contributing to the achievement of sustainable development, including mitigating and adapting to climate change and achieving good design. To help achieve this all NPSs are subject to an Appraisal of Sustainability (AoS) covering the economic, environmental and social effects of the policies in the NPS. Where necessary NPSs will also be subject to Strategic Environmental Assessment.
- 2.10 There is no set period for National Policy Statements and they will remain in force until such time as they are withdrawn or replaced. The 2008 Act requires the Secretary of State to review each NPS whenever it is appropriate to do so. This could be either a partial or full review of the NPS.
- 3. National Policy Statements, local issues and the planning system**
- 3.1 Applicants will be required to consult local communities and local authorities before submitting an application to the Infrastructure Planning Commission. The IPC will give notice in writing to the relevant local authority, inviting them to submit a local impact report by a specified deadline. The Planning Act is not prescriptive about what should or should not be included in a local impact

report – it is for the local authority to determine what they regard as relevant taking account of the likely impact of the proposed infrastructure development on any part of the authority's area. The IPC must have regard to the local impact report in coming to a decision on the planning application.

- 3.2 The new system for nationally significant infrastructure projects will operate alongside the current town and country planning process.
- 3.3 NPSs are not part of the statutory development plan (i.e. Regional Spatial Strategy and Local Development Frameworks) but are statements of national policy which regional planning bodies and local planning authorities must have regard to when preparing plans and strategies.
- 3.4 National Planning Statements should not unnecessarily delay the process of preparing development plans, including regional strategies. Local planning authorities and regional planning bodies should consider the extent to which emerging plans and strategies can reasonably have regard to emerging NPSs, depending on the stage the development plan has reached. If it is not possible to make changes to emerging plans to take account of an NPS it will be necessary to address any issues through an early plan review. In cases where development plans have not been updated to take account of a particular NPS, the NPS is likely to be a material consideration which the local planning authority will have to take into account when determining planning applications.
- 3.5 NPSs can also include policies that may need to be taken into account by other decision makers as well as the IPC. For example the Ports NPS sets out government policies for all types of port infrastructure – both above and below the thresholds set out in the Planning Act. Local planning authorities and others should therefore take account of such policies when considering planning applications.

#### **4. Current NPS consultations**

- 4.1 This section summarises each of the consultation NPSs and highlights some of the potential implications for the Tees Valley. The Overarching Energy Policy NPS (EN-1) should be read together with each technology specific NPS (EN-2 to EN-6) as it sets out the key principles that the IPC will take into account in determining energy infrastructure applications, as well as setting out the national need for different types of energy.

#### **Overarching National Policy Statement for Energy (EN-1)**

- 4.2 The Overarching National Policy Statement establishes national policy for major energy infrastructure provision. The objectives of government energy and climate change policy for the power industry are to reduce emissions; provide security of energy supply; expand grid capacity; keep costs down, and contribute to sustainable development.
- 4.3 A large number of power stations are due to close over the next 10 to 15 years (oil, coal and nuclear) and significant new electricity generating capacity

is needed to meet future demand and ensure that peak demands and unexpected events do not lead to interruptions in supply. The NPS sets out a diverse energy mix to deliver the new capacity requirements and makes clear that the IPC does not need to consider the relative advantages of different technologies. By 2020 around 30% of future electricity generation will be from renewable sources. Nuclear power will potentially amount to 40% of new capacity by 2025. New fossil fuel electricity generating stations with carbon capture and storage are expected to be operational by 2020, and a 'smarter' electricity grid for distribution is required. Imported gas will become increasingly important as production in the North Sea declines and will require new infrastructure.

4.4 The NPS sets out five key principles which will guide the IPC when deciding applications:

- If development contributes to meeting need and is in accordance with the NPS, then consent should be given;
- Regard should be had to local impact reports and other matters considered relevant and important;
- National, regional and local benefits (environmental, social and economic) should be taken into account;
- Adverse impacts should be considered, including longer term and cumulative impacts and proposed mitigation, and
- If the IPC considers that the adverse impacts (after mitigation) outweigh the benefits, then consent should be refused.

4.5 In the event of a conflict with existing planning policy, the NPS will be followed.

4.6 The NPS identifies a series of criteria and impacts applying to all energy infrastructure projects which the IPC will take into account when reaching a decision:

- Good design
- Air emissions – impact on the health of ecosystems and Air Quality Management Plans
- Biodiversity – particular consideration of impacts of designated sites and mitigation
- Aviation and defence Interests
- Coastal Change – resilience to coastal change, taking account of climate change, impacts on marine biodiversity
- Nuisance from noise, odour, dust, light, smoke etc

- Flood risk – Flood Risk Assessment is required. Development in a flood risk area must be designed to remain operational if floods occur
- Historic Environment
- Landscape and Visual Impacts
- Land use – impacts on high quality agricultural land, coastal recreation, open space, sports facilities
- Social and Economic Impacts
- Traffic and Transport – mitigation of impacts will be required
- Waste Management – requires effective management of hazardous and non-hazardous waste
- Water Quality and Resources – regard to the Water Framework Directive

Potential implications

4. A number of issues and concerns have been raised nationally by several key stakeholders over the government's approach to energy infrastructure in the NPSs, including:
  - The lack of a locational strategy – the government is leaving it to the market to decide where proposals for new electricity generating infrastructure will come forward. There is no indication of priority areas for new infrastructure provision and no attempt to steer investment away from areas where such developments are not desirable
  - Little on the relevance of the development plan (Regional Spatial Strategy and Local Development Framework) to the infrastructure decision making process. The NPS should give clear guidance on the weight to be given to the development plan in considering proposals and how they relate to other planned development
  - Concern that the possible 'fast-tracking' of fossil fuel power stations may deflect action and priorities away from climate change issues and the move to a low carbon economy

**Fossil Fuel Electricity Generating Infrastructure (EN-2)**

4. This NPS covers the provision of large coal, gas and oil fired generating infrastructure over 50MW in capacity. Large power stations need large areas of land, close to transport routes and a way of connecting to the electricity grid network. Some power stations will have a high demand for water and need to be located on the coast, alongside rivers or estuaries.

4. The government has concluded that new fossil fuel generating capacity with carbon capture and storage will be needed to provide additional and flexible supply. The government expect up to four coal power carbon capture and storage demonstration projects to be operational by 2020. Incorporation of combined heat and power should also be considered as an option.

Potential Implications

4. A major concern is that the NPS contains no guidance on preferred locations for new power stations. The NPS should be more prescriptive about which conditions would be favourable to help meet other spatial planning objectives, such as:
- Use of previously developed land
  - Proximity to compatible/incompatible uses, including protected wildlife sites
  - Proximity of carbon capture and storage facility
  - Proximity to the demand for energy use
  - The extent to which local communities and/or the perception of an area might be disadvantaged, and
  - The spatial framework for the area, including aspirations of landowners
4. The overarching NPS states that need is to be accepted for all types to ensure a range of technologies are included in the energy mix to ensure security of supply. However, there should be further information setting out the level of provision for each technology. At the very least, there needs to be a strong mechanism for monitoring applications to ensure a suitable mix is coming forward and gaining permission. There is a danger that a specific technology (i.e. the most economically viable) will dominate the market, resulting in an inappropriate mix that may not meet the requirements.
4. There is a presumption that CCS will be commercially viable, although this may still be open to debate. Although the NPS makes provision for this scenario by stating that a regulatory approach to managing emissions may be needed, this could result in the UK not being able to provide sufficient low carbon energy at 2025 and beyond. It seems obtuse to on the one hand take a proactive approach to planning for low carbon energy infrastructure, whilst on the other promote what could be significant fossil fuel generation capacity without understanding whether this will actually be low carbon.
4. Power plant over 50MW is already determined by the Secretary of State, rather than within local government, and on the face of it there seems little change in this process. However, the current Section 36 procedures (of the Electricity Act) provide for the Secretary of State to hold a public inquiry into the development if the local planning authority object to a proposal (and this

cannot be resolved). This is absent from the proposed procedures and represents a marked change in process. There is concern that local views and technical expertise (as expressed by local planning authorities) will not be given due weight within the new regime and within the NPS. Indeed, more clarity of the process of affording weight to local planning authority concerns should be provided.

4. Currently local planning authorities get up to 4 months in which to formally respond to government on major power generating development. It would appear that this will be cut to 28 days within the new system (albeit with an additional 28 day period at pre-application stage). Even with amended procedures, there is concern that this would be far too short a period to allow an adequate response be considered and agreed, especially if the local authority planning committee is required to be involved.
4. Other issues of concern include:
  - The need to assess the impact of grid infrastructure at the same time as power plant applications
  - The importance of monitoring conditions and planning obligations
  - The need to consider the implications of Hazardous Substance Consents and the COMAH regulations
  - Landscape and visual impact needs to be given significant weight – the emphasis on high quality design should not be limited to simply minimising adverse impacts
  - The implications of plant decommissioning must be built into the process, particularly impact on local communities
  - The combined effects of carbon capture storage infrastructure should be fully considered in tandem with wider power projects

#### **Renewable Energy Infrastructure (EN-3)**

4. This NPS relates to large energy generation developments from on shore wind, biomass and waste plants (over 50MW generating capacity) and off shore wind (over 100MW generating capacity). With the national need for different types of energy infrastructure required over the next 10-15 years set out in the Overarching Policy Statement for Energy (EN-1), the government estimates that by 2020 about 30% of electricity generation will be from renewable sources – primarily wind generation with smaller amounts of 'bioenergy', with more of the latter becoming desirable and possible.
4. Biomass and Waste Combustion – biomass and waste which would otherwise go to landfill can be used to generate energy through combustion. Transport movements will be high and good connections required. Applications



involving waste should be in conformity with the waste hierarchy and should not prejudice the achievement of waste management targets.

4. Onshore wind – turbines usually generate between 2-3.5MW and have a limited lifespan. The NPS advises the IPC to limit consent to 25 years and require removal afterwards. Key considerations include proximity of housing (visual amenity and noise), connection to the electricity network, access and impacts on national designations.
4. Offshore wind – many offshore windfarms require significant onshore infrastructure to bring in electricity, including very large sub-stations and possibly overhead lines. These should form part of the application to the IPC.

#### Potential Implications

4. The thresholds set by the NPS as nationally significant for wind farms and combustion plants have not been reached by any applications to date in the Tees Valley, although a number of biomass plants have been just below the threshold and the cumulative impacts could be significant.
4. With regard to biomass and waste combustion proposals, concerns include:
  - The need for a detailed assessment of transport options in terms of economics and sustainability with applicants justifying the options chosen to allow the IPC to address all impacts and benefits of the proposal
  - The NPS should reflect priority to brownfield locations as many developments can have some flexibility in their location requirements
  - While the NPS gives support to proposals that will recover residue materials, where such recovery forms part of a proposal there should be sufficient evidence provided to allow an informed decision to be made.
4. Regarding onshore wind the balance between the potential impacts of a site and its efficiency should be a consideration of the IPC. The installation of test masts prior to application submission could be a useful way of assessing economic viability and maximising potential energy capture from a limited resource – the capacity of a landscape to accommodate turbines.
4. Bird collision is an issue with windfarms, and the NPS should require an assessment to take account of the importance of bird populations against the benefits of the proposed scheme.

#### Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

4. This NPS covers large underground gas storage and liquid natural gas facilities; large gas reception facilities; gas transporter pipelines conveying gas to at least 50,000 potential customers; and oil and gas cross country pipelines over 10 miles in length. In England the IPC will decide all relevant

applications. Offshore gas storage, infrastructure and pipelines, will be determined by the Secretary of State for Energy and Climate Change.

4. Underground Natural Gas Storage – nationally significant underground natural gas storage facilities will hold 43 million standard cubic metres of gas or higher; or will have a projected delivery flow rate capacity equivalent to 4.5 million standard cubic metres of gas per day or higher. Gas needs to be stored where it can enter the transmission system quickly at times of high demand, and where longer term storage can take place. Porous rocks in a depleted or partially depleted oil or gas field, salt caverns, and aquifers offer suitable locations. The main areas where thick natural layers of salt are found are in northern England. Specific criteria relate to water quality and resources – in a salt cavern water abstraction and disposal of brine will need to be addressed.
4. Liquid Natural Gas Import Facilities – these are major installations, which need to be located on the coast away from areas of population, where tanker unloading facilities including a deepwater jetty, large storage tanks and re-gasification plant can be accommodated. Specific criteria include the impact of dredging on designated marine and coastal habitats, protected species, the water environment, coastal processes and geomorphology which will need to be considered, together with the need to mitigate visual impacts.
4. Gas Reception Facilities – these receive and process gas to a form in which it can be used in domestic appliances. They need to be linked to the on shore and off shore gas supply infrastructure. Nationally significant gas reception facilities will have a projected maximum flow rate of at least 4.5 million standard cubic metres of gas per day.
4. Gas and Oil Pipelines – these networks link import facilities, refineries, storage and distribution facilities. Where possible the proposed route should avoid impacts on National Parks or Areas of Outstanding Natural Beauty. Elsewhere the character of the landscape should be taken into account and mitigation provided. Impacts on groundwater will need to be assessed and mitigated, and the suitability of the geology for gas storage considered.

#### Potential Implications

4. The North and South Tees Industrial Development Framework summarises current gas supply infrastructure in the industrial area around the Tees Estuary, and identifies a number of issues/opportunities:
  - There is excess capacity of gas caused by a drop in consumption as some industrial users have closed or contracted (although a recent new customer may take up much of this spare capacity and this may have an impact on further developments in the area)
  - There is significant potential for liquid/gas storage, particularly in the brine cavities in the N Tees area; there is however a significant cost

associated with testing and proving a redundant cavity is suitable for re-use as a storage cavity

- Land ownership is a significant constraint to the development of new, and the use of existing, pipelines; particular issues include potential ransom demands, costs of using/leasing existing pipelines, and lengthy legal processes to obtain wayleaves
4. The NPS sets out clearly the issues that will need to be considered by an applicant for underground natural gas storage, LNG import facilities, gas reception facilities, and gas and oil pipelines. The IPC will need to be assured that all relevant safety, environmental, and locational considerations have been met.
  4. The NPS highlights the potential increased demand for gas storage facilities as offshore gas production declines, particularly for a mix of short range and medium range storage. The brine cavities in the North Tees area could be well placed to meet this potential need.

#### **Electricity Networks Infrastructure (EN-5)**

4. This NPS covers above ground electricity power lines for long distance transfer of electricity (275kV and 400kV) and distribution systems (lower voltage power lines 132kV and above) and associated infrastructure e.g. sub stations. Lines below 132kV are only included if they are associated with a nationally significant infrastructure project which will be determined by the IPC and is applied for at the same time.
4. A 'smarter' electricity grid will be needed to support a more complex system of electricity supply and demand, where generation takes place in a wide range of locations across the country. The NPS recognises that whilst desirable, it is not always possible for applications for electricity networks to be submitted at the same time as the related generating plant.
4. Specific criteria for considering electricity network applications include:
  - Landscape and visual impacts – routes should avoid areas of high amenity or scientific interest. Otherwise the most direct route should be followed, avoiding skylines and ridges, maximising tree screening, avoiding concentrations of lines, and in urban areas approaching through industrial zones and considering running routes underground in residential and recreational areas
  - Noise – depending on weather conditions, transmission lines emit an audible 'hum' or 'crackle' which should be minimised, although this is unlikely to lead to a refusal by the IPC. Sub-station noise should be mitigated
  - Electric and magnetic fields – these occur around power lines, electric cables and equipment. Applications for 275kV – 400kV overhead lines

will have to satisfy the IPC that international safety standards are not exceeded for residential accommodation along the route.

#### Potential Implications

4. The NPS appears to be acceptable in terms of considering the impacts and effects of electricity networks in terms of landscape, visual and amenity impacts. The main concern is that there are no considerations regarding how future electricity network infrastructure will impact on potential development opportunities. It is a key concern that future infrastructure does not inhibit the development and regeneration aspirations of the Tees Valley local authorities. It is necessary to ensure that electricity infrastructure has sufficient capacity to deliver the future needs of development and regeneration proposals. There is also no mention of how old infrastructure will be removed and dealt with once new electricity networks have been installed. This should be considered further.
4. The Tees Valley aims to support improvements in the electricity network which will contribute to the prosperity of the sub-region. It is important that the energy network provides certainty of energy supply and uses excess heat and steam for industrial use to help resist global fluctuations in energy prices. The overall strategic aim is to develop a low carbon infrastructure that is fully integrated with local industries and technologies.
4. It is essential that the provision of electricity networks infrastructure is coordinated with the provision of electricity generating facilities. This will ensure not only that the necessary infrastructure is in place to serve such facilities but also to minimise the amount of infrastructure required and ensure the use of that provided can be maximised. Given the potential for the provision of energy generating facilities in Tees Valley as part of a low carbon economy it is important that the electricity networks infrastructure does not result in an uncoordinated mesh of power lines crossing the area. It is equally important that this infrastructure when provided has enough capacity to be able accommodate the electricity generated from facilities provided in the future.

#### Nuclear Power Generation (EN-6)

4. The NPS for Nuclear Power Generation establishes the need for nuclear power stations, the locations considered to be potentially suitable, likely impacts which could result and measures which a developer will be expected to take into account to reduce adverse impacts.
4. In 2008, the government decided that nuclear power stations should have role to play in the future energy mix. Currently there are 10 nuclear power stations

in the UK, providing around 13% of the electricity supply and all but one of these will close by 2023 on current schedules. The Government expects the first new nuclear power station(s) to be operational from around 2018, and that by 2025 nuclear power generation could potentially amount to around 40 % of the new energy provision.

4. During 2009 eleven sites were put forward by energy companies as locations for new nuclear power stations. In preparing the draft NPS for Nuclear Power Generation the Government undertook a Strategic Siting Assessment, assessing sites against a range of criteria, and now considers ten of these to be potentially suitable. The NPS consultation is seeking views on all of these sites and there is no hierarchy in terms of potential locations. One of the identified potential locations is Hartlepool.
4. The NPS sets out the Government's view on the management and disposal of radioactive waste and considers that effective arrangements will exist to manage and dispose of waste, and is satisfied that spent fuel and high radioactive waste from new build is expected to be disposable. Decommissioning can take 30 years and the IPC will need to be satisfied that funding is in place to cover the full costs of this and any share of waste management and disposal costs.
4. Operators will be required to obtain authorisation from, and comply with conditions set by, the regulators to ensure safety and protection. In addition security measures will need to be included in any plans. The Health & Safety Executive and Environment Agency are currently assessing the suitability of two different reactor designs for use in the UK.

