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22nd February 2010

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Developing Energy National Policy Statements Consultation Documents

We are writing in response to your consultation on Energy National Policy Statements. Environmental Protection UK has considered the consultation document and welcomes the opportunity to comment. The main areas of Environmental Protection UK's work are air quality and climate change, land quality and noise and nuisance. Our specific comments on this NPS therefore focus on issues relating to these areas of local environmental quality.

About Environmental Protection UK

Environmental Protection UK brings together organisations from across the public, private and voluntary sectors to promote a balanced and innovative approach to understanding and solving environmental problems, through policy development and education. We are a registered charity with 110 years experience of environmental campaigning, public information provision, producing educational resources and policy formulation. Environmental Protection UK's membership includes policy makers, regulators and practitioners from local authorities, consultants, developers, academics, industry and interested NGOs.

General comments on the Energy NPS

We support in principle the development of National Policy Statements to guide the development of major infrastructure. On the Energy National Policy Statements we make the following overarching points:

- a) Applications to be considered in context: The recognition that NPSs need to provide for applications to be considered in any necessary wider context. It is crucial for the IPC to recognise that different infrastructure projects may be interdependent, e.g. where a generating station may require support from a road or rail link, or a large project may require a series of buildings/access routes – which may be applied for in series. It is therefore important that consent for one does not make consent for another a *fait*

accompli – and as far as possible prevents the creation of potential barriers for another development.

- b) Cumulative impacts: EN – 1, 4.1.1 iv, and 4.2.3 - 4 directs the IPC to account for cumulative impacts, it must be clear in the NPS that while individual projects may not have significant impacts, the cumulative impacts of serial proposals for related projects, e.g. for generation plant followed by associated transport links, must be considered.
- c) Health: While health will be a material consideration in applications, Health Impact Assessments should be expressly required in appropriate cases alongside Environmental Impact Assessments, using the WHO's definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Throughout the draft NPSs, it is noticeable that far greater emphasis is given to potential impacts of infrastructure on habitats/ biodiversity than on human health. In particular the omission in EN-1 of any reference to health in relation to air emissions. There must be a more balanced consideration of impacts throughout the NPS to provide adequate regard to health protection.
- d) IPC members: To ensure potential health impacts are fully accounted for the IPC must include Commissioners with suitable expertise in environment and health.
- e) Spatial considerations: NPSs need to reflect spatial planning principles and take clearer account of existing planning guidance if the nation is to be certain to get the right infrastructure in the right place and address national needs with full regard to local impacts. This is particularly imperative in view of the absence of a national spatial plan, which integrates plans for jobs, housing and tackling climate change with those for energy, transport and water. We are pleased to see that the AoS does make reference to existing planning policy statements and guidance – however these are patchy. It must be ensured that referencing is consistent, comprehensive