#### Potential Implications

4. In anticipation of the nomination of developing a new nuclear power station in Hartlepool, the Mayor, the Chief Executive and senior Borough Council officers met with representatives of EDF Energy to facilitate communications, and an inter-departmental officer group within the Council has been established to help manage the process leading up to the current NPS consultation and beyond. As part of these preliminary discussions, the Mayor in particular has expressed his intention to encourage a full and open debate on the subject that could help inform the Council's position on the nuclear power proposals within Hartlepool.
4. To help inform public debate Hartlepool Borough Council has liaised with partners within the Economic Forum and the Environment Partnership to produce an economic impact study and a high level assessment of the environmental implications of a new nuclear power station. The Borough Council is now progressing arrangements for consultation of the NPS and these include:
  - A "Question Time" session on 26<sup>th</sup> January – a panel representing a variety of interest groups/organisations will be gathered and it is intended that EDF Energy and the Department of Energy and Climate Change will be invited

- A dedicated website for comments – this will be open until 1<sup>st</sup> February and can be accessed through the Council's homepage [www.Hartlepool.gov.uk](http://www.Hartlepool.gov.uk)
- A survey using the Council's Viewpoint 1000 group
- An additional Cabinet meeting to discuss the issue and agree a response to the NPS consultation

### **Ports**

4. The NPS notes that national forecasts suggest that expansion of port capacity will resume after the recession, and that this is most likely to occur in the container and 'roll-on roll-off' sectors. The NPS shows why it is in the national interest for ports not only to meet the total estimated need for new capacity, but also to adapt to changing patterns of demand, encourage competition and build national resilience.
4. The NPS aims to:
  - Encourage sustainable port development to cater for long-term forecast growth in imports and exports
  - Allow the ports industry to make informed judgements about when and where new development might take place
  - Ensure all proposed developments satisfy the relevant legal, environmental and social constraints and objectives
  - Encourage port operators to develop master plans as the basis for engaging with their neighbours, users and other stakeholders from the earliest stage of project formulation
4. The NPS applies to major developments, at either an existing, or new port, and each adding at least:
  - 500,000 teu of containers (a teu is a twenty foot equivalent unit: most containers are 40ft long so these count as 2 teu each);
  - 250,000 roll-on roll-off units, mainly lorries, unaccompanied trailers or trade vehicles, or
  - 5 million tonnes of other types of cargo

### **Potential Implications**

4. A principal concern is that the NPS seems to act as a replacement to national, regional and local policies. Whilst it is recognised that there are benefits of streamlining the decision-making process, this should be done within the spirit of the wider spatial planning system. The NPS should complement the existing policy framework rather than overriding it. There are elements of the NPS which are directly at odds with existing planning policies at all levels.

The NPS is focused purely on delivering the economic benefits associated with large infrastructure developments, rather than taking a balanced view to consider the wider economic, social and environmental implications of the development.

4. The spatial planning framework in the statutory development plan is based upon having a clear and robust strategy that is to be delivered, taking into account the full range of benefits and impacts. This NPS is a departure from this ethos as there is a complete absence of strategy. It is more a list of factors that the IPC will have to look at when dealing with applications.
4. The NPS makes little reference to how national Planning Policy Statements (PPSs) will be considered. The NPS aims to incorporate all considerations, but does not make clear if these are instead of PPS or as a supplement to them.
4. Although the NPS contains demand forecasts, it does not specify detail about where and how this should be distributed amongst the regions. The NPS should be clear about the level of need for future capacity and it would be preferable if there was some strategic thinking to lead the NPS, so that port development can deliver specific aims and objectives. For example, economic growth and job creation could be targeted throughout the country. If the NPS set out where the increase in ports capacity (in quantitative and qualitative terms) should be located, then full consideration could be given to improving infrastructure networks and housing delivery to support this. This approach could also result in shorter road haulage miles and CO<sub>2</sub>.
4. There is no guidance on the preferred approach to selecting suitable sites. For example, whether preference should be given to expansion of existing facilities over creating new ones or preferring the use of brownfield over greenfield sites.
4. There is little reference to the role of RSS/LDF in the decision making process for the IPC. As spatial plans, and statutory development plans for the area, proposals for major ports are likely to have been considered in the preparation of the documents, which have been subject to full public consultation and examination in public.
4. There is no reference to how the aspirations of adjacent landowners will be taken into account. There should be no presumption that port development will be the most economically advantageous (and therefore most appropriate) use of a particular piece of land, especially if there is an agreed strategic framework for the area.
4. The NPS reflects the importance of protecting national and European wildlife sites, but does not state whether compensation/mitigation will be required for impacts on local sites.

**5. RECOMMENDATION**

- 5.1 It is recommended that a response to the consultation National Policy Statements is made to the relevant government departments based on the content of this report.

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## **CONSULTATION ON DRAFT NATIONAL POLICY STATEMENTS FOR ENERGY INFRASTRUCTURE**

**Response by Tees Valley Unlimited/Tees Valley Joint Strategy Unit on behalf of the following local authorities:**

**Darlington Borough Council  
Hartlepool Borough Council  
Middlesbrough Council  
Redcar and Cleveland Borough Council  
Stockton-on-Tees Borough Council**

This response was considered at a meeting of the Tees Valley Unlimited Planning and Economic Strategy Board on 19<sup>th</sup> January 2010.

### **Draft Overarching National Policy Statement for Energy (EN-1)**

**Q5: Do the assessment principles in the draft Overarching Energy National Policy Statement provide suitable direction to the IPC to inform its decision making?**

The lack of a locational strategy in the NPS is a major concern. The Government appears to be leaving it to the market to decide where proposals for new electricity generating infrastructure will come forward. There is no indication of priority areas for new infrastructure provision and no attempt to steer investment away from areas where such developments are not desirable.

The IPC must take into consideration the role of the development plan (Regional Spatial Strategy and Local Development Framework) to the infrastructure decision-making process. The NPS should give clear guidance on the weight to be given to the development plan in considering proposals and how they relate to other planned development. The 'need' for an infrastructure development should be considered in relation to development plan policies, local impact, environmental sustainability, and other relevant programmes and strategies.

The NPS should clearly support regional and sub-regional economic needs and development aspirations, and there should be a mechanism to coordinate different energy generators, different technologies, and different supply and transportation of energy.

### **Draft NPS on Fossil Fuel Electricity Generating Infrastructure (EN-2)**

**Q9: Does the draft NPS provide the IPC with the information it needs to reach a decision on whether or not to grant development consent?**

A major concern is that the NPS contains no guidance on preferred locations for new power stations. The NPS needs to inform the IPC about which conditions would be favourable to help meet other spatial planning objectives, including:

- The use of previously developed land
- Proximity to compatible/incompatible uses, including protected wildlife sites

- Proximity of carbon capture and storage facility
- Proximity to the demand for energy use
- The extent to which local communities and/or the perception of an area might be disadvantaged
- The spatial framework for the area, including aspirations of landowners

Although the overarching NPS states that need is to be accepted for all types of fossil fuel to ensure a range of technologies are included in the energy mix to provide security of supply, there should be further detail setting out the level of provision for each technology. At the very least there needs to be a strong mechanism for monitoring applications to ensure a suitable mix is coming forward and gaining permission. There is a danger that a specific technology, which will usually be the most economically viable, will dominate the market, resulting in an inappropriate mix that may not meet the requirements.

There seems to be a presumption that carbon capture and storage will be commercially viable, although this may still be debatable. Although the NPS makes provision for this scenario by stating that a regulatory approach to managing emissions may be needed, this could result in the UK not being able to provide sufficient low carbon energy by 2025 and beyond. While quite rightly there is a proactive approach to planning for low carbon energy infrastructure, there is a danger that the NPS could be promoting significant fossil fuel generation capacity without understanding whether this will actually be low carbon.

**Q11: Do you have any comments on any aspect of the NPS not covered by previous questions?**

Power plant over 50MW is already determined by the Secretary of State, rather than within local government, and on the face of it there seems little change in this process. However, the current Section 36 procedures (of the Electricity Act) provide for the Secretary of State to hold a public inquiry into the development if the local planning authority object to a proposal (and this cannot be resolved). This is absent from the proposed procedures and represents a marked change in process. There is concern that local views and technical expertise (as expressed by local planning authorities) will not be given due weight within the new regime and within the NPS. Indeed, more clarity of the process of affording weight to local planning authority concerns should be provided. It is important that local/sub-regional views, evidence on planning policies, and technical expertise are fully aired.

Currently local planning authorities get up to 4 months in which to formally respond to government on major power generating development. It would appear that this will be cut to 28 days within the new system (albeit with an additional 28 day period at pre-application stage). Even with amended procedures, there is concern that this would be far too short a period to allow an adequate response be considered and agreed, especially if the local authority planning committee is required to be involved.

Other issues of concern over this NPS include:

- The need to assess the impact of grid infrastructure at the same time as power plant applications

- The importance of monitoring conditions and planning obligations
- The need to consider the implications of Hazardous Substance Consents, the COMAH regulations, and the potential impact of HSE constraining future developments around major infrastructure development
- Landscape and visual impact needs to be given significant weight – the emphasis on high quality design should not be limited to simply minimising adverse impacts. A poor visual legacy of heavy industrial development in the past should not be used to lessen arguments on design impact in future developments. At present local planning authorities have influence on the ultimate design of power plant projects (once deemed consent is granted). It would be undesirable to remove this element of local control, even after the development has been granted in principle
- The implications of plant decommissioning must be built into the process, particularly impact on local communities
- The combined effects of carbon capture storage infrastructure should be fully considered in tandem with wider power projects
- The NPS is particularly weak with regard to Sites of Special Scientific Interest and local habitats – this could have significant local impact if not fully considered
- Due to the national and international concern over the sustainability of all types of development, consideration of the origins of fuel sources, and their transport to the site should be taken into account in a scheme to ensure that the UK policy does not have unavoidable adverse consequences elsewhere

**Draft NPS on Renewable Energy Infrastructure (EN-3)**

**Q10: Does the NPS appropriately cover the impacts of the specific types of new energy infrastructure, and potential options to mitigate those impacts?**

There are a number of concerns with regard to biomass and waste combustion proposals, including:

- The need for a detailed assessment of transport options in terms of economics and sustainability with applicants justifying the options chosen to allow the IPC to address all impacts and benefits of the proposal. It is acknowledged in the NPS that each scheme will generate a high number of heavy goods vehicle movements and the impacts of these could be significant and wide ranging. As decisions on such schemes will in part offset impacts against benefits, poor or good sustainability in respect to transportation of goods to the site should equally contribute to the assessment and not be limited to consideration against economic viability
- The NPS should reflect priority to brownfield locations as many developments can have some flexibility in their location requirements

- While the NPS gives support to proposals that will recover residue materials, where such recovery forms part of a proposal there should be sufficient evidence provided to allow an informed decision to be made

With regard to onshore wind projects, the balance between the potential impacts of a site and its efficiency should be a consideration of the IPC. The installation of test masts prior to application submission could be a useful way of assessing economic viability and maximising potential energy capture from a limited resource i.e. the capacity of a landscape to accommodate wind turbines.

Bird collision is also an issue with windfarms, and the NPS should require an assessment to take account of the importance of bird populations against the benefits of the proposed scheme.

The assessment of noise from wind farms relies on the acceptable noise levels recommended by ETSU-R-97, which has not been updated since its publication in 1997. As there have been a significant number of wind farms developed since 1997 these should form the basis of assessment to inform the new guidance.

#### **Draft NPS on Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)**

##### **Q11: Do you have any comments on any aspect of the NPS not covered by previous questions?**

It is noted that the NPS refers to the potential of underground cavities for liquid/gas storage. There are a number of brine cavities in the Teesside area which may be suitable for this use but it should be noted that there is normally a significant cost associated with testing and proving a redundant cavity is suitable for re-use as a storage cavity.

The NPS should acknowledge that land ownership is a significant constraint to the development of new, and the use of existing, pipelines; particular issues include potential ransom demands, costs of using/leasing existing pipelines, and lengthy legal processes to obtain wayleaves.

The NPS sets out clearly the issues that will need to be considered by an applicant for underground natural gas storage, LNG import facilities, gas reception facilities, and gas and oil pipelines. The IPC will need to be assured that all relevant safety, environmental, and locational considerations have been met.

**Draft NPS on Electricity Networks Infrastructure (EN-5)****Q10: Does the NPS appropriately cover the impacts of the specific types of new energy infrastructure, and potential options to mitigate those impacts?**

The NPS appears to be acceptable in terms of considering the impacts and effects of electricity networks in terms of landscape, visual and amenity impacts. The main concern is that there are no considerations regarding how future electricity network infrastructure will impact on potential development opportunities. It is a key concern that future infrastructure does not inhibit the development and regeneration aspirations of the Tees Valley local authorities. It is necessary to ensure that electricity infrastructure has sufficient capacity to deliver the future needs of development and regeneration proposals. There is also no mention of how old infrastructure will be removed and dealt with once new electricity networks have been installed. This should be considered further.

**Q11: Do you have any comments on any aspect of the NPS not covered by previous questions?**

The Tees Valley local authorities aim to support improvements in the electricity network which will contribute to the prosperity of the sub-region. It is important that the energy network provides certainty of energy supply and uses excess heat and steam for industrial use to help resist global fluctuations in energy prices. The overall strategic aim is to develop a low carbon infrastructure that is fully integrated with local industries and technologies. Studies in the Tees Valley have noted that grid access should not be viewed as an immediate restriction to the development of new projects but a rigorous process is needed to investigate potential connections to the National Grid Company and/or the Distribution Network Operator.

It is essential that the provision of electricity networks infrastructure is coordinated with the provision of electricity generating facilities. This will ensure not only that the necessary infrastructure is in place to serve such facilities but also to minimise the amount of infrastructure required and ensure the use of that provided can be maximised. Given the potential for the provision of energy generating facilities in Tees Valley as part of a low carbon economy it is important that the electricity networks infrastructure does not result in an uncoordinated mesh of power lines crossing the area. It is equally important that this infrastructure, when provided, has enough capacity to be able to accommodate the electricity generated from facilities provided in the future.

**Draft NPS on Nuclear Power Generation (EN-6)**

Hartlepool Borough Council will be providing detailed comments on this NPS following an extensive public consultation exercise. However of concern to adjoining authorities are the possible implications of a new nuclear power station in Hartlepool on planned and potential developments within the sub-region. For example the effect of enlarged Health and Safety Consultation Zones on potential developments may require more detailed consideration and this issue should be referred to in the NPS.

## **DRAFT NATIONAL POLICY STATEMENT FOR PORTS**

**Response by Tees Valley Unlimited/Tees Valley Joint Strategy Unit on behalf of the following local authorities:**

**Darlington Borough Council  
Hartlepool Borough Council  
Middlesbrough Council  
Redcar and Cleveland Borough Council  
Stockton-on-Tees Borough Council**

This response was considered at a meeting of the Tees Valley Unlimited Planning and Economic Strategy Board on 19<sup>th</sup> January 2010.

### **Key concern**

A principal concern is that the NPS appears to act as a replacement to national, regional and local policies. Whilst it is recognised that there are benefits of streamlining the decision-making process, this should be done within the spirit of the wider spatial planning system. The NPS should complement the existing policy framework rather than overriding it. There are elements of the NPS which are at odds with existing planning policies at all levels. The NPS tends to focus on delivering the economic benefits associated with large infrastructure developments, rather than taking a balanced view to consider the wider economic, social and environmental implications of the development.

The spatial planning framework in the statutory development plan is based on having a clear and robust strategy, taking into account the full range of benefits and impacts. The NPS is a departure from this ethos as there is a complete absence of strategy. In many respects it is more a list of factors that the IPC will consider when dealing with applications.

The NPS makes little reference to how national Planning Policy Statements (PPS) will be considered. The NPS aims to incorporate all considerations, but does not make it clear if these are instead of PPS or as a supplement to them.

### **Q1: Do you think the draft ports NPS provides suitable guidance to decision-makers on the question of what need there is for new port infrastructure?**

Although the NPS contains demand forecasts, it does not specifically detail where and how such demand should be distributed on a regional basis. The NPS should be clear about the level of need for future capacity and it would be preferable if there was some strategic thinking to lead the NPS, so that port development can deliver specific aims and objectives. For example, economic growth and job creation could be targeted throughout the country. If the NPS set out where the increase in ports capacity (in quantitative and qualitative terms) should be located, then full consideration could be given to improving infrastructure networks and housing delivery to support this. This approach could also result in shorter road haulage miles and reduced CO2 emissions.

There is no guidance in the NPS on the preferred approach to selecting suitable sites. For example, whether preference should be given to expansion of existing facilities over creating new ones, or preferring the use of brownfield over greenfield sites.

**Q4: It is a requirement of the Planning Act that an NPS must include an explanation of how the policy set out in the statement takes account of Government policy relating to the mitigation of, and adaptation to, climate change. Do you think the draft ports NPS adequately fulfils this requirement?**

The NPS states that the IPC should give only limited weight to the estimated net carbon emissions associated with ports development. However this seems contrary to the climate change agenda, PPS1 etc. It is widely accepted that in minimising carbon emissions, at least 10% of the expected energy usage should come from renewable sources. The NPS does not refer to this, despite the opportunities that exist to capture coastal wind power associated with potential port locations.

**Q7: Do you think the draft ports NPS provides suitable guidance to decision-makers on the need to promote equal access to jobs, services and social networks created by port infrastructure?**

The NPS states that where substantial employment is created, and there is likely to be substantial in-migration to the area, there is a need to consider the effect on demand for local public services. The NPS should consider the funding of any additional provision deemed necessary – for example, will this be the developer? If people are moving to an area to work there should be no requirement for additional affordable housing unless they are ‘key workers’. Also, whilst the term ‘substantial’ is quantified in the NPS, this also needs to be considered within the context of the locality.

The section on Social Impacts is limited to open space, green infrastructure, sport and recreation. There should be more recognition of issues concerning accessibility, particularly in relation to employment, and links to skills training. There should be a stronger link to reducing social inequalities and creating safe, healthy and attractive places.

**Q8: Do you think the draft ports NPS provides suitable guidance to decision-makers on the impacts of port infrastructure on the local population?**

There is no reference to how the aspirations of adjacent landowners will be taken into account. There should be no presumption that port development will be the most economically advantageous (and therefore most appropriate) use of a particular piece of land, especially if there is an agreed strategic framework for the area.

**Q9: Do you think the draft ports NPS provides suitable guidance to decision-makers on the impacts of port infrastructure on the natural environment?**

Paragraph 2.15.16 seems to suggest provision for approving applications against the advice of the Environment Agency, who are likely to sustain their objection where mitigation or compensatory measures cannot be implemented. Whilst there may be occasions where approvals will be made contrary to EA advice, it seems obtuse to expect this scenario in a policy document. In these circumstances approvals should

only be made where there is exceptional justification, which will become apparent through consideration of a planning application.

Paragraph 2.23.7 in the NPS should recognise Heritage Coast designation.

**Q10: Do you think the draft ports NPS provides suitable guidance to decision-makers on the impacts of port infrastructure on biodiversity?**

The NPS reflects the importance of protecting national and European wildlife sites, but does not state whether compensation/mitigation will be required for impact on local sites.

Although the section in the NPS on biodiversity and geological conservation is extensive, it makes no reference to PPS9 and its role.

**Q12: Do you think the draft ports NPS provides suitable guidance to decision-makers on the key considerations to inform the assessment of future port development applications?**

Pre-application discussions are referred to, but the NPS does not state how these will be undertaken. Will the IPC lead on these? Will the relevant local authorities be invited? Will local communities be given the chance to be involved? The NPS show indicate how Local Impact Reports will be taken into account, or how much weight will be attached to the consideration of them.

The NPS alludes to the use of conditions. There is no guidance over how these will operate; for example, who will be responsible for discharging them, how will they be monitored etc?

If there are planning obligations, who will enter into a legal agreement with the developer – will it be the local authority? The NPS should say something about the role of the Community Infrastructure Levy, and in particular whether the local authority charging schedule will be used. There could be far-reaching infrastructure implications that may transcend a number of local authorities.

**Q17: It is a requirement of the Planning Act that a NPS must give reasons for the policy set out in the statement. Do you think the draft ports NPS fulfils this requirement?**

There should be more reference to the role of the Regional Spatial Strategy/Local Development Framework in the decision making process for the IPC. As spatial plans, and statutory development plans for the area, proposals for major ports are likely to have been considered in the preparation of the documents, which have been subject to full public consultation and examination in public.



**NUCLEAR POWER ONLINE CONSULTATION**

Results from online survey from 24/12/09 to 29/01/10. The survey consisted of 10 questions in total of which 6 questions were closed responses and 4 questions were open ended and asked for respondents views. A total of 160 respondents took part in this consultation.

**1. Before you looked at this website, were you aware that a new nuclear power station might be built in Hartlepool?**

	<b>Count</b>	<b>Results</b>
Yes	158	99%
No	2	1%

**2. Which of these statements best describes what you think about this plan?**

	<b>Count</b>	<b>Results</b>
Generally I support a new nuclear power station being built in Hartlepool	132	83%
Generally I am against a new nuclear power station being built in Hartlepool	24	15%
I don't have a strong view about a nuclear power station being built in Hartlepool	4	3%

**3. Do you think that a new nuclear power station will bring any benefits to Hartlepool?**

	<b>Count</b>	<b>Results</b>
Yes	138	86%
No	16	10%
No strong opinion	5	3%
Don't know	1	1%

**4. What do you think the benefits might be?**

This question has been answered 130 times. Full details of all the responses can be found in appendix B. The main themes of these comments can be summarised as being:

- Support for jobs and local employment opportunities
- Income into local economy
- Source of sustainable energy
- Low carbon power

**5. Do you have any concerns about a nuclear power station being built in Hartlepool?**

	<b>Count</b>	<b>Results</b>
Yes	30	19%
No	119	76%
No strong opinion	7	4%
Don't know	0	0%

**6. What concerns do you have?**

This question has been answered 25 times. Full details of all the responses can be found in appendix B. The main themes of these comments can be summarised as being:

- Storage & disposal of nuclear waste
- Safety of Nuclear Power
- Impact on environment
- Impact on health – especially cancer
- Proximity to other industries e.g. oil and gas

**7. Are you aware of the government's plans for nuclear waste - how it will be transported, stored and disposed of?**

	<b>Count</b>	<b>Results</b>
Yes	125	81%
No	30	19%

**8. Do you have any concerns about the plans for nuclear waste?**

	<b>Count</b>	<b>Results</b>
Yes	24	19%
No	84	68%
No strong opinion	14	11%
Don't know	2	2%

**9. What concerns do you have?**

This question has been answered 21 times. Full details of all the responses can be found in appendix B. The main themes of these comments can be summarised as being:

- Long term solution not in place
- Creation of problem for future generations

- Effects on environment
- Effects of potential accidents
- Potential terrorism threat

**10. Do you have any other comments about the possibility of a new nuclear power station being built in Hartlepool?**

This question has been answered 101 times. Full details of all the responses can be found in appendix B. The main themes of these comments can be summarised as being:

- Hartlepool has a power station already so no issues with having another one
- The current power station has operated safely over its lifetime to date
- Employment opportunities
- Economic benefits to Hartlepool
- The need for more power
- Loss of existing station would have a negative impact on Hartlepool
- More consideration should be given to alternative forms of renewable energy
- Potential risks to health, environment and communities
- Disposal of nuclear waste has not been resolved
- Local views need to be listened to before decision is made

**Question:4 What do you think the benefits might be?**

- \* Jobs and the local economy
- \* Employment in both the construction and operation of the plant.
- \* Increased numbers of jobs both during construction and after commissioning
- \* employment, revenue from taxes, prestigious blue chip company operating plant and spin offs for local companies.
- \* skilled jobs, support industries and suppliers, sustainable & low CO2 electric supply. Use of adjacent land which other wise would not be used
- \* Long-Term benefits to local tradesmen and workers during the construction phase as long as the 'Blue Book' rules of exhausting local labour first is forced. Hopefully long-term employment for local people at station when it is fully built and running. Knock-on effects to local businesses and infrastructure through more people working in the area.
- \* Continued employment and long term career prospects for local residents.
- \* employment should rise during construction and benefits to local companies
- \* Jobs
- \* lots of new jobs local power supply for the town good for industry in area 1st major construction job in Teesside for around 10 years
- \* More Jobs
- \* A new station will bring millions of pounds into the local economy both during the construction phase and also during the 60 year life of the plant. 1) A long term (60 years +) provision of several hundred well paid jobs in the town. 2) An income stream from business rates. 3) Business opportunities for local business during the building phase. Several thousand workers will be required, some of whom will come from the local population. These workers will need the services that the two can supply them with (accommodation and subsistence) for a period of 5-6 years. 4) Direct business opportunities will be available for suppliers during both the building phase and the lifetime of the station. 5) EDF has the practise of forming links with local higher education establishments which then provide an ongoing educational resource for the stations. 6) The presence of a new nuclear station will help to support the N E as a Low carbon Economic Zone.

- \* Secure employment for hundreds of people plus all the support industries in the area will benefit
- \* Long term employment for existing employees and future recruitment
- \* JOBS FOR LOCAL AREA, SECURE ENERGY SUPPLIES, LOW CARBON ENERGY GENERATION.
- \* EMPLOYMENT - both short term (5 years in construction) and long term (60+ years? in operation)
- \* more jobs, replace existing station
- \* A green, safe and reliable way to sustain our electricity supply in the future, with the added benefits of bringing large scale employment to Hartlepool during the construction stage but also supporting the local economy and the supply industries for such construction. But in the longer term bringing a safe secure future for further generation.
- \* Creation of jobs and a large injection of money into the local economy, both in terms of construction and once the plant is in operation.
- \* direct employment indirect employment investment in infrastructure contribution to local government income
- \* Massive contribution to reduction of global warming. Nuclear is the only viable option for safe, reliable, low carbon generation around the clock - regardless of weather!
- \* continued employment of local people, greater prosperity to the area, due to the number of contract staff being employed to build the new station. They will have to live in B&B's in or near the town, local supply businesses will get increased orders for supplies.
- \* Employment. Environment (we already have one)
- \* Jobs
- \* Employment, high quality, secure and well paid long term jobs, secures a supply of low carbon power in the North East. Construction will create many jobs and spending in and around Hartlepool. Puts Hartlepool on the map. Wildlife conservation.
- \* Job for the future, economic benefits for the town and local industry
- \* Jobs - protecting those we have and increasing the number of jobs in construction - and indirect benefits to local businesses supporting construction and accommodating the influx of contractors. Increased business rates for HBC

- ✱ The country needs to replace lost nuclear generation with more nuclear to maintain diversity and mitigate an over-reliance on imported fossil fuel supplies. New nuclear stations will be built. The new build will generate financial stability and growth for those areas that are fortunate enough to be chosen. Teesside has been devastated in recent years and is a shadow of its former self as a centre of industrial excellence. The sad news before Christmas regarding Corus at Redcar being a sad reflection on the industrial decline in the north east.
- ✱ Local economy boost Jobs
- ✱ The benefits will be many fold. There will be many construction jobs initially. A new power station would secure some of the existing jobs at the current powerstation and also create new one. These jobs are skilled and well paid with long term security. Other local businesses will also benefit not only from supplying goods & services but the wages of employees will be getting spent in local shops. The business rates income to the council will be millions plus British Energy/EDF are very strong in supporting the local community.
- ✱ This will bring additional employment for local residents. Revenue will be increased for shops, hotels etc
- ✱ More jobs for Hartlepool. Also people already employed will continue to be employed, not putting about 1000 extra people on the dole in Hartlepool. More revenue for Hartlepool due to extra people arriving to build power station.
- ✱ employment profile for town keep skills currently at power station
- ✱ Employment for locals and local business would benefit
- ✱ Boost to the regions economy. More jobs for the area following the closure of Corus.
- ✱ Jobs for the area
- ✱ Sustained jobs and income for the region.
- ✱ Job opportunities, economic spin-off benefits.
- ✱ continued employment and new employment opportunities , local business i.e shops hotels etc etc and local industry benefits , potential for encouraging further companies to invest in Hartlepool
- ✱ Long term employment for several hundred people. Short term employment for many hundreds/thousands of people for construction. Long and short term benefit for local supply companies.

- \* Sustainable energy. New jobs.
- \* It will bring much needed jobs and may bring in more money to the area, from other services provided to the power station.
- \* Continued job security at the present plant, and enhanced job prospects if there were two stations running side by side
- \* Continued employment for local people and new opportunities for employment. Another benefit would be the financial revenue into the local economy that this would bring.
- \* More jobs both directly and via local companies and suppliers. These will be long term as the stations are expected to be operating for over 50 years. Hartlepool supporting a reduction in UK CO2 emissions.
- \* Jobs
- \* Continued Employment for those working on HPS Additional Employment in the construction Phase Retain local skill set Opportunities Long Term for local people Increase in trade for Local Companies/Hotels etc. during New Build It's clean energy
- \* Jobs (both direct and indirect). Further investment by other industry in the Seal Sands area.
- \* The main benefit would be the continuation of employment for local people both directly and indirectly and given that the new build of power stations have a life expectancy of 60 years it will bring a lot of employment of a number of years
- \* employment and future growth
- \* New jobs for the town. Higher profile for the town.
- \* Economic - jobs through years of construction and continuing jobs for a local high skilled workforce in a high tech area. The existing power station has operated safely through its 30 years approx in operation.
- \* New jobs generated with construction, staff running the plant and security for local businesses supplying the station.
- \* Jobs and training opportunities, financial income for town through tax and wages, work for supporting industries - safeguarding jobs.
- \* Local benefits will include the continued employment and associated economic input of several hundred people, many at professional and scientific level. The land earmarked for the construction of a power station, given current ownership, has no alternative economic use. Nationally and globally, the only realistic and feasible source of

sustainable energy over the next century is nuclear power: Hartlepool's new plant would be a part of this increasingly inevitable solution. Carbon-neutral energy sources cannot be rashly abandoned.

- \* Long term employment and investment in the area and the large scale production of carbon free electricity.
- \* Bring new employment opportunities to the area. Safe guard jobs for the existing workforce.
- \* Economic benefits through design, build, operation and ongoing maintenance of the station and safe production of electricity for the area.
- \* Secure energy supplies for decades to come and support the community with Job security and the benefits that go along with that.
- \* Continued long term 'high calibre' employment for workforce - providing local youngsters with opportunities. Economic benefits during construction and operation and decommissioning of old power plant.
- \* JOBS FOR THE LOCAL PEOPLE AT THE STATION AND THE MANY SUPPLIERS. THE NEW STATION WILL PROVIDE JOBS FOR SOME 60 YEARS, THATS A HUGE BENIFIT FOR GENERATIONS OF WORKERS.
- \* much needed employment / money put into town which could help other businesses / plus we don't want the lights to go out we need to get electricity from somewhere so why not nuclear
- \* The benefits locally will be increased employment opportunities both direct and indirect. Nationally there will benefits in terms environmental contribution and diversity of supply. There will also be local ecological benefits in reducing emissions from fossil fuel electricity supply.
- \* Jobs for Hartlepool people and also supply industry
- \* Employment for the town and surrounding area
- \* Money and opportunity to the local area. The existing power station pays millions and millions of pounds in salary to local people. This money is passed down to local businesses benefiting the local area. (not to mention all the tax from the well above average salaries)It provides significant career opportunities and training to its staff. Any new power station on the site would undoubtedly bring more of the same to the area. Not to mention the huge influx of money to the area during the build of the station.
- \* Employment to the region.



- \* The building of a new nuclear station in Hartlepool will create many jobs in the area which will in turn benefit the local economy - short term & long term
- \* Increased employment. Nuclear energy is needed as fossil fuel stocks are reduced.
- \* Guarantee of electricity supply and massive boost to the local economy including the creation of lots of jobs.
- \* Local employment and spin off to other businesses
- \* More jobs, continuous employment for existing employees
- \* good short term and long term quality employment including supporting businesses.
- \* Economic benefits to the Town from over 500 well paid long term jobs. Economic benefits to local suppliers and retailers.
- \* Increased number of jobs in region during construction (~5 years). Secure the long term future of jobs in the region (+25 years), current power station is due to close in the next 10 years. A new power station would help to support smaller businesses in the area through smaller construction and technical contracts. A new power station would help develop the north east as a centre for technical expertise, the region has seen declines in the petrochemical and steel industries
- \* Long term generation of power for the UK along with the development of new skills and employment opportunities for the local area.
- \* engineering and technical apprenticeships/jobs, maintenance of a diminishing skill base
- \* Employment / boost to local economy. Security of electricity supplies.
- \* jobs
- \* Employment on station and contractors and local suppliers. Local government tax payments for the area
- \* new jobs during construction. New jobs to run the new power station and all the spin offs to local shops etc.
- \* Job creation for the people of Hartlepool
- \* employment... nuclear power/energy production is here to stay lets face it and why not let Hartlepool be part of it as we have a successful, proud work force here already.

- \* The lights will stay on and we will not starve to death - obviously. The parochial benefits are obvious as well.
- \* More jobs, more money coming into Hartlepool.
- \* Employment
- \* Jobs in the area. More custom for local businesses (i.e. when contractors visit the station)
- \* More local jobs, both building and running the new station.
- \* long term continued employment in high tech industry significant economic impact for area if a 4Bn investment were to be made in new plant
- \* Extra Jobs to the local area, increase in business to local companies, the station always uses local companies where possible, security of supply of electricity, increased pride in area in having a state of the art PWR reactor system at our door step.
- \* Jobs for people in the area both direct and indirect. also revenue from the rates for the plant
- \* Continued employment & creation of work within the region. Reduction in CO2 emissions with a positive impact on the local environment.
- \* Jobs
- \* Safe, low carbon electricity generation. Good for local economy by providing thousands of jobs both in construction of new power station, running of station once built and local industry benefits from servicing the power station.
- \* Having had 30 years continuous service at Hartlepool P.S. I feel that the benefits of a new P.S. far outweigh the negative feedback of " NUCLEAR ENERGY ". The morale boost for the community & small businesses over a long period of time both during construction & production must be of huge benefit & also to the surrounding area i.e. job security. At present Hartlepool P.S. has many local suppliers which could benefit a new P.S. As most of the production infrastructure is already in place & with its excellent safety record, why not have a HARTLEPOOL 2 ?
- \* More work for unemployed people and more investment to the local businesses from contractors working at the new power station
- \* Employment, infrastructure
- \* Creates jobs which means employment for local people

- \* Continuation of jobs in Hartlepool and the surrounding area. This applies not only to employment at the Power Station, but also the numerous people employed in the support businesses to the Station. Therefore a loss of jobs at the Power Station would have a devastating impact on the North East people and its economy as a whole.
- \* Secure long term employment for local people and much needed revenue for the Town and surrounding areas. Many small businesses could also benefit from supplier contracts.
- \* New secure jobs for the life time of the station. utilise the good engineering experience already in the north east. provide work throughout the community. economy boost
- \* Long term employment.
- \* New jobs for the area
- \* Secure and well paid employment for several hundred people for the life of the station. Well paid employment for many more people during the construction phase. Business rates paid by the operator of the power station which will provide money for the community.
- \* Nuclear power is a safe effective way forwards to meeting not only the nations electricity needs but Hartlepool's too. Also a new power station helps meet Co2 reduction targets. Its will bring to the town, safe well paid jobs, boost the local economy. Also provide future employment and developing skills for local youngsters wanting apprenticeships etc.
- \* It will provide many jobs for the local and surrounding communities, also, as in the past British energy have used a lot of local building and fabrication companies not just in actually building the station, but using them in supporting running the station
- \* Significant Employment to the area and the continued retention of a skilled workforce. Hartlepool being an integral part to the security of the countries energy resources.
- \* Long term high earning employment. Puts Hartlepool on the world map Rates paid to council. Local suppliers and sub contractor employment. Less burning of fossil fuels. Non dependence of fuels from overseas.
- \* New and continued local employment (construction and operation resulting in investment in the Town and the North East). Continued diverse and reliable electricity generation for the UK. There is already a trust within the community via the current Nuclear Power Station. The new Station will be sited at an existing Nuclear Site, so the main utilities/supplies/pylons already exist.

- \* Short term and long term jobs will be generated. Increased revenue for the town.
- \* in my opinion having the town of Hartlepool, the people and businesses will positively boom, as long as the government doesn't let us down, and employ local, and british contractors to build it and maintain it. If EDF employ eastern europeans, then the only people to benefit will be EDF, please don't let us down, I have owned guest house in hartlepool for 5 and 1/2 years now, and the reason I come to hartlepool was because of the benefits and prospects for contractors and local industry, I really believe this could be the start of something major for Hartlepool. I don't want to have to sell up and move to Hinkley or Sellafield!
- \* Sustain a significant of jobs in the area, help underpin the energy supply needs of the nation.
- \* Continued support for the area in relation to short term and long term employment. Financial benefit to local area from both taxes and employees wages.
- \* Apart from the obvious jobs, there must be associated taxes that businesses (which the Nuclear power station clearly would be) have to pay. Put people in employment also brings in more council tax and might help to spread the load more evenly than it currently is.
- \* A stronger local economy. More Jobs. Clean energy production.
- \* Jobs - which are few and far between at present
- \* HARTLEPOOL IS DESPERATE FOR LONG TERM WORK. ONCE THE NEW STATION IS BUILT, THE OLD STATION WILL NEED TO BE DISMANTLED, THUS GUARANTEING 20YRS AT LEAST, WORK FOR HARTLEPOOL PEOPLE, AND THE BENIFITS FOR THE SUPPLYING COMPANIES WITHIN HARTLEPOOL.
- \* Creation of jobs during construction and operation. Experts/professional jobs required for construction should boost local economy and wages. Possibly more government investment in the surrounding area which would otherwise be ignored.
- \* Jobs, we have the expertise and resources already in place.
- \* Jobs and secure electric supply
- \* Providing more jobs for the area
- \* Employment, safety of supply ,reducing carbon. Financial aid to local community .

- \* I have been previously employed at hartlepool p.s. and know the precautions taken in both design and operation of the plant to safeguard both its employees and the general public. i have a much greater concerns regarding the chemical plants on seal sands where i have also worked, compared to them, the power station is much more professionally run and very well maintained.
- \* Local employment should be more secure and the investment will benefit local industry and business's.
- \* Employment
- \* Some local jobs. Infrastructure improvements.

**Question:6 What concerns do you have?**

- \* It only takes one nuclear accident to create a major disaster - I think the world has been lucky so far with only one in 40-50 years but that doesn't mean to say nuclear power is accident-proof or terrorist-proof. Also the waste still has to be disposed of, and monitored, for many years afterwards and could still be dangerous well into the future. It is not a viable form of electricity generation in my opinion because of the concerns above.
- \* 1) long-term storage of spent fuel 2) a 'human error' causing pollution of atmosphere or sea.
- \* What will be done with the waste
- \* Once you have built a power station it takes a really long time to demolish it. We have one that will be decommissioned soon and I think we are still creating problems for a future generation to solve. There are other methods which produce more and cleaner electricity than nuclear.
- \* None
- \* Already increased cases of cancer in Seaton Carew since existing nuclear power station built. Already too much industry so close to houses. SSSI's in area of proposal and another power station would be detrimental to wild life, some of which is protected.
- \* That environmental and decommissioning standards of sufficient stringency be met at all stages of the project. The project is inevitable in national and global economic terms, but its execution must nevertheless be carried out to the highest standards of environmental

and H&S protection. The decommissioning process must be planned and provided with secured funding before the first sod is turned.

- \* I object strongly to Nuclear Power on environmental grounds, the risks associated with thermal pollution/reactor accidents, potential release of radiation during shipments, and long-term radioactive waste storage and disposal. I am also concerned about the potential risk of terrorist target threats.
- \* I am concerned that we are currently unable to deal with waste produced by the current power station, let alone a second, and as such, the already unacceptable risks of pollution and security would be multiplied. I object to the train carrying lethal waste which passes within a few hundred metres of my house. The risks to people living in and around the plant far outweigh the benefits
- \* what the bloody hell are you considering this for we all know hartlepool has the highest cancer rates in the uk.
- \* Safety, radioactive waste
- \* Increased cancer risk within a 5k radius of a nuclear power plant. The continued local production of radioactive waste. Continued local risk of meltdown / terrorist attack
- \* The disposal/storage of nuclear waste. Nuclear generation creates toxic substances that remain so for thousands of years which means it is impossible to assure their safe storage other than for a few decades into the future. I am not concerned about the safe running of the plant itself as the engineering is proven.
- \* dangers surrounding nuclear power. Adding this onto everything else that is in the surrounding industrial area is something that we don't need.
- \* Hartlepool is having the power station forced upon it so that London and the south may continue to prosper without taking any risks associated with heavy industry. Investment/compensation to mitigate the risks Hartlepool is taking may not come. Centralised power stations are highly inefficient, and Hartlepool could instead create a small power station to look after its own interests instead of a huge one to look after the rest of the country.
- \* My concern is regarding the waste from any nuclear power station
- \* Regarding safety, and the storage of nuclear waste. I don't believe it will bring jobs, as the build will be done by existing foreign teams (like the jarrow tunnel). I also don't believe there is a strong economic case for nuclear power, which is an expensive form of energy. I would rather

see Hartlepool lead the way in conservation, insulating local property, introducing renewable schemes. Hartlepool could lead the way in this.

- \* The current power station is built on top of one of the biggest industrial sites in Europe, involving oil and gas. In the event of an accident, either at the power station or involving one of the other companies on the industrial site, the chain events could be catastrophic. I realise that jobs would be lost if a new power station was not built, but think of the bigger picture: how many lives could be lost if a catastrophic accident happens? I think it is time to build a new power station AWAY from such an industrial site.
- \* I thought strongly enough AGAINST another nuclear power station that I resigned from my position as President of Hartlepool Constituency Labour Party. Without going into ALL of my objections my basic, unanswered, principle is that ---- if there are ANY advantages they are far FAR outweighed by the POTENTIAL dangers involved One nuclear plant failure was 1500 miles away and that wasn't far enough for us to be immune !! I have never been impressed by the dubious "good" record of "ours" because all of that would become irrelevant with only ONE major malfunction. If they are so good, so safe, and so essential, then why are there none in London where they turned their powerstation sites into museums and art galleries and simply relied on others to tolerate the risk factors elsewhere Well we have had "our turn" it is now the turn of nimby's
- \* The health of hartlepudlians, which will put a bigger strain on the national health service which will out way the few hundred jobs its supposed to be offering. no no no no no no no no.
- \* I don't think Hartlepool should have a second nuclear power station but that it should be sited elsewhere. I don't think nuclear energy is completely safe.
- \* There is already a huge block of concrete at Teesmouth which will remain for a very long time when the existing station is decommissioned. It will have to be protected from intrusion until it is considered safe to be demolished - not in any of our lifetimes. Why add another? I have no worries about the use of radioactive materials in the stations, their transport or reprocessing. Nor do I accept any of the more strident and alarmist views about health issues; they'd have shown up long ago with the existing station, surely.
- \* Disposal of waste. Don't think government should be looking at Nuclear as an energy source for the future - believe other renewable energies should be given priority.
- \* Recent press reports have cited power stations to be potential targets for terrorist attacks at this time of high alert and probably well into the

**APPENDIX B**

future. There is so much available research now into other ways of producing 'Green' energy. The investment in Nuclear power stations could fund solar panels in a very large number of houses. The populations surrounding Hartlepool are considerable in Middlesbrough, Billingham and Stockton as well as those smaller towns and villages in between and on the edge of the larger towns, including those south of the River Tees would all be affected by a nuclear accident or terror attack. The Draft Government National Policy for Nuclear Power Generation includes acknowledgement by the Appraisal of Sustainability, Habitats Regulation Assessment and the Cultural Heritage Analysis and Assessment, where they have all noted concerns about potential adverse effects to the proximity of the proposed site on the local environment and further afield and to wild life and habitats which could have a long term effect. These concerns could also impinge on Cultural Heritage coastal sites which have views towards Hartlepool from the south of the River Tees and effect their towns' economies from the Tourism aspect, such as Redcar, Marske and Saltburn. The populations very close to Hartlepool, which are Middlesbrough, Billingham and Stockton as well as those smaller towns and villages in between and on the edge of the larger ones, including those south of the River Tees, (only 4-8 miles south as the crow flies) have long been affected by Teesside's industry and are now benefitting from the development of protected wild life sites because of cleaner water and air, as the heavier industry has gone and wild life species have returned to the River Tees and Tees Estuary. The Coatham end of Redcar has a Golf course adjacent to a beautiful beach leading to South Gare lighthouse, which is a Grade 11 listed building. It is the unspoiled jewel in the crown of Redcar, which has been a fairly economically depressed town since the 1960's. The beach, mudflats and marsh land that leads from the sand dunes at the end of the golf course has been designated as a Site of Special Scientific Interest and a Special protection area, now home to rare plants and insects, as well as 200 bird species. Not far from Coatham is another part of Redcar called Kirkleatham with a museum,(former manor house), almshouses with a chapel and church that form a historic village, part of an estate that was bequeathed to the locality. The 'Cleveland coast Ramsar' part of the north Yorkshire coast, is less well known, than the Northumberland coast SPA and Northumberland coast Ramsar, which are all Internationally designated sites of ecological importance, yet it is much closer - on the doorstep, across the River Tees from Hartlepool. This is an illustration of a still relatively unknown, small part of the country,(by people in the south of the UK),part of a larger, well populated area that contains much diverse interest and beauty and I do not believe it can benefit from a new nuclear power station or that it can safeguard the area for the future.

- ✱ Health concerns: radioactive discharges going into the sea and air will end up being ingested by local people, triggering cancers in some, particularly the vulnerable. Risk of a serious accident: Emergency plans are inadequate and pre-supplied potassium iodate tablets which



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prevent thyroid cancer are given to a very small local population. Evacuation of Hartlepool City would be a logistic nightmare.

- \* Risk of terrorist attack. A terrorist attack against a nuclear facility anywhere could pose a massive risk to human health. However, in the case of Hartlepool this risk is significantly increased due to the close proximity of the Teesside petrochemical complex. Back in the days of the Cold War pupils in at least one Hartlepool secondary school were taught that if a single strategically positioned, conventionally armed Soviet missile were to hit Teesside the domino effect of a series of chemical and nuclear explosions could lead to an area of land stretching from the Scottish borders to Leeds being decimated. A terrorist kamikaze pilot in charge of a hijacked aeroplane could easily affect a similar outcome. Climate change: rising sea levels and increased storm surges. The primary reason currently being advanced in support of new build nuclear power stations is the need to address climate change. This policy would appear extremely misguided in lacking the necessary understanding of the timescale of the problem. In a report by Middlesex University's Flood Hazard Research Centre into the impact of climate change on nuclear power sites in the UK, published in 2007, it was revealed that the government's planned new build reactors 'are not likely to be fully decommissioned and therefore safe until 21951.' That is a very long period of time, particularly in comparison the lifetime of the nuclear industry. The world's first nuclear power plant was opened at Obninsk, near Moscow, 1954. The UK's first, Windscale in Cumbria, was opened two years later. It became the site of the world's first major nuclear accident the following year after a fire caused a serious leak of radiation. Long-term climate change projections are based upon a timeframe of one thousand years: half the toxic lifespan of a new build nuclear site. Though nuclear scientists appear alarmingly certain as to their long-term projections, climate change scientists are reassuringly less so. They are only too aware of the enormous scope for the confounding influences of multiple variables across such a longitudinal timeframe, and are therefore unlikely to come to the kind of consensus that characterises the pronouncements of those working in the nuclear field. Climate change researchers from the Massachusetts Institute of Technology (working on a project to improve the lives of the people of New Orleans affected by the devastation caused by Hurricane Katrina in 2005) have compared sixteen different 1000-year sea level change predictions from sources including the Intergovernmental Panel on Climate Change and the US government's Environmental Protection Agency. Predicted sea level rises across the sample ranged from 20 centimetres to 6 metres; the average, adjusted to take account of extreme outliers on either end of the scale, being 99.4 centimetres. However, more recent analysis highlights the limitations of previous estimates (which were based on the thermal expansion of the oceans as the Earth warms up) due to their flawed methodology in disregarding the likely effects of, for example, the melting of the ice caps and the associated acceleration in global warming caused by increased

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atmospheric methane leaching from vast tracts of ancient marshland newly exposed by the receding permafrost. When such variables are factored into the calculations the sea level for 2100 is projected at between 1.5 and 2 metres above that of today. It gets worse: these are average sea levels, in reality they will vary across space and time - with some regions hit harder than others and an increased seasonal variability as freak weather events become more frequent. According to The Royal Society for Science, historical climate data shows that storm surges of up to 1.5 metres are 'predicted to be exceeded every 120 years on average'. 'However', they warn, 'by the 2080s, it is projected that this level will be exceeded once every 7 years on average; a 17-fold increase in the exceedance frequency'. The last time a major storm surge happened in the North Sea, in 1953, 2000 people were killed on mainland Europe and 300 people lost their lives along England's eastern coastline as a 3-metre swell engulfed low-lying land. In September 2009, a number of European nations, including the UK, were involved in a major planning operation with emergency services from the participating nations involved in simulations of what might happen if a similar disaster struck today. BBC news quoted Peter Glerum, the project coordinator as saying: "We estimate an impact on between approximately two and a half to five million people. We expect damage of above 100bn euros and we know that it will be impossible to evacuate everybody out of the area." Although this is undoubtedly an enormous cost, both economic and in terms of human suffering, it would most likely pale into insignificance if compared to the costs associated with the flooding of a number of coastal nuclear power stations.

**Question:9 What concerns do you have?**

- \* The length of time this remains in a dangerous state. The security and long-term monitoring of the storage sites. The possibility of accident or leakage within the disposal sites.
- \* We are just burying the problem for another generation to sort out. Short term solution offered when a long term solution is needed. Sounds to me like a committee only concerned with the problem for the duration they will stay with the committee and then happy to leave it to the next person to sort out.
- \* A long term reprocessing solution has yet to be found. However, the amounts are small and I believe that the control and storage of waste is adequate to safeguard the environment.
- \* Unknown long term effects on the environment.
- \* Nuclear waste can never be destroyed as the half life never reaches zero. Even though many measures can be made to try to make it safe,

it is still a huge danger; during transportation, accidents and even when stored, there is a risk of terrorism.

- \* The whole process of radioactive waste storage is currently undergoing a process of rationalisation which is making it more efficient, but is leading towards the conclusion that a certain section of subterranean Europe must essentially be designated the Nuclear Waste Zone and sealed off for a long time from further human activity. It is regrettable that this is inevitable, irreversible and in Cumbria.
- \* There needs to be a decision asap about how the waste will be managed. It is technically possible but just needs a clear commitment by government to make it happen.
- \* The time it is taking for the waste on existing sites to be made safe and stored and no central storage site.
- \* That the government have a robust long term plan for waste disposal and have the finance to support this.
- \* ACCUMULATION OF FUTURE STOCKS, HAVE WE THE REQUIRED SPACE TO SAFELY STORE THESE AMOUNTS?
- \* Safe storage will be needed for many years.
- \* I believe NOTHING this government tells me, therefore I object strongly to Nuclear Power on environmental grounds, the risks associated with thermal pollution/reactor accidents, potential release of radiation during shipments, and long-term radioactive waste storage and disposal. I am also concerned about the potential risk of terrorist target threats.
- \* There is no safe method of storing, transporting and otherwise getting rid of, nuclear waste. Plans to bury the waste locally have been passed around for years, meaning the whole North East would be a nuclear ticking clock.
- \* Is storing it locally a better solution? Really?
- \* See earlier statement.
- \* Not enough is known about the long-term risks of a local nuclear power plant and even in an optimistic scenario, huge risks are taken on the local population. Measures to mitigate the danger of waste are still unsatisfactory in my opinion.
- \* The long term effect on the environment from nuclear waste
- \* They are not founded on good science, it is disgraceful leaving a problem for future children and families in Hartlepool. There is no proven safety record, there have been too many near misses at Sellafield and cancer clusters.
- \* it is nuclear waste, most people will have concerns, mainly on environmental, safety and welfare of Hartlepool residents

- \* i refer you to my earlier answer - building a power station on one of Europe's biggest and potentially volatile industrial estates.
- \* The high burn up fuel used in the new reactors will be so physically hot and radioactive (twice as hot as Sizewell spent fuel) that it will need to be stored on site on an 'interim' basis for 160 years, including the operational time for the reactor. This is dangerous in itself but because it is so far into the future, the nuclear waste may never be moved away for example if the UK economy fails. Local people should not be subject to the risks involved.

**Question:10 Do you have any other comments**

- \* I think the original power station was wrong, and the new planned one is still wrong. Big business and national and local governments have taken an easy option to go down the nuclear route and have never poured the amount of development and investment into investigation of safer, renewable energy sources that has gone into the nuclear industry thus far. Nuclear power stations and disposal of waste has a long-term effect on the world and the nuclear power debate is a short-term excuse for a lack of vision and thought into alternative energy sources that will eventually cost us or our descendents a terrible price.
- \* present station is well maintained and operated, There will be a need for constant monitoring of the old station so it makes sense to site new station locally.
- \* given the recent decline in the steel industry, this is a great opportunity for hartlepool to become a focal area for nuclear power. Existing staff from the current power station and new jobs from construction would be a big boost to the local economy
- \* There have been no major safety concerns with the existing power station since it's build. Nuclear power is one of the most safest types of power generation in use today as long as the waste is disposed of correctly. If the government have set plans for X-amount of these plants to be built and we say no to it being built in our town then it will only be built elsewhere and another community would benefit. Hartlepool may as well have the benefits of this being built.
- \* The present one doesn't not seem to have operated at optimum output...seems to have had lots of probs. Why build another?
- \* Hartlepool already has an existing power station so it will not be a new venture for the town. Nuclear power is far more environmentally friendly than some other energy suppliers and is one of only a few environmentally friendly options available

- \* health & safety and environment at hartlepool's power station have been good for all the years it has been running so I see no problem with a new station being built
- \* great prospect for the town, never been any issues with the current station. people worry about nuclear power but you never hear them complain about all the chemical sites on Teesside. We need nuclear power so we may as well have the jobs to go with it.
- \* The money used for the new power stations across the UK should be placed into MAST (Mass Amp Spherical Tokamak) Nuclear fusion is the way forward not fission. The figures from this program show that not only will this produce more electricity than a nuclear power station but it's safe and green energy with no waste. I know the program is not complete and they have not managed a sustained power output for a reasonable time yet. They will find the way and soon and to build the new nuclear power stations is just a stop gap solution falling very short of the actual energy requirements needed to bring us in line with the carbon 0 target. The only good thing to come out of this is the jobs it will create for the region after so many industrial employees have closed plants. This is the only reason the project has my support.
- \* There should be no hesitation. The country needs the electricity and the benefit to the Hartlepool economy will be immense. The existing station has operated safely for the last 25-30 years.
- \* The possibility of a new nuclear power station at Hartlepool is a golden opportunity to provide the continuity of economic activity that the town currently enjoys from the existing station. This income stream will dry up before 2020, and when the station closes the skill base will be lost. Action should be taken now to positively lobby for the new station, and I'm sure that the "silent majority" of the town would agree if the facts were explained to them. It would be a sad day for democracy in the town if the small but vocal minority who are against new build were allowed to veto new build
- \* The present station has not caused any great issues so new technology and the experience BE have gained from operating the present station should give safe reliable station
- \* The current station is coming towards the end of life, currently around 700 people are employed at the station. To lose a further 700 jobs in the region would be disastrous. As I have said in the survey, the construction of a new station would provide thousands of jobs short term and hundreds long term, the vast majority of people employed would be from the local area (especially in the long term). This would have a major boost to the local economy.
- \* No as the Power Station we currently have in Hartlepool has been operating safely and reliably since 1984.

- \* Due to the existence of the current station the area has many of the key skills and services required to build and support the new station. Some of these would inevitably be lost if proposals for a new station were rejected. It would be likely that nuclear industry investment would go elsewhere and potentially ultimately be lost forever to the region.
- \* the old one is wearing out - we need a new one fast
- \* The sooner the better - it will bring jobs and prosperity to the town.
- \* this would only bring benefits to my local community.
- \* We have got to generate power, and nuclear power is clean and efficient.
- \* I would welcome a new nuclear power station in Hartlepool.
- \* due to the restriction on the power lines from the existing power station, the new station will need to be built before the existing station stops generating, to safeguard jobs and generation.
- \* Please don't let the minority vocal anti campaign spoil the town's chance to grow a more thriving economy for future generations - and help keep skilled local people here
- \* Hartlepool as a fantastic opportunity to see the area regenerate and grow. It means continued employment for locals and a new source of wealth generation for local businesses. There aren't that many sites in the UK with an existing infra-structure geared up for nuclear generation. It would be a disaster to let this slip through our fingers.
- \* As a town we should positively lobby to get an new nuclear power station in Hartlepool. My only concern is that the loudest voices may end up being the "anti groups" with the vast silent majority being in favour. Nuclear is and will continue to be safe, reliable low carbon energy.
- \* No
- \* I hope the consultation is not delayed. If the existing station is due to close in 2020 we need another one built and ready to go as soon as the other one closes not have to wait 5 years.
- \* Access roads from the south should be improved before building starts. EG access from M'Bro area. Some green partnerships would benefit community, nuclear power station does not invest enough in local schemes.

- \* The area has a pool of experience and knowledgeable people, which make it the ideal site for new station.
- \* This will be good for the area as it brings well paid jobs, as we have had a power station for 30 years it does not bring any new dangers to the area, in fact i would imagine a new build would be even more safe.
- \* it will be of huge benefit both to hartlepool and the surrounding area it will also employ permanent staff of possibly 500+ which also generates more money into the local economy we need to encourage this and other engineering project to come to the area we have the skills base and projects like this would help us to expand on this and this in turn will provide a base for more companies to come to the area and it becomes an ongoing process we need to build on what we already have rather than let this opportunity go to another area as if we miss out it will discourage others from investing in the area
- \* No further comments.
- \* I would be pleased at the idea of a new power station as it may give me the opportunity to apply to work there, as it may produce power for a long time giving job security to many.
- \* It is key to support this now to ensure the skilled labour does not move out the area as we have seen in other industries. The safety record at Hartlepool power station and across the UK has been excellent and continues to improve.
- \* Nuclear Power stations remove unstable radioactive material from the ground, use it to produce power and then return it in a much safer state than it was originally. Unlike coal, oil & gas powered plants it is clean energy and does not add significant greenhouse gases to the atmosphere.
- \* It would be a brilliant decision if a new plant was built, securing hundreds of well paid jobs, and bringing further investment to the region.
- \* The current power station has an excellent safety record and I would have no problems with a new station
- \* it can only benefit the town and community as a whole both during construction and 60 years guaranteed work for full time employees and associated companies (approx 1200 to 1500 jobs) and the income spending power that produces
- \* I feel that the new power station has no threat to the local environment and feel confident that it will be as safe as the current one.

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- \* There is enough industry in this area. the inhabitants of Seaton Carew are subjected to all kinds of pollution from the close proximity of industry. The existing Seaton Meadows is a disgrace. There are rules about how high the tip should be, but are completely ignored. Is the council going to ignore the public view that we never wanted a power station in the first place, let alone another one. I thought the amount of power put into the National Grid from Hartlepool was tiny so the closure will not make much difference. The sooner it goes the better.
- \* Let's get on with it.
- \* A new station would provide a lot of skilled, well paid jobs within the teesside area. With jobs being lost in the steel and chemical industry, a new power station would provide alternative employment for these people who lose their jobs over the coming years, without having to move from the area.
- \* We should strongly support this, we have had one as a neighbour since 1969 without any detriment to the town. They are a good employer and our town would shrink without the men and women who work there bringing their wages, families and influence to our town
- \* The current Nuclear Power Station has arguable the least negative environmental impact of any large-scale industrial operation in the Borough of Hartlepool. This is remarkable in a landscape so scarred by industrial activity and corroded by planning motives undermined by subsequent economic conditions. Provided that stringent environmental and health and safety criteria are met at every stage in the project from planning to decommissioning, and that all these stages are planned for from the outset (and in this process local activists will provide a useful watchdog), there is no reason that the putative new power station cannot provide a similarly useful and non-damaging contribution to the local environment and economy as does the existing nuclear plant.
- \* The economic benefits of a new nuclear power station cannot be overstated. This is a major project and very few towns get the chance to benefit from such large scale investment. Not only will the station provide over 500 long term jobs there will also be a major boost to local suppliers. The construction phase will be particularly beneficial to the local economy. We have lived with a nuclear power station for 30 years with no detrimental effect. The new station will have more advance safety features than the current station so the risks are even lower than the existing station. Hartlepool, is a town with a proud industrial history and we were happy to live with the risks from steel making, ship building and heavy engineering for many years. Why should we turn our backs on the opportunities the nuclear industry can bring because of the exaggerated safety concerns of a small minority of people.



- \* Overall I think building a new station at Hartlepool will be a benefit to the local community and the North East as a whole.
- \* The existing nuclear power plant has operated with minimal adverse impact to the local community for almost 25 years now and has been a low carbon producer of power to the nation. A new modern plant, with an operational design life in excess of 50 years will provide the local community with an environmentally neutral source of local employment and business income from a power plant of national importance into the future.
- \* WE LIKE MANY COMMUNITIES NEED LONG TERM EMPLOYERS AND A NEW POWER STATION WILL PROVIDE MANY FAMILIES WITH QUALITY JOBS THAT WILL ENABLE THEM AND THE TOWN TO PROSPER. I BELIEVE THIS PROJECT IS VITAL TO THE FUTURE OF HARTLEPOOL.
- \* if nuclear is disposed of in a safe way i cant see a problem and with todays technology and in years to come they will find even better ways of disposing of waste and could even find some use for it
- \* I believe that the net benefits outweigh any disadvantages associated with the building of a new plant.
- \* Good for construction jobs and also for existing staff to transfer to new plant
- \* We have had a power station here for years and it has only brought significant benefit to the area, no deformed kids or cancer clusters. Its nuclear, more CO2 or we live in the dark. Hartlepool should embrace the opportunity it is being given with new nuclear build or 'hartlepool's station' will only be built somewhere else, and they will reap the rewards.
- \* I think a new station will bring employment to the area. It will encourage young people with apprenticeships and training schemes.
- \* Should have happened years ago before the lights go out.
- \* It will keep Hartlepool on the map as a big player in the north east
- \* This is a fantastic opportunity for good long term employment for the town
- \* It makes sound economic sense for New Power Stations to be built adjacent to existing ones.
- \* I regard the selection of Hartlepool as a possible site for new nuclear development as a very positive step for the region.

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- \* There are many positives which the power station would bring to the area. This will always be tempered by the use of nuclear energy and the risks that this presents. I believe it is a matter of control of that risk and if the safeguards are in place then the station should be safer. Like flying, there is always a risk and it is how these are managed.
- \* at present I believe there is no viable alternative to nuclear for "base load" electricity supplies; the country needs to be able to guarantee security of supply with minimal dependence on imported fuel and or electricity. We have squandered gas + oil, clean coal would be uneconomic and wind power both uneconomic and unreliable. Wind power was only able to provide 0.5% of our electricity in early January 2010.
- \* New nuclear stations will be required somewhere. Hartlepool is a good choice because of the local workforce, existing grid connection, plus adequate geology and cooling water.
- \* it has been running for years with no problems. in today's economic crisis we need work and jobs in our area.
- \* It would be a positive move, industrial growth for the area with employment during construction and operations.
- \* I am all for a new power station being built in Hartlepool. It will bring much needed jobs and a good amount of financial input to the economy
- \* there are positives/negatives no matter what power plants, processing plants are to be built and for me the positives far outweigh the negatives.
- \* Anyone who opposes it should set out how much renewable energy is going to cost the taxpayer in subsidy instead.
- \* Strongly in favour of a new power station.
- \* From attendance of last consultation meeting, I was appalled by the lack of knowledge about nuclear that the local residents have, which has led to scare mongering by local groups against new build. The conspiracy theories that were being spoken off at this meeting such as secret fuel stores under Hartlepool were shocking, if this is the level of knowledge our local residents have of nuclear then no wonder it has promoted so much debate!
- \* Yes. My concern is that I hope no decision has already been taken on this matter without the views and voices of not only the people of Hartlepool, but the people of the North East as this affects all of us.

- \* Nuclear power is neither safe, nor environmentally friendly. It requires vast amounts of resources to process, transport, re-process and dispose of, and if there is just one serious accident, hundreds of thousands of people could suffer the consequences for a long time to come. I implore the council to resist all attempts to build a second reactor, and to insist on the decommissioning of the existing plant.
- \* how much are u getting bribed for this plan to be passed????
- \* with the reduction of Co2 emissions nuclear seems to be the best alternative. also during the recent cold spell the risk of a gas shortage to the general gas consumer was a real concern as gas was being guzzled up to produce electricity.
- \* Build another 400 if it means an end to fossil fuel use
- \* There will be no increase in risk to me from a new power station that does not already exist from the current one. Also from other sources of radioactive material used by other industries/services in the area. I would consider the chemical facilities to be of a greater threat.
- \* Good for community in a time when the country/world is struggling with the economic climate
- \* Why not ask Hartlepool work force of their experiences at a Nuclear P.S.
- \* This proposal should be backed by all Teessiders as the benefits outweigh the negatives. We have no option but to build new nuclear and so should be trying to safeguard jobs directly and indirectly associated with Hartlepool Power station
- \* New build is necessary to ensure our children and grandchildren have a future, in terms of a career and general employment prospects. Again these prospects do not limit themselves to working at the Power Station, but also the hundreds of other local businesses that support the Station. Should new build not go ahead, we would be in grave danger of losing the current skill set who are currently based in the North East (currently employed at the existing Station)
- \* The government need a secure source of energy supply, coal and gas are running out. Nuclear has to be part of the long term solution along with renewables. A New plant will provide much needed jobs and money for the local area for many years.
- \* It will be good for the local area.
- \* I think it provides continuing employment in the power industry when the present station is decommissioned, Can Hartlepool really afford to lose over 500 GOOD jobs when the present station closes, you only

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have to go back to the 1980's to the closure of British Steel south works and the effect it had on the community , do we really want that again!

- \* I would just like to say that having lived in Hartlepool for 22 years, the Station has had a good safety record, and I feel that the company will build on that experience and knowledge into the New Build
- \* Accommodation for contractors needs looking at seriously before any work starts. 5000 people coming to the area will push up property prices and rents. Road infrastructure for access and maybe local rail line could go into power station to transport personnel.
- \* Siting a new Nuclear Power Station in Hartlepool adjacent to the current Nuclear Power Station will utilise existing utilities, supplies, pylons, experienced staff and ease of access both road and rail and will therefore result in little disruption for the local community. Also it will mean continued investment into the local community and the surrounding North East towns and villages when the existing Nuclear Power Station closes down.
- \* The local decrepit plant has been a driving force behind my considering moving my family away from Hartlepool. If a new plan is agreed to build another plant, Hartlepool will be my home no more
- \* If they are to be built then I would support a local station as we might as well benefit from the jobs and investment if the waste is to be created anyway. I would prefer that the national energy strategy did not depend on nuclear power at all.
- \* Nuclear power is clean and until we develop technology that can truly run from the sun it's the only viable energy alternative. Wind / wave other renewables are not up to the job to replace current fossil fuel energy supply. Nuclear is an incredibly safe form of energy and is run under strict guidelines. Of course there has been incidents but these are few and far between. Also, there is no evidence to suggest a link between nuclear power and ill health. These ill-advised, poorly researched scare mongers (Ryder and Kennedy) need to sort themselves out! They're an embarrassment to the town as they clearly have no clue what they're talking about. Green 'activists' vs scientists - no competition. Dr Richard Ward
- \* Hartlepool has had a nuclear powerstation for decades. This has provided long term employment and put money into the local economy. A new power station will result in even safer and cleaner electricity for millions of people. I would rather have 10 nuclear power stations than one toxic gas producing energy from waste plant such as the one Nirimax have applied for permission to build in the centre of Hartlepool.

- \* Too many do-gooders who know nothing about nuclear energy and disposal of waste (only what they read in national rags) against it. Should be more educated on the issue.
- \* THE SOONER IT IS STARTED, THE SOONER HARTLEPOOL WILL ONCE AGAIN THRIVE.
- \* The debate is currently not a balanced one. The only experts in Hartlepool are current or retired staff from the power station, who are mostly in favour. The anti-nuclear lobby comprises of members of environmental action groups who cannot produce a viable scientific argument.
- \* There are alternative options regarding providing energy
- \* I think it will give a negative image of Hartlepool, and may deter further investment in tourism, retail and small local business. Hartlepool has such a brilliant opportunity to build on its Heritage and the tall Ships to make it an attractive place to visit and bring money in, a new power station will drive away entrepreneurial opportunities for local people.
- \* If a new power station was to be built, I think that the residents of Hartlepool should be entitled to cheaper electricity, and a reduction in council tax for anyone who lives in a 5 mile radius of the new facility
- \* We have the technology, the skills, the spaces and the materials to build and install other energy generation options IN THIS AREA. We would generate more long-term employment and perhaps even prosperity by concentrating on renewable / "free" / clean energy sources than digging a hole -- taking an American machine out of its crate and running mind - blowing risks for half-a million years AGAIN !
- \* As a family we do not want it to be built here or anywhere else for that matter. no no no no
- \* Fully support the proposals to build a new nuclear power station. As an informed Hartlepool resident, with an eye to the future power requirements and aware of the dangers of using fossil fuels ( Carbon Footprint).
- \* Ignore the protestors. They wasted years in ridiculous protest over the dismantling of perfectly ordinary ships, not to mention costs to the public purse that could have been infinitely better spent. They played the alarmist 'Health' card then, and they are all set to give a repeat performance over this. Please approach this rationally without the hysterical emotion of the noisy nimbys.
- \* Worries about results of potential studies (e.g. German study) linking local populations living near nuclear power stations to increased risk of

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cancer. Also concerned about the increase in legal emissions that Hartlepool nuclear power station was evidently 'allowed'.

- \* According to the Draft National Policy for Nuclear Power Generation, places for disposal of nuclear waste had not yet been resolved.
- \* We do not need any nuclear power stations. The Sustainable Development Commission reported after a lengthy examination, that we can produce all our energy needs without resort to nuclear while promoting renewable technologies and energy conservation.

## Appendix C

**Viewpoint (31) Consultation Results**

Viewpoint 31, 67% response rate, 884 completed questionnaires (all results are weighted to 1200 responses). # = less than 0.5%; - = no responses; \* = excluded from calculations.

**1. Before you got this questionnaire, were you aware that a new nuclear power station might be built in Hartlepool?**

(N=1181)

Yes 91%

No 9%

**2. Which of these statements best describes what you think about this plan? (N=1175)**

(PLEASE TICK ONE BOX ONLY)

Generally I support a new nuclear power station being built in Hartlepool 58%

Generally I am against a new nuclear power station being built in Hartlepool 19%

I don't have a strong view about a new nuclear power station being built in Hartlepool 22%

**3. Do you think that a new nuclear power station will bring any benefits to Hartlepool? (N=1194)**

Yes 71% Go to Q4

No 15% Go to Q5

No strong opinion 8% Go to Q5

Don't know 5% Go to Q5

**Appendix C****4. What do you think the benefits might be? (N=1134)**

Brings employment opportunities / job security	801
Good for the local economy	95
Benefits to other local businesses / brings associated business to the area	51
Ensures a good supply of electricity	37
Will reduce the level of carbon emissions	34
No answer	20
Cheaper fuel bills	20
Improve the profile of Hartlepool	15
An efficient way of producing energy	14
Is a more renewable energy source	14
Will help improve the Hartlepool infrastructure	14
Will be safer than old power station	8
Other	12
	1134

**5. Do you have any concerns about a new nuclear power station being built in Hartlepool? (N=1190)**

Yes	39%	Go to Q6
No	47%	Go to Q7
No strong opinion	11%	Go to Q7
Don't know	3%	Go to Q7



## Appendix C

## 6. Those who have concerns about a new nuclear power station being built in Hartlepool

	Total
Risk of pollution / environmental risks	141
Concerns about general safety	113
Risk to public health	103
Becoming a target for terrorism	95
Dumping / storage of waste	68
Proximity to housing	39
No answer	20
Poor publicity for Hartlepool	17
Risk of accident / explosion	16
Safe decommissioning of old station	15
Already done our bit	15
Jobs will go to people from outside the area	13
Alternative energy sources would be located elsewhere	11
Eyesore	11
Worried about proposed location	7
Increased level of traffic	5
Already got ghost ships	4
Risk of flooding the power station	4
How much will it all cost	3
Worried about build quality	3
Other	26
	727

## 7 .Are you aware of the government's plans for nuclear waste – how it will be transported, stored and disposed of? (N=1189)

Yes 31% Go to Q8  
 No 69% Go to Q10

**Appendix C****8. Do you have any concerns about the plans for nuclear waste? (N=361)**

Yes	38%	Go to Q9
No	51%	Go to Q10
No strong opinion	11%	Go to Q10
Don't know	0%	Go to Q10

**Q9 What concerns do you have?**

Regarding the disposal / storage of the waste	84
No answer	23
Safety of the community	19
Regarding the transportation of the waste	14
Becoming a terrorism target	7
Health of the community	5
Other	4
	155

**Q10. Do you have any other comments about the possibility of a nuclear power station being built in Hartlepool?**

Fully support building of new power station	90
Little difference to current situation as already have a nuclear power station	66
Will provide vital jobs	60
Need nuclear power to fill energy supply gap	43
Provide more information	38
Done our bit / locate it somewhere else	26
It will benefit the local economy	26
Worried about the effect on local health	24
Opinion of public won't matter / decision has already been made	21
Should focus on other types of power sources	19
Locate away from town / housing	16
Concerned over what would happen to old power station	14
Concerns over storage of waste	12
Most new jobs will go to people from other areas	12
Will help improve local infrastructure	11
Don't want it built	9
Should result in reduced energy prices for local people	8
Risk of becoming a terrorism target	7
Other	48
	550

## **Notes of meeting ‘Question Time’ Event**

The meeting opened at 6.00 p.m.

Introductory remarks by The Mayor, Stuart Drummond. The Mayor introduced the panel to the audience: -

### **Paul Newman (PN), Hartlepool Station Director. (EDF)**

Paul joined the CEGB from university in 1983. He worked in a number of central roles within Engineering Division and Safety and Regulation Division between 1983 and 1996 and was involved with work on Magnox, AGR and PWR technologies. Following this he moved to Hartlepool power station in 1996. Whilst at Hartlepool he held the positions of Technical and Safety Manager and Operations Manager. In 2004 he moved to Heysham 1 to take up the plant manager's role, and in December 2006 he was appointed as station director of Heysham 2. Paul holds a BSc honours degree and a PhD both from Birmingham University. Paul was appointed as station director of Hartlepool in September 2008.

### **Dermot Roddy (DR) - Professor of Energy, Science City, Newcastle University**

Demot Roddy joined Newcastle University in August 2007 as Science City Professor of Energy. The ambition is to establish the North East of England as a trail blazer on the journey to the low-carbon economy of the future. Was previously Chief Executive of Tees Valley Renew and prior to that worked in the chemicals industry in Tess Valley and Netherlands.

### **Adam Dawson (AD), Head of New Nuclear Deployment, Department of Energy and Climate Change (DECC)**

Joined Civil Service in 2005 after 19 years with Shell. Within the new Office for Nuclear Deployment, he heads up the team leading on the delivery of the facilitative actions outlined in the January 2008 Nuclear White Paper, specifically on:

- Justification
- New Build, Waste and Decommissioning policy
- Generic Design Assessment (being conducted by the Regulators)
- Strategic Siting Assessment

### **Ben Ayliffe (BA), Senior Nuclear Campaigner, GreenPeace.**

The Senior Nuclear Campaigner at Greenpeace, whose job is to manage and lead campaign to stop the construction of a new generation of nuclear power stations in the UK and promote real solutions to climate change (like energy efficiency and renewables). MSc in Environmental Technology and spent about a year working for Action on Smoking and Health, a small campaigning organisation that works towards eliminating the health problems caused by tobacco. Then it was straight on to Greenpeace.

**Joy Yates (JY), Editor of the Hartlepool Mail, Chair**

**JY** – Introduction. Editor at the Mail for 3 years. The Mail is supporting balanced reporting and coverage for readers to form their own views. The paper's role is to inform.

Notes of the meeting being taken for the panellists and to be fed into the consultation process.

Each Panel Member will be given 5 minutes to outline their position on nuclear power. Questions representative of those submitted by the public will be put to panel with the opportunity for some supplementary questions at the end of each section relevant to the current question.

The aim is to concentrate on a new nuclear power station in Hartlepool and its impact on the town rather than the national position on nuclear power.

**BA** – General view as to why Greenpeace is opposed to new nuclear power is down to three reasons; it's inadequate, unnecessary and dangerous. A fleet of 10 new reactors will only cut carbon emission by 4% sometime after 2025. Unnecessary; there are better technologies out there to get the UK where it needs to be in terms of energy security and climate change targets. We can expand renewable sector targets beyond 2020 to get to where we need to be by 2050. We also think it's dangerous as there are unsolved problems around the nuclear waste issue and there is the nuclear proliferation issue.

We also think there is the danger of distraction. The industry around renewables around the world is booming but not in the UK. The overall lack of government priority doesn't help.

**AD** – government has set out position in white paper in 2008 feels nuclear has a role to play. There are two main reasons for nuclear. It has low carbon credentials and we need all the low carbon sources available to us. We need security of supply and need diverse mix of power.

We have been consulting on new nuclear power for the last 3 years. A Draft national policy statement with 10 potential sites for new stations. Hartlepool is on that list. Long process but not end of line. If it's decided that Hartlepool or any site should stay on the list after consultation, we will have to come forward with a finalised statement and it would be up to an energy company to come forward with a formal proposal. Is also government scrutiny committee scrutinising the national policy statement.

The government has agreed a target of an 80% cut in carbon emissions across all generation sources by 2050. Key in that is a massive increase in renewables together with carbon storage for coal and gas power generation. Lot of effort also going into efficiency and reduction in consumption.

**DR** – The policy statement has a mix of generation sources with amendments to the planning process. We do, however, have a track record of not hitting targets. Nuclear part of a mix all have different purposes. Carbon capture is also an option. When talk about energy electricity is the only part mentioned by government but it is only a third; there is heat and transport as well. Nuclear is low carbon. One question; is there enough uranium? It is well

mapped across the world. We do know how to operate these plants safely but I would be concerned at the same plants being operated in different countries around the world. There is one lingering doubt is the long term secure storage of nuclear waste.

**PN** – Hartlepool station provides 3% of the country's electricity. Over its life since 1993 it has saved 100m tonnes of carbon during life but not carbon free. It provides power for 1.5m homes. Hartlepool's projected end of life is 2014 with a potential extension to 2019, but will come to end of life. A challenge is providing new power generation. Renewables only provide about 5% of current electricity so need to grow that base. Need to provide secure energy generation for the future. Also will be an energy shortfall when fossil sites come to end of their life. EDF view is that as a generator of multi source we support the mix the country needs but nuclear does play an important part of that mix. We are looking at building four units in south with options being kept open on other sites including Hartlepool.

### **Questions**

(Aud – a member of the audience)

**Q1. Does the panel believe that the current suggested mix of power generation identified in the Government's Draft National Policy Statement will be able to fulfil the UK's energy needs and reduce CO2 emissions in the long term?**

**PN** – Government has identified the need for replacement generation capacity of at least 60gw. Hartlepool power station output is only 1gw which gives an idea of the scale. The target is for renewable is to fill 35% of that which is a big challenge. Which leaves 25gw from thermal generation and we would like to see a significant proportion of that to be Nuclear power. Electricity is fundamental to our standard of living.

**DR** – I have some doubts. Investors don't have confidence in government of fulfilling these targets. Issue of money spent on research on renewables as has fallen.

**AD** – Government isn't building these new nuclear or other power stations; they will be built by energy companies. Government is supporting renewables though. The new power stations will be built by companies but they will only do so if they can get a return on their investment. Is challenging – we won't be subsidising nuclear. Will be a market price for carbon which means anyone producing will have to pay for the ability to do that. Our CO2 target is an internationally binding target. Government priority is to deliver the world in a decent state for future generations. The government is looking at the pathways towards the 2050 target, which is across all electricity, heating and transport. Also looking at how to get the necessary investment on board to achieve this.

**BA** – National Policy Statement (NPS); looks at first like it might do the trick. However, the simple fact is that there isn't an energy mix set out in the NPS, so if others don't invest then it won't happen. There is a disconnect between ambitious targets for 2050 and the new Infrastructure Planning Commission (IPC) dealing with large planning issues. IPC won't see the life time carbon emissions of those big infrastructure schemes such as power stations and airports. We don't see any way in seeing what the CO2 impacts of these schemes are at the outset which makes it difficult to assess them.

**Aud** – when we get to 2050 and we haven't met our CO2 obligations, what happens to our power supplies?

(6.30 p.m.)

**AD** – We might achieve secure power but may be high carbon. So got to make sure we are going down the path of low carbon production. Don't know what that mix will look like but need to get started now. We need to get on with big investment in renewables and power stations now. Sanctions for failing, I don't know and the desire of government is that we don't, but is almost irrelevant as it's about what we leave future generations.

**Aud** – who owns EDF?

**PN** – EDF is parent company of British Energy in France and 80% owned by French government.

**Aud** – What is wrong with British enterprise, why no British ownership why must we have overseas ownership. We could afford to bail the banks out.

**PN** – If you look at where the electricity industry is in this country and the levels of investment needed, you need a significant size of company to do that.

**Aud** – Must be a lot of profit in it. Why not building our own

**AD** – is an emotive issue. EDF is world's biggest operator of nuclear power stations; have 58 reactors in France. The majority are Pressurised Water Reactors (PWR) which is the type we are looking to introduce here. If we are serious about getting these running quickly then need to get the best in to do it.

**JY** – further questions

**Aud** – Can Greenpeace clarify position as majority of panel have said nuclear is low carbon generation.

**BA** – if you look at the overall reductions of the new fleet of stations will reduce the whole of the UK carbon output by 4%. The governments own figures back this up. Not saying that over its life nuclear is not low carbon, but

there are better options out there. Particularly when consider the waste options.

**PN** – the amount of carbon saved by nuclear power today equates to taking half the cars of the road. Already 20% of electricity comes from nuclear power production.

**Aud** – Agreed internationally the carbon reduction figures, but who were targets agreed with EU or worldwide?

**AD** – There is an EU target to reach a 20% carbon reduction by 2020, which may be increased to 30%. Was a debate on carbon reduction at Copenhagen looking to 2050 and how the world should look to low carbon production. UK is signing up to a target of 80% reduction as part of that agreement.

**Aud** (Iris Ryder) – I visited EDF in France and there are great problems in towns near EDF sites. There are leaks of stored spent fuel into water supplies and threatening wine regions. Now shipping to a field in Russia, where there is no protection. Is this the sort of expertise we can expect here. The new reactor will be a Pressurised Water Reactors – Greenpeace study shows that they produce greater amounts of radioactive materials. Produce greater amounts of hazardous materials and would be greater problems if an accident. This was from study in 2007 which showed major problems is there was a major accident. Why is it such a great idea to have one here.

**PN**- to build these reactors have to be licensed. Waste has to meet extremely tight conditions and new reactors would be the same. I don't know of the issues you raise on waste to Russia as the regulations on moving waste are extremely tightly controlled. I don't know of waste going to Russia. Will have to meet tight regulation. Current site meets the current tight control. Current discharges are extremely low.

**BA** – the reactors will be new first of design and will be UK specific. Is an issue of waste. Will create spent fuel more radioactive than we have had before. Are important issues.

**Aud** – disposal nobody wants the waste in their back yard. Sellafield is getting full. I have asked before about the three mines in Blackhall, Horden and Easington which go out for 3 miles under North Sea, so wouldn't be in anybody's back yard. Is this feasible?

**AD** – Can you put it under north sea? Lots of questions there. Looking at geological site for waste disposal of nuclear waste but government has said won't impose the waste so have asked for areas to come forward. No one from this region has come forward. There are some areas that wish to be considered. Waste under the North Sea; don't know if you could do it. It would require a detailed geological study.

**Q2 What does the panel feel will be the key economic benefits to Hartlepool from a new nuclear power station and how will Hartlepool best place itself to get maximum local economic benefit for residents and businesses?**

**PN** – Current business operation at Hartlepool turns over £0.25bn year. £30m into local economy through wages. Most staff live within 10 miles of the station. The plant creates significant economic activity. A new station would require an investment of £45bn. A current build in Finland has 5000 working on one station. That would probably be more like 3000 jobs here. The design life of a new plant would be 60 years. It would employ 350 people on site in high tech jobs. When Sizewell was built there was significant business created in the NE through contracts for the supply to that development. So is a history here of that type of work, so even if Hartlepool doesn't go ahead, there would likely still be work through the other developments in the South. Hartlepool would be involved in supplying people for work on the development and through the supply chain to feed such a build.

**DR** – I don't believe we will producing nuclear reactors here or in the UK. We could produce some of the equipment but not the major plant. Tried same with offshore wind farms here. We have dragged feet and didn't get the supply chain work, so Hartlepool needs to make a quick decision. When these nuclear plants are developed in France and Germany, they supply lots of the waste heat to the local community within 30 miles to cut on the use of natural gas, but that's not the UK culture.

**BA** – Finland not the best example but on site 75% are overseas contractors, so not much benefit to local community. Could be in for a nasty surprise by pinning your hopes on them building a reactor; it is only an option. Offshore wind major new development in offshore wind– why Hartlepool not pursuing. District heat distribution is a major issue. The use of waste heat from large industrial sites needs to be explored more in this country. The future doesn't have to be nuclear.

**AD** – UK has got a strong manufacturing base and reputation. UKK companies are building steam generators for China. In UK do have a bigger building capacity. Last nuclear build in UK at Sizewell – half of construction jobs were local. The prospects for new jobs are reasonable assumption. Will also be things like new roads needed etc. Combined heat and power capture; it has to be understood that 60% of waste heat is not hot enough to generate power. We would like to capture that heat and district heating is the type of scheme we are looking to. However, UK housing areas are quite diverse and do not readily lend themselves to this type of scheme.

**Aud** – There are other places we can build powers stations. If going to have we have it here so we can get the extra benefits. Are many alternatives. If covered the whole of the available space in the UK in wind farms it would only produce 20% of energy we need.



**BA** – Don't agree with figures. There is a massive potential for off-shore wind. There are massive opportunities in renewable power. We do need back up but we need it for all types of generation. Don't have an objection to building power station in Hartlepool just believe it should be a green one and not nuclear.

**PN** - haven't said we would build one here at this time but have indicated that we would wish to build the 4 new nuclear plants in the south. We do believe there is potential to build here in the future.

**Aud** (Jean Kennedy) – All you have talked about so far is money, power and jobs but no one mentions that Hartlepool has the highest death rate in the country. Seaton Carew high death rates from cancer in young women. This is a dying town. They are burying all sorts of waste on the Meadows site. No one taking any notice. Stop talking about money or the jobs that don't come here. Really angry that its always money. We went to CoRWM (Committee on Radioactive Waste Management) discussions and they talked about these issues for days. We don't want your power stations we want good health and clean industry.

**PN** – Have been a large number of studies done around nuclear sites and none suggest that there are cancer clusters around power stations. In

**Aud** (Jean Kennedy) – Kildale Road closest to the site and there are a large number of cancer deaths in that road. There are lots of deaths in close proximity.

(7.00 p.m.)

**Aud** – We welcome the opportunity of the investment. What guarantees can give you that there will be a set timetable if EDF invest, that there will be timetable of adult training and apprenticeships and spin-offs for the local businesses. If don't have that in place we have the problems of over-runs with huge criticism. Have to have appropriate resources in place and it's not about bringing foreign labour in. first call has to be for the benefits to go to the community.

**AD** – There is a win, win if we get this right. It will be more successful and timely if is properly planned. It is in every ones interest that it runs smoothly. One of things developer will be doing is appropriate planning to get right work environment in place with the local community. Will be looked at in minute detail to get things right from the outset.

**PN** – that's what's happening now in EDF with the new sites we wish to develop. Is a long term investment in resources, which is why we have increased our graduate and apprenticeship recruitment. Manufacturing sector in the area will also need to assess what they will need to do to meet the demand.

**BA** – No one can give you a promise on a timetable. Nuclear doesn't have a good track record of finishing on time or in budget. EDF are not in a position to say these jobs will come to the community as they haven't said they will build one here.

**Aud** (Iris Ryder) - Hinckley point; said no relation with illness. But there is a relationship at Hinckley at Burnham on Sea. A German study shows is a link in childhood leukaemia within 5 kilometres of the site. You can't operate a nuclear site without these releases being made into the environment.

**PN** – There are emissions into the environment, but they are closely monitored and they are only a fraction of what is of concern to people.

**Aud** (Iris Ryder) – If it's legislated that can release a certain level of emissions, why did you have to seek government approval to increase levels of emissions in 1996.

**AD** – is a concern about health. If a planning application comes forward then the IPC will need look at that in detail and ensure it is covered by the regulators. In the UK we have tried to reproduce German study here but did not find the same link. In the Germany observed there was a link but there was no causality link. But is important and government has asked that they be done again. There are mortality statistics available. Around Hinckley people live 2-3 years longer than general population and in Sizewell it is similar.

**Q3 Why do we need another power station when some residents believe the existing plant is too close to population centres and has adversely affected peoples' health and wildlife?**

**DR** – Half of the electricity produced in the North of England is exported to other areas of the country, so if the question is about do we need one here the answer is no. There are countless stories about clusters of health complaints with reports full of statistics and they are all very difficult to understand.

**AD** – I can't say much more on the cancer cluster issues. All of the sites that were nominated had to say were not in certain distance of population. All of the sites had to show they weren't within certain distances of population areas. Hartlepool passes those criteria set, it was exclusionary criteria, so if hadn't passed wouldn't be at this stage. Wildlife and environmental impacts – nothing in the reports that rules out the site at this stage. But any developer will need to undertake detailed plans. Environmental Impact Plans that will have to be signed off by the IPC and the regulators.

**Aud** – If decreasing CO2 emissions but increasing other emissions why?

**PN** – There are very clear set of regulations about what you can and can't discharge from nuclear power sites. Yes there significant issues that we have to manage to ensure that we don't exceed the targets.

**BA** – Is an important point. Yes, we do have to cut our emissions but nuclear isn't only way. Football analogy. Cutting energy use is primary action we should take and is very cheap. Then renewables, cleaner use of fossil fuels, carbon capture and storage. Nuclear doesn't do much about cutting our carbon output. If we do all the others then there is no compelling reason to use nuclear. You would be well on the way to hitting all your carbon targets and a secure energy future.

**Q4. What work has been done to assess the risk/impact of new nuclear plants on communities and the environment?**

**PN** – EDF are assessing new generic designs for new stations based on EPR design. If approved safety case gives formal case. Then go to planning stage which is very tightly regulated.

**DR** – I have every confidence in the people who design, maintain and run these sites in the UK. But in another country its is a very different story. But you can't take people out of the equation. In the UK people are very serious in the area of security and maintenance.

**Aud** (Iris Ryder) – Union Carbide is example of when it goes wrong. Is always the chance that it can go wrong. Even Nuclear Power Inspectorate said that there are serious concerns over design we have and that was based on a preliminary design. Putting another one there because we already have one is not the way The location is key to this. There is a large petrol storage site one mile from the station that has an assessment that in the case of an explosion can cause damage up to 3 miles away. What damage will that do to the existing plant and any new one?

**PN** – We do build and manage nuclear power stations to the highest standards. There are industrial hazards around the area and they are reviewed every 10 years. We have a safety case against all those hazards. A new site will be no different. We feel we can make the safety case quite satisfactorily.

**BA** – UK design of EPR will be very specific. The pre-licensing of the designs is key. The independent regulators have said there are some safety concerns they have with the designs so far. None of the reactor designs will be given a clean bill of health and that is what is happening in Finland with problems having to be designed out as they build the plant.

**PN** – That's why need the GDA (Generic Design Assessment) done right up front.

**AD** – EPR is design that EDF favour. We are going to some lengths to ensure that all designs are not bespoke. Current plants not all the same. The new ones would be similar to others around the world. It makes them better to manage as a fleet, particularly for problem solving. If the GDA asks for issues to be resolved, then they will have to be dealt with; any problems will have to be resolved.

**Aud** – The predictions of climate change with rising sea levels and coastal erosion; is this the right place to build a nuclear powers station.

**PN** – It is a significant issue and we have looked at coastal erosion, storm surge, tsunami and rising sea levels and still feel that this is the right place. We can design the plant to address those kind of issues. We will have to address these issues as part of an application.

(7.30 p.m.)

**Q5. Do the panel believe the proposals for storage and decommissioning of nuclear plants in the future is safe and viable?**

**BA** – No. There are gaping holes in the NPS particularly on the storage of waste. New build sites will store waste on site for 160 years which is new for UK. Geological disposal is the governments preferred solution. Greenpeace are not sure this is the way to go. Government have muddled issue with mixing the legacy waste and new waste solution. CoRWM (Committee on Radioactive Waste Management) has recommended that legacy and new nuclear waste should be dealt with separately and that there should be a new decision for the new waste. It is going to be hugely expensive to store this waste. Voluntarism of a community for storage of legacy waste; can see why government suggesting this route. But have said if they don't find a volunteer community they will find another way. I think that the premise that you can safely store extremely radioactive waste on a site like Hartlepool for 160 years is stretching it to say the least.

**AD** – This is the biggest single practical challenge that goes with new nuclear power. The government consulted in 2007 on new nuclear power and waste was second major issue for people. In the white paper in 2008 we have said need to be assured of the storage of the waste before moving on with new stations. Consultation is process is to get those messages across. People do not feel that the government has taken on board the issues with health. On the technical side – we have been generating nuclear waste for 50 years. Sellafield is an interim storage site. Similar waste from US and French sites are using similar interim storage sites now, so we feel we can do.

**Aud** (Iris Ryder) – This is a site with land tilt and with a known geological fault. Is the closest to habitation anywhere in the world. There's guidance to say should be remote. An accident at Hartlepool could affect as far north as Sunderland. No plans to deal with people evacuation. Other sites have a green belt of isolation from local communities. The first station had no safety study published and went against all guidelines when built.

**AD** – The geology of site for station and waste and issue of sea level rise; any application for the site would have to protect against sea level rise now and that it could do so for future. Can't comment on the original siting debate. The site would have to be assessed now as how it stands and there are criteria that have to be adhered to including population density.

**PN** – The original power station was subject to a formal process, just as we are doing now. It is a requirement that we regularly review the safety case which includes the geological assessment. There is a comprehensive emergency plan regularly practised with the local authorities.

**Aud** – If there are so many issues with nuclear powers stations and there are so many other options why are building nuclear?

**AD** – It is not instead of but as well as. If we are serious about reducing CO2 we need to look at all options and at that includes nuclear. We need to do all we can to tackle climate change.

**BA** – There is a strong emphasis from government on new nuclear. The new NPS on nuclear power is huge and includes lots of references to job creation. Is a lot of good stuff being done on renewables but are other things to do. We think nuclear is getting in the way of things like energy efficiency which is easy to do. If we achieve our energy efficiency and renewables targets by 2020 we won't have to build any new major generation plants before then.

**Aud** – Would you say in a deep mine shaft three miles out in the North Sea is a safe place for storage for waste three miles under sea.

**AD** – Don't think it is possible to answer.

**Aud** (Cllr G Lilley) – Past governments have failed to have a proper energy policy for decades. In 2003 Greenpeace produced a report on the opportunities for renewables. Tidal energy is also untapped. We are going to end up going down the nuclear path because of those decisions. We are missing the opportunity to go down the heavy end of renewables there are great opportunities there for us. We should be pushing the government to look to renewables; this power is infinite. Are we doing enough to look to securing energy sources for the significant long term future?

**AD** – There are massive opportunities for renewables. We looking to build up a skill base for renewables and we could move towards being a lead in the world if move. Finiteness of nuclear or other fuels; there will be reserves of nuclear fuel for many years to come but it will run out, yes. How do I see renewables fitting in. We would like to move to them but are issues and challenges. Wind is intermittent and there are major issues with tidal power. To compliment that until the 2050's we will need something to compliment that.

**Aud** – When power station built was little development around it. Power station hasn't moved out they have encroached in on the power station. There are risks but they are addressed. All those sites have robust procedures under COMAH. Some of those sites are the safest in the world.

**DR** – Do agree, but that does mean that standards have to be upped to address those risks.

**Aud** (Evelyn Leck) – There the 2 families that live in Greythorp close to the site. One has been there a significant number of years.

**PN** – We are aware of them.

**Q6 What community gain can Hartlepool expect from the development of a new nuclear power plant?**

**PN** – Jobs. Support to local communities. EDF is very supportive of its local communities. Infrastructure will have to be right for a project of that size.

**Aud** (Iris Ryder) – Safety in local areas. A leaked internal document says that a new station wouldn't be built without additional protection against gas cloud explosion. The one that we've got isn't safe from current hazards. Government has put more hazards around the site which seems to dilute the problems of identifying the identification of the causes of health hazards.

**PN** – The safety of the site has been fully reviewed and agreed with the regulator. In terms of the other facilities in the area, they have to go through extensive planning regulations including consultation with the Nuclear Installations Inspectorate.

**Aud** (Cllr A Lilley) – The only people who will benefit from the new build are the shareholders. The Stone Age didn't end because we ran out of stones but that we found something better. Nuclear power is a last century technology. Does the panel think that nuclear is last century technology. These power station designs are ones they don't have in US. There are renewable sources of energy available such as tidal power. Prisons are not working, why don't we have as a punishment prisoners go on a bike and pedal until they have created a megawatt of electricity.

**DR** – I support the use of marine renewables. The development of tidal power is about 15 years behind wind power, so we have a long way to catch up. All the more reason why we have to accelerate the work.

**BA** – I agree we should find something new. Nuclear technology hasn't change in 50 years and is still very expensive way due to the waste produced. We are accused of being luddites – we think there are a range of new technologies that can be used together with cutting the amount of energy that we waste.

(8.00 p.m.)

**Aud** (Cllr G Lilley) – Community advantage; when compare EDF in France and the way they support the community in France, there is a difference to here. I want parity with my French counterparts. The French government has also set price restrictions on the increase in electricity prices.

**PN** – I can't comment on the specifics of what EDF will or won't do in that respect. EDF is keen to be involved in the provision of a changing energy economy. We want to be involved in low carbon energy production and are involved in the off shore wind farm at Redcar. We value community relationship highly and wish to strengthen that going forward.

**BA** – The comments on a balanced portfolio is rubbish; they are an nuclear generator. EDF are not a green energy producer.

**Aud** – Why don't EDF offer local community cheaper electricity?

**AD** – We have had that point often. We all benefit from electricity for our schools and hospitals. Where would you stop on localised pricing? France does things differently.

**Q7 Question from 15 year old school boy (present in audience) "I am a 15 year old school boy who attends English Martyrs School. I went to Hartlepool Power Station for 2 weeks work experience. My question is I have applied for an apprenticeship with British Energy. If I am chosen for an apprenticeship and Hartlepool is not chosen what does my future hold for me".**

**PN** – If you were successful in gaining your apprenticeship with British Energy/EDF you will still get an excellent training and you will be part of the strong future with EDF. If you stayed in Hartlepool, with the prospect of extending the life of the plant until 2019 by which time you will be 24 with an excellent training and skills behind you. Hopefully you can take the opportunity for what is recognised as an excellent training scheme that is highly recognised across many other industries.

**Q8 Does the panel feel that the current consultation process on the Draft National Policy Statement on energy has been appropriate and sufficient.**

**BA** – I do feel for the government are between a rock and hard place in what is a very technical debate. Is hugely tech debate and there is access to a huge amount of information. If they don't give enough time for consultation, we will take them to court. Issue is how your views actually make a difference at government level. Government needs to be a lot clearer on how our views have been taken into account. I haven't been entirely convinced they have done that in the past.

**DR** – I'm suffering from consultation overload. In 12 years had 12 energy ministers. Does the current incumbent have any knowledge of the consultations we responded to four or five years ago. Government is willing to have consultation but when we respond we find that the decision maker has moved on.

**AD** – There has been a lot of consultation exercises and they are extremely hard work. Government has decided that consultation is an important part of democracy. We have done a lot of work on the back of Greenpeace's successful challenge in 2006. Always surprised at how knowledgeable people are and we do take views on board. There are 4 or 5 main things coming out of this consultation. Transport – we have heard a lot of people concerned about the affect on local transport. Health – is another issue that is coming out more strongly than we have had before. Waste is another. These issues are coming out strongly in the debate here and elsewhere and I think our policy will be better for the work we have done.

**Aud** – Not all questions put, I submitted one and hasn't been asked.

**JY** – have tried to represent all the questions put.

**PN** – This is a structured consultation process. This isn't the end of the process this is on the draft statement, is a long time to go. I would like to congratulate the council for this event.

**Aud** (Iris Ryder) – I don't feel sorry for the government as they are taking others waste in and making money. I took part in the CoRWM debate and that was ignored. Past consultation event in Newcastle was industry consultation.

**Aud** (Jean Kennedy) – France are sending their waste here. Why are we taking it?

**Aud** (Cllr G Lilley) – Getting worried about consultation. This event has worked well today. My concern is that the true views of the Hartlepool people, the silent majority, are not coming forward. I don't propose that we hold a referendum but their views can only come forward if we can have a balance debate.

**Aud** (Cllr A Lilley) – The young man will get a good training but when your done go into renewables. We have never built anything before that we couldn't dispose of or demolish. Let us not create any more waste for future generations as we can't deal with what we've got now.

**Aud** – I understand that in US nuclear waste is stored on site. With EDF stuck with one big model. With waste stuck on site.



**PN** – We can safely secure and store waste on site for a long time. There is already a legacy waste issue to address. These things will be addressed in applications.

**JY** – the tabled question I think is for the Mayor who has left. I understand you are questioning whether there should be a referendum.

**Aud** (Norman Robertson) – In his opening statement the Mayor said he wanted to get our views. This should be our decision and the only way to find out is for the town to have a referendum. Only 100 people here but 90,000 people in the town.

**AD** – Generally speaking policy making in this country isn't done by referendum. Difficult decisions are made by the government we elect. I find it difficult sat in Whitehall to find out what people think. In consultations like this we get good feedback from a cross section of people but only those who are passionate about the subject and bothered to come. We did a consultation with a selected 1000 people. Found out that people were very concerned about issues on waste, security, health transport and costs. I don't think we will end up having a referendum in Hartlepool but it is important that everyone has the opportunity to have their say.

**JY** – we have over run, so it is time for closing remarks.

**DR** – New nuclear plants will be built somewhere in the UK. Hartlepool needs to make its mind up quickly or the benefits may go somewhere else. I am still very concerned about the long term storage of nuclear waste.

**PN** – Clearly nuclear is not the only answer but there is an urgent need to address the energy needs of this country and need to secure the energy generation needs we have for the future. We need to think carefully about the different demands of security of supply.

**BA** – We do need to address energy security and climate change. Nuclear business does have a shady past in meeting targets and budgets. We feel the NE has a great potential to meet its energy needs through other means.

**AD** – Thanks for hosting such an excellent event. We have talked about the future and what we leave to our future generations. Nuclear waste is a complex issue and we need to address. But we also need to deal with CO2 and can't leave to future generations. We are committed to being open and transparent on moving the debate forward, that is something nuclear industry hasn't done in past. On the pedalling to create power, I've estimated that one person will produce about 100 watts, the same as a light bulb. The power output of the average power station is 1000 mega watts. So need 10 million people to equal the power output of one power station.

**Antony Steinberg** – Thank you for attending and we do take peoples views seriously. Timescales are tight due to the deadline for submission of a response. On website is an online questionnaire, if people don't know how to

do that we can go through it over phone. Thanks panel for their input and time.

Close: 8.25 p.m.

DJC  
26.01.10

# Local economic impact scenarios arising from decommissioning and potential new build of Hartlepool Nuclear Power Station

Final report – February 2009



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## Executive Summary

This report has been commissioned by Hartlepool Borough Council, Tees Valley Regeneration and the Hartlepool Economic Forum to undertake a socio-economic assessment that investigates, analyses and quantifies the impact associated with plausible scenarios for Hartlepool Nuclear Power Station in terms of generation, decommissioning and potential new build.

One of the aims of Tees Valley Regeneration is to create development and investment opportunities and to deliver sustainable and meaningful economic activity for the long-term development of the Tees Valley region. The nuclear power station at Hartlepool offers a significant level of employment and investment to the area – with a minimum contribution of approximately 1% of the working population of the locality, a total turnover of circa £225 million per annum and an annual salary bill of £25 million. Other materials, good and services are £19 million with rates payments of £7 million.

British Energy Hartlepool is a twin advanced gas-cooled reactor (AGR) power station that began generation in 1983 and is capable of supplying electricity to 1.5 million households. The site is currently due to close in 2014 at which point electricity generation will cease and decommissioning preparations commence.

Decommissioning will result in a significant change to the workforce with a likely change in reliance from permanent employees to an increased reliance on contractors with a number of associated activities requiring altered skills base.

In addition to the decommissioning elements it is possible that Hartlepool could be selected for nuclear new build. It is likely that Hartlepool will request an extension to current operations of approximately 5 to 10 years (deferred decommissioning). This will bring significant economic benefits to the locality – but not as significant as new build would generate over its potential lifetime. Due to grid connection capacity it is likely that a new north east nuclear power station would only be financially desirable once the existing site has ceased generation. The time lag between cessation of current generation and initiation of new build should be minimised to reduce the risk of time periods between resulting in an almost total decline in employment numbers.

New build could have an upfront construction cost of up to £1.5 billion per site, which would be a significant increase to the local economy. However, it is worth noting that construction activities will have civil engineering requirements that mean only the largest construction companies are likely to have the capacity to deal with it. Construction is not a major skills base within the Hartlepool and wider local area; therefore a level of in-migration associated with new build would be expected. It is hoped that the use of larger national based companies would look to reduce the risk of in-migration by ensuring relevant people in sub-contracting organisations operate on a transient basis. It is possible that developing the local supplier chain (including regional considerations) would help to meet the construction needs.

The potential scenarios investigated are:

**Scenario 1 - Baseline decommissioning with no nuclear build.** Under this scenario, it is assumed that the Hartlepool site ceases power generation as currently planned in 2014 and that the decommissioning timeline continues as expected. No new nuclear build at the site is envisaged under this scenario.

**Scenario 2 - Baseline decommissioning with early new nuclear build.** Under this scenario, baseline decommissioning occurs as with Scenario 1. However it is assumed that new nuclear build commences at the earliest opportunity conceived on the basis of currently available information. Under this scenario, construction would therefore begin in 2020.

**Scenario 3 - Baseline decommissioning with late new nuclear build.** Under Scenario 3, baseline decommissioning occurs as with Scenario 1. However it is assumed that new nuclear build commences following the release of land as a result of partial site delicensing of the current Hartlepool site. Under this scenario, construction would begin in 2029.

**Scenario 4 - Deferred decommissioning with no nuclear build.** This scenario assumes that an extension is granted for continued power generation at the Hartlepool site until 2024. No new nuclear build at the site is envisaged under this scenario.

**Scenario 5 - Deferred decommissioning with early new nuclear build.** The decommissioning timeline is assumed to be consistent with that of Scenario 4 with concurrent decommissioning and new nuclear build. New build would begin in 2020.

**Scenario 6 - Deferred decommissioning with late new nuclear build.** Under this scenario the decommissioning timeline is consistent with that of Scenario 4. However it is assumed that new nuclear build commences following the release of land as a result of partial site delicensing of the current Hartlepool site. Under this scenario, construction would therefore begin in 2029.

Associated staff costs, levels and types have been explored for each in addition to consideration of potential supply chain and associated land costs. Please note, that the information presented in this report is based on best judgement available at the time as detailed plans for British Energy sites have not yet been produced (analysis has utilised data from Magnox sites and communication with British Energy).

Key findings from the study are summarised below.

- ◆ Nuclear energy currently supplies about 20% of the UK's energy requirements;
- ◆ British Energy is the largest UK producer of electricity. They own and operate eight nuclear power stations, including Hartlepool. Their nuclear stations have a combined capacity of almost 9,000 megawatts; and
- ◆ The fund set aside for decommissioning the entire British Energy power station fleet is estimated to be currently worth £5.3bn.

Whilst in operation, Hartlepool power station currently:

- ◆ is capable of supplying electricity to 1.5 million households;
- ◆ employs 500 British Energy staff plus 200 full-time contractors;
- ◆ contributes an annual salary bill of around £30 million to the Hartlepool area;
- ◆ in addition to salaries, the site contributes £7 million per annum to the region through rates payments;
- ◆ has an annual spend of ca. £12 million on materials, goods and services (20% is on the local supply chain, 60% on the national supply chain and 20% on the international supply chain); and,
- ◆ employs workers with an average salary of approx. £35k per year (significant proportion, up to 75%, are professionals including scientists and managers).

The station is due to close in 2014 at which point electricity generation will cease and decommissioning preparations commence; but there is a good possibility of a lifetime extension up to 2024.

The decommissioning process would:

- ◆ cost approximately £1.1 billion in total;
- ◆ require approximately 320 staff for defuel and initial site clearance and Safestore will require approximately 20 staff members;
- ◆ be followed by a “Safestore” period for at least 85 years to enable radioactive decay prior to dismantling along with full and final site clearance (around 2100); and
- ◆ result in the land being available for other use in approximately 2117.

A new power station would:

- ◆ employ approximately 450 people over 70 years;
- ◆ during construction require up to 3,000 staff (minimum 1,500) over a 5 year construction period that could result in a wage bill of £75m per year;
- ◆ Government aspirations indicate construction commencing in 2013-2014 with the first reactors going online 5 to 6 years after this;
- ◆ British Energy have approximately £12.5 bn set aside for new build projects (likely to be 4 in total);
- ◆ The building and commissioning of a new nuclear reactor in the UK is estimated to fall within the range of £2.0bn to £3.6bn (inclusive of costs associated with construction, national grid connection, operation and the back-end costs of decommissioning); and
- ◆ Generate enough energy to power 1.5 million homes.

The next generation of power stations last 70 years so a new build would have a lifetime effect of:

- ◆ £75m wage bill per annum (£375m total) during construction and £20m wage bill per annum during operation (over the lifetime of plant this equates to approx. £1bn); and
- ◆ Maintain a supply chain spend of approximately £12m and continue rates payments of approximately £7m.

Of the scenarios considered for the Hartlepool site, economic benefits to the region would be greatest if power generation were extended and this combined with new nuclear build.

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### **Environmental implications of new Nuclear Power Stations (August 2009)**

#### **Introduction**

Following a detailed consultation paper, published in May 2007 (1), in January 2008, the Department of Business, Enterprise and Regulatory Reform (BERR) published a White Paper on Nuclear Power (2). The White Paper presented the Government's conclusions following the latest public consultation on the future of nuclear power. In summary these were that the Government believes new nuclear power stations should have a role to play in this country's future energy mix alongside other low-carbon sources; that it would be in the public interest to allow energy companies the option of investing in new nuclear power stations; and that the Government should take active steps to facilitate this.

This paper provides information on the potential environmental effects, both positive and negative, of the process of a new nuclear programme which may involve the building of a new nuclear power station at Hartlepool. Environmental is here interpreted in a broad sense to include both global and local effects and also to encompass safety issues as these would have knock-on environmental consequences. The paper has been produced by the Environment Partnership of the Hartlepool Local Strategic Partnership. Its aim is to provide an overview of those potential effects and to provide links to other papers for those who want to consider them in more detail. It should be stressed that this paper is not in any way a formal assessment of the environmental effects. These will be addressed through the regulatory processes of Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA). SEA evaluates policies, plans or programmes to ensure that all environmental consequences are fully addressed. EIA evaluates a specific project, which in this case would be to build a specific type of nuclear power station in a specific location, in sufficient detail such that every potential environmental impact is fully assessed.

This paper is largely a summary of several evidence-based papers on various aspects of nuclear power, produced by the Sustainable Development Commission (SDC) in 2006. The SDC is the Government's independent adviser on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland. It is led by a board of 18 Commissioners, from a mix of academic, scientific, business and NGO backgrounds and is chaired by Jonathon Porritt. After reviewing the evidence on nuclear power in 2006, the SDC's Commissioners took the position, albeit by a very small majority of 8 to 7, that there was no need to bring forward a nuclear power programme at that time though it was right for the Government to continue to assess the potential for new nuclear technologies in the future. However the evidence papers themselves do not state a position and merely review the evidence, therefore they are referred to as providing a thorough but relatively concise summary of the issues. The full papers can be viewed and downloaded from the SDC's website (3)

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As a separate source of information reference is made to a Screening Report that has been produced by BERR as the first stage of an assessment under Article 6 of the EU Habitats Directive. This assessment considers whether the Government's nuclear programme would have any adverse effects on those areas of nature conservation interest designated under the EU Habitats Directive. In the absence of any nominated sites, the Screening Report is of necessity very general and concludes that a further Screening Report would be required once specific sites are chosen. Nevertheless the document is very useful as it considers the full range of potential effects on nature conservation. The screening report can be viewed on the BERR website (4). A related BERR report, which sits alongside the screening report is entitled "Applying the Strategic Siting Criteria: a study of the potential environmental and sustainability effects" and can also be viewed on the BERR website (5)

This paper is divided into four themes: reducing CO<sub>2</sub> emissions; environmental & landscape impacts; radioactive waste; safety & security. These reflect the topics in the SDC papers that deal with the environmental and safety aspects of nuclear issues. Most of the information has been obtained from the SDC papers themselves though additional sources are highlighted as numbered references.

**Reducing CO<sub>2</sub> emissions – (SDC Paper 2)**

Emissions of the greenhouse gas, carbon dioxide, are one of the main contributors to human-induced climate change. Based on a Royal Commission report in 2000, the UK government had a goal of achieving a reduction in CO<sub>2</sub> levels of 20% by 2010 and 60% by 2050 from the baseline of 165 MtC (million tons of carbon) produced in 1990. A 60% reduction would require emissions to fall to 66MtC by 2050. More recently independent expert opinion has pointed to a the need for the UK to produce an 80% reduction in greenhouse gases by 2050 in order to restrict global warming to the critical threshold of 2 degrees above pre-industrial levels. In Oct 2008 the Energy and Climate Change Secretary Ed Miliband committed the UK to cutting greenhouse gas emissions by 80% on 1990 levels by 2050. (6)

In 2004, nuclear energy supplied 19.3% of the UK electricity supply, which equated to 7.8% of the total UK energy supply. This had decreased slightly by 2007 to 15.1% of the UK electricity supply. As power stations currently generate almost 1/3 of UK carbon emissions the replacement of fossil fuel power stations by nuclear power stations could significantly reduce the total CO<sub>2</sub> emissions. However a new generation of fossil fuel power stations will produce less CO<sub>2</sub> per unit of electricity and therefore the net benefit in CO<sub>2</sub> reduction from nuclear generation will be less. In addition the development of carbon capture and storage technologies have been calculated to have the potential to reduce emissions from fossil fuel power stations by up to 90% (7). If successfully implemented such technology would further reduce any advantage nuclear power stations would have in terms of lower carbon emissions.

The ability of nuclear energy to contribute to CO<sub>2</sub> reduction targets in the short term is limited by the time it would take for new nuclear power stations to come on line and achieve full operating capacity. Under the government's recent



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proposals the first new power stations will begin operating between 2017 and 2020 at the earliest. (8)

The SDC paper looks at carbon emission reducing scenarios involving either replacement of existing nuclear power stations with an equivalent number of new stations or the doubling of the current capacity. With either scenario nuclear power would deliver around a 2.4% reduction in CO<sub>2</sub> by 2020. This is based on the assumption that existing power stations close on their scheduled decommissioning date rather than applying for extensions to remain operating. If, as seems likely, some power stations would be granted an extension to continue operating then CO<sub>2</sub> reduction would be slightly more than 2.4%. By 2030 these figures are likely to have increased to a 4.1% reduction for the like for like scenario and a 6.5% reduction with a doubling of the number of current capacity. The latter scenario could achieve cuts of 8.1% by 2050 as the building programme is completed. While a new nuclear programme would deliver significant CO<sub>2</sub> reductions it is clear that CO<sub>2</sub> reduction targets will not be met by an increase in nuclear energy alone. Rather it should be viewed as only one part of a low carbon economy.

It has been argued that it is possible to produce the reductions in CO<sub>2</sub> required without the need for nuclear power. For example a significant proportion of the UK's energy consumption could be reduced by increasing energy efficiency. SDC calculated that a reduction of 20MtC could be achieved by 2020 with the potential for further cuts by 2050 as new technologies are developed.

The UK has considerable potential for renewable energy resources and, in practice, this could provide in excess of 60% of current electricity production. However even if it were feasible to achieve targets for CO<sub>2</sub> emissions without nuclear energy this would require substantial investment in renewable energy, carbon capture and other technologies in order for it to happen. To give some idea of the scale of investment required, renewable energy supplied 5% of the UK's electricity in 2007 and the Government has a target of increasing this to 10% by 2010 and 20% by 2020 (9). It should be noted though that a doubling of nuclear capacity, or even replacement of existing capacity, would itself require substantial investment.

While the production of nuclear power does not directly produce CO<sub>2</sub> there are some carbon emissions connected with the life cycle of nuclear power plants. Construction is a carbon intensive process particularly given the large amounts of cement required to create the super-structure of a power plant. The fuel cycle will also result in carbon emissions including those generated through the mining and processing of uranium and the transport, storage and processing of spent nuclear fuel. It should be born in mind that other energy generating technologies, including major renewable technologies, would also have indirect carbon emissions though for such as wind turbines these are lower as a proportion of the life-time energy generation.

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### Environmental & Landscape Impacts – (SDC Paper 3 & BERR Screening Report)

The landscape and environmental impacts of any development usually extend beyond the boundaries of the site's footprint. In the case of the nuclear industry the main landscaping issue is mining for uranium ore. Although this doesn't occur in the UK its impact globally should be considered. Most mining sites use an area up to 50ha in size though this could increase several-fold if mining occurs in areas where uranium ore deposits are less concentrated. However techniques for in-situ leaching of uranium are increasingly used where the geology is suitable. These have a minimal impact on the landscape. As with other aspects of its environmental impact, nuclear energy needs to be compared with its alternatives. In this respect it should be noted that mining for coal or extraction of oil and gas all have significant effects on the landscape. Though with each of these operations, including mining for uranium, sites are usually reclaimable for after-uses without restrictions on access.

The infra-structure associated with the nuclear industry also has an effect on the landscape. A nuclear power plant itself does of course have a significant impact on the landscape character of its surroundings and its visual impact may be noticeable for several kilometres in various directions. In terms of the actual amount of land required to build a power station, this is estimated to be similar to that of coal and gas-fired power stations and to the infra-structure required for an onshore wind farm which has a similar generating capacity to the nuclear power station. Such a wind farm would occupy a much larger total site but the space between the turbines can still be used for other purposes within certain restrictions. However the dispersed nature of a wind farm means that it might have a greater visual impact on the landscape than a power plant. In this respect, nuclear power stations are very efficient in terms of land use per unit of installed capacity compared with other forms of generation.

Nuclear power plants are usually surrounded by an exclusion zone though this land can often be used for other purposes not associated with nuclear power. In particular the lack of disturbance can make them of high value for nature conservation. This is in fact the case with approximately 20ha of land to the west of the Hartlepool Nuclear Power Station which has been designated as a Site of Nature Conservation Interest in the Hartlepool Local Plan.

The BERR Habitats Regulations Screening Report referred to in the introduction looks at potential impacts on biodiversity, flora and fauna in general terms. Not all of those potential impacts would relate to each potential site and particular sites when chosen will be subject to detailed scrutiny through the Environmental Impact Assessment process, which will include measures to mitigate any adverse effects.

The Screening Report relates the potential impacts to the phases of activity in the life of a nuclear power station, ie construction, operation and decommissioning. The most likely effects during construction are noise and visual disturbance and an increase in dust emissions and surface run-off. There is also the possibility of accidental contamination of water courses and soils from construction materials, which potentially could also affect the human

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population. The construction process itself will of course utilise areas either temporarily or permanently that might have had value as a habitat. It should be noted however that these potential effects are common to all major developments and that it is possible to mitigate their effects to varying degrees.

During operation there will be routine releases of radioactive material. However these discharges are subject to strict regulation by the Environment Agency and would be within established dose limits; as such they should not have any adverse ecological effects. There is of course the possibility of the release of radioactive materials resulting from an accident. While this would have a significantly adverse effect, the likelihood of an accident is extremely small and is likely to reduce further with new reactor designs. (These issues are addressed more fully in the Safety & Security section)

When operating, a nuclear reactor requires large quantities of water to cool the reactor. The water abstraction can lead to high mortality of aquatic species though new technologies have been designed to minimise these impacts. The water that is discharged after cooling can be up to 10°C higher than the surrounding water; this can change the ecological communities in the local area but this change is not necessarily detrimental. Other potential adverse effects during the operational phase could be caused by movement of vehicles, the management of non-nuclear materials and the presence of the site buildings and staff but again these are common to all large developments.

Many of the decommissioning activities would have similar potential effects to those during the construction and operational phases. Additionally there is the transport of radioactive waste for final disposal to consider. This could have an adverse effect on biodiversity, flora and fauna through unplanned releases although past experience suggests that the risk of this is low.

The decommissioning process also provides an opportunity to restore the site in such a way that it benefits nature conservation. The recent Planning Policy Statement 9 states that the aim of planning decisions should be to maintain or enhance biodiversity and geological conservation interests. In addition, under the Natural Environment & Rural Communities Act (2006) guidance, Local Authorities are required to actively seek opportunities for biodiversity enhancement through the planning process. Therefore the planning process should ensure that the nature conservation value is enhanced above the site's original value prior to the nuclear build.

### **Radioactive Waste - SDC Paper 5; CoRWM report & Government response**

The SDC's paper 5 looked at Waste & Decommissioning. The paper summarised the development of nuclear waste policy in the UK up to that point in time. Summaries of decommissioning and radioactive waste management programmes in other countries were also provided. It also looked at waste management practice including an inventory of UK radioactive waste materials. The paper raised particular concerns about the lack of an adequate policy on

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long-term storage of waste at that time. This latter point has been addressed by the Committee on Radioactive Waste Management, (CoRWM), who published their long-term management options in July 2006.(8)

CoRWM made 15 recommendations the principal one being the view that the best available long term approach to dealing with radioactive waste was geological disposal. Given the timescales required to develop geological storage facilities this was accompanied by a recommendation for the development of secure interim storage facilities. Other recommendations were the need for ongoing research into geological storage; a flexible approach in case geological storage was superseded by new technologies and commitments to the involvement of communities in the process. Government accepted these recommendations and published a report on its response (9).

In June 2008, the Department for Environment, Food & Rural Affairs (Defra) published a White Paper entitled “Managing Nuclear Waste Safely: a framework for implementing geological disposal.” (10). The White Paper sets out the framework for the future implementation of geological disposal, including:

- Updating the UK Radioactive Waste Inventory;
- The Nuclear Decommissioning Authority’s technical approach to developing a geological disposal facility
- Arrangements to ensure sound regulation and scrutiny;
- Measures to involve communities in the site selection process.

The Government’s plans for geological disposal will be independently scrutinised by CoRWM, which was reconstituted in 2007 to “provide independent scrutiny on the Government’s and the Nuclear Decommissioning Authority’s proposals, plans and programmes to deliver geological disposal together with robust interim storage”

Geological disposal would involve isolating radioactive waste deep inside suitable rock formations. One of the key properties of such a rock formation would be its geological stability. Depending on the specific characteristics of the geological formation chosen, the radioactive waste would be stored typically between 200m and 1,000m below the surface. The storage would utilise multiple barriers, the principle being to place the waste beyond disruption by man-made or natural events.

Geological disposal has been chosen as the method of disposal by 25 of the 39 countries with significant amounts of radioactive waste. A further 6 have expressed a preference for this method. No country has chosen indefinite, interim storage as its long-term waste management policy. (11) The United States currently has one such geological disposal facility and, in its case, the waste is stored in vaults excavated in a salt formation, with storage beginning around 250m underground.

Progression to an operational geological disposal facility in the UK is likely to take several decades. The practice of interim storage would be required until such time. Interim storage involves a facility, generally at or close to the site of origin of waste, where the waste material can be suitably packaged and stored.

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Interim storage facilities are engineered to be resistant to incidents such as earthquakes and severe weather and to provide protection from environmental variables such as humidity and atmospheric salts. They are designed with a life-expectancy of around 100 years.

### **Safety & Security – (SDC Paper 6)**

In discussions over the pros and cons of nuclear power a major concern in the public consciousness is over issues of safety & security. In the SDC paper these are discussed under four headings: accident risk; vulnerability to terrorism; implications for nuclear proliferation and health impacts from background radiation.

Civil nuclear power stations in the UK have an excellent safety record. To date there have been no accidents that have had consequences beyond the site, nor any accident that required all safety measures to contain it. Nuclear power stations are designed so that safety measures are multi-layered. The safety equipment is duplicated and triggered automatically. These measures do away with much of the potential for human error and provide a fail-safe mechanism. It is likely that a new generation of nuclear reactors will reduce the low risk of accident even further. Nevertheless the extremely low probability of an accident occurring beyond the site needs to be balanced against the potentially high impact of a serious accident.

In the wake of the 9/11 terrorist attacks security at nuclear power stations is now at a very high level. The security measures are designed on the basis of current intelligence on groups that might pose a threat to UK security. The safety systems within the power station that would shut down the reactor are triggered automatically and their defence-in-depth strategy means that several layers of defence would need to be breached, by which time the reactor is likely to have shut down.

Also post 9/11 the buildings housing the reactor in current power stations have been assessed in terms of their ability to withstand the impact of a crashed airliner. Although not specifically built with this in mind, they are considered to be sturdy enough to withstand this although that may not be the case with other potential impacts such as certain missiles. The design of new power stations would be able to incorporate further safeguards.

Any new build nuclear power stations would also need to be protected from potential hazards in the future caused by natural events. Of particular relevance given the tendency to build nuclear power stations in coastal locations because of the high requirement for water is the need to “climate-proof” those power stations in the light of rising sea levels.

Under certain circumstances it might be necessary to ship radioactive materials for reprocessing or storage. Such material would be transported in the form of extremely hard ceramic pellets that are difficult to fragment or otherwise process. Likewise spent fuel containers are subject to stringent tests to determine their resistance to impacts or fire. Nevertheless the possibility that

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terrorists could attack such containers in transit cannot be completely ruled out. It is unlikely that material could be removed in such a scenario to be used for other purposes however the breach of a spent fuel container could in itself act as a “dirty bomb”. To do this would risk a life threatening dose of radioactivity to any terrorist carrying out such an activity but in the context of current terrorist threats that is not necessarily a deterrent.

It should be noted that this scenario would not apply to the transport of fresh fuels as this is of low level radioactivity and is unlikely to be of interest to terrorists.

Safety arrangements for nuclear installations are regulated by the Office of Civil Nuclear Security (OCNS). Under the Nuclear Industries Security Regulations (2003), operators of civil licensed nuclear sites or those who use or store Category I-III nuclear material at other premises must have site security plans approved by OCNS. Furthermore, if a licensed site has a tenant on the site who uses or stores nuclear or other radioactive material, including sources, then the tenant must have a security plan. These plans detail the security arrangements for the protection of nuclear sites, nuclear and other radioactive material and sensitive nuclear information on such sites. (14)

The UK is bound by the Non-Proliferation Treaty (NPT) and the Euratom treaty. Under the terms of these treaties it has been agreed not to divert civilian nuclear material for military use. Worldwide, all but four states are NPT signatories. The signatories are divided into declared Nuclear Weapon States, which are France, USA, USSR, China & UK and Non-nuclear Weapon States. All NPT signatories have signed voluntary agreements to allow independent inspection of their civil facilities to ensure that they aren't being diverted for military use. Nevertheless concerns remain about the effectiveness with which such agreements can be implemented or enforced. Also there is no guarantee given the potential for political instability in certain areas that states will not choose to withdraw from the treaty in the future, as North Korea has done.

The health impacts of exposure to radiation as a result of the normal operating procedures of the nuclear power industry are a separate issue to the risks of exposure following an accidental release. Around 80% of the radiation exposure for an average member of the UK public comes from natural background radiation though this varies from place to place depending on the underlying geology. Of the radiation that comes from human processes, the biggest contribution (around 14%) is from medical exposures. The proportion of radiation exposure that is due to the nuclear industry is actually very small and most of this is from fuel reprocessing. The development of a new generation of nuclear power stations will reduce this further especially as it is intended that nuclear fuel from new nuclear power stations would not be reprocessed.

In terms of cancer in general, the risk of developing a fatal cancer as a result of a new build nuclear power station have been calculated as significantly lower than the 1 in one million level that the Health & Safety Executive considers to be “broadly acceptable.” (15)

There has been evidence of a leukaemia cluster around the Sellafield reprocessing plant with seven cases between 1955 and 1985 in young people

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aged below 25 years. A cluster of five leukaemia cases was also reported from Dounreay in the mid 1980s. However radiological assessments of the areas around Sellafield and Dounreay do not support a link with environmental exposure to radiation. Studies have also failed to show a link between paternal pre-conception exposure to radiation and childhood leukaemia. (16) Since the Sellafield and Dounreay cases came to light, multi-site studies have been performed around 29 sites throughout England with similar studies taking place in several other countries. In general these studies have shown that the probability of a leukaemia cluster occurring is no greater near nuclear sites than elsewhere (16) (17).

While the focus on the potential impacts on human health of the nuclear industry has often been on scrutiny of any potential negative effects it should be acknowledged that a nuclear power station brings a very significant economic benefit and that this in turn has a positive effect on the health of the population as a whole.

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## **The Draft National Policy Statements for Energy Infrastructure**

**Response by Hartlepool Borough Council – supplementing that submitted by Tees Valley Unlimited/Tees Valley Joint Strategy Unit on behalf of the following local authorities:-**

**Darlington Borough Council**

**Hartlepool Borough Council**

**Middlesbrough Borough Council**

**Redcar & Cleveland Borough Council**

**Stockton-on-Tees Borough Council**

### **Response to the specific nuclear-related questions raised in the consultation**

**Q16. Do you think that the Government should formally approve ('designate') the draft Nuclear National Policy Statement?**

This question cannot easily be answered because we do not have the knowledge or technical expertise to validate or otherwise the Government's assessment of need for new nuclear energy infrastructure. During the public consultation process held locally in Hartlepool doubts were raised (by Greenpeace) as to whether an overall 'energy mix' was set out in the NPS, whether investment would take place sufficiently to achieve delivery, and whether nuclear contributes in any significant way to co2 reduction. Hartlepool Borough Councils view is that the overall strategy of reliance on a mix of energy sources, including nuclear, coupled with a continued focus on reducing consumption and increasing energy efficiency, is seen as the most robust way of securing supply and reducing carbon emissions. Within that mix, the case for a nuclear component as presented in the NPS is accepted, but regard does need to be paid to the danger of the debate about nuclear energy distracting attention from measures to bring forward other sources of supply.

**Q17. Does the draft Nuclear National Policy Statement provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?**

This question cannot easily be answered because we do not have the knowledge or technical expertise to validate or otherwise the Government's assessment of need for new energy infrastructure. Our view is that the NPS explains the relationship between the Local Planning Authority and the IPC. It is assumed that because there is an existing power station at Hartlepool the general matters of site selection and the more locally relevant issues should not give rise to problems in the working relationship between the LPA and the IPC. However there is uncertainty about how the Independent Planning Commission and the LPA processes do relate and more clarification is required in the NPS.

**Q18. Does the draft Nuclear National Policy Statement provide suitable direction to the Infrastructure Planning Commission on the need and urgency for new nuclear power stations?**

This question cannot easily be answered because we do not have the knowledge or technical expertise to validate or otherwise the Government's assessment of need for

new energy infrastructure. Our view is that the NPS could include more information on offsite infrastructure requirements. In particular it is suggested that more information should be given in the NPS on any improvements to the connection to the National Grid required. In addition, further information should be given about the inter relationship of the new plant and the old plant particularly at the decommissioning stage.

The NPS does not indicate in detail how the NPS and more particularly the siting of a new nuclear power station should be reflected in the LDF process. In the case of Hartlepool the emerging Core Strategy will be able to incorporate appropriate policy guidance on a new station

**Q19. Do you agree with the Government's preliminary conclusion that effective arrangements will exist to manage and dispose of the waste that will be produced by new nuclear power stations in the UK?**

It would appear that technical solutions to radioactive waste management are either known in principle or in practice. The outcome of the current approach for the siting of a GDF is unknown but is more likely to be successful than the previous attempts. It is essential that adequate levels of Government funding are maintained to ensure that the prospects of effective waste management are enhanced and that there are effective fall-backs and contingencies in place should the current strategies prove to be unsuccessful.

Openness and transparency are essential in the development and implementation of the radioactive waste management strategy and it is important that host communities and their decision making bodies play a significant role in any decision making concerning the management of radioactive waste and about options for the interim storage of spent fuel from new reactors. The local public consultation exercises held in Hartlepool identified the storage and disposal of nuclear waste as a key issue of concern in relation to both decommissioning and new nuclear.

**Q20. Does the draft Nuclear National Policy Statement appropriately cover the impacts of new nuclear power stations and potential options to mitigate those impacts?**

No, for the reasons set out under "Key issues of concern" in the answer to Q19 above regarding waste disposal.

**Q21. Do you agree with the Government's preliminary conclusion on the potential suitability of sites nominated into the Strategic Siting Assessment, as set out below? You can respond in general terms on the assessment as a whole, or against one or more specific sites.**

**a) General comments**

No comment – our knowledge and expertise limits our responses to this question to views about the suitability of Hartlepool as a potential site for a new nuclear power station.

**The Government considers the following sites to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:**

- b) Bradwell**
- c) Braystones**
- d) Hartlepool**
- e) Heysham**
- f) Hinkley Point**

- g) Kirksanton**
- h) Oldbury**
- i) Sellafield**
- j) Sizewell**

**d) Hartlepool**

Hartlepool Borough Council is supportive of the Government's intention to include Hartlepool as a potentially suitable site within the NPS for the deployment of a new nuclear power station by 2025. The existing nuclear power station is due to close in 2014 but there may be the possibility of a lifetime extension up to 2024. Economic benefits would be greatest if existing power generation were extended and combined with new nuclear build. The NPS sets out the broad range of site assessment criteria requirements which had previously been consulted upon. The description of the site at Hartlepool appears accurate and the siting criteria comprehensive and appropriate.

The criteria for the Hartlepool site include those relating to flood risk, the relationship to other hazardous installations and the potential adverse effects on internationally protected nature conservation sites. Officers consider that such issues can be addressed by mitigation measures and do not present insurmountable problems. (Appendix F looks in more detail at Environmental considerations)

The NPS draws attention to the limited size of the ownership boundary particularly as it will need to include land requirements for provision of a sea outfall pipe through the SPA.

The references in the NPS relating to storage on site need to be expanded so as to clarify the long term provision of storage.

**The Government does not consider the following site to be potentially suitable for the deployment of new nuclear power stations by the end of 2025:**

**l) Dungeness**

No comment – our knowledge and expertise is limited solely to the situation pertaining in Hartlepool.

**Q22. Do you agree with the Government's preliminary conclusion that the three sites identified in the Alternative Sites Study, as listed below, are not potentially suitable for the deployment of new nuclear power stations by the end of 2025? You can respond in general terms on the sites identified in the Study as a whole, or against one or more specific sites.**

- a) General comments**
- b) Druridge Bay**
- c) Kingsnorth**
- d) Owston Ferry**

No comment – our knowledge and expertise is limited solely to the situation pertaining in Hartlepool.

**Q23. Do you agree with the findings from the Appraisal of Sustainability reports for the draft Nuclear National Policy Statement?**

We agree with the general issues covered and have no specific comments to make regarding the AoS.

**Q24. Do you think that any findings from the Appraisal of sustainability reports for the draft Nuclear National Policy Statement have not been taken account of properly in the draft Nuclear National Policy Statement?**

We are not aware of any omissions.

**Q25. Do you have any comments on the Habitats Regulations Assessment reports for the draft Nuclear National Policy Statement?**

We note that the Appropriate Assessment for Hartlepool identifies that an adverse effect on site integrity cannot be ruled out at plan level for both Teesmouth and Cleveland Coast SPA/Ramsar and Northumbria Coast SPA/Ramsar. We agree with the Habitats Regulations Assessment summary that there is potential for the mitigation/avoidance measures to be sufficient to avoid/mitigate the adverse effects on the European Sites identified but that these cannot be fully assessed until a specific project is proposed.

**Q26. Do you have any comments on any aspect of the draft Nuclear National Policy Statement or its associated documents not covered by the previous questions?**

Note: Hartlepool Borough Council organised a series of local public consultation events to help shape its responses to the consultation questions. A copy of the Cabinet Report plus associated Appendices detailing local views is attached as supplementary information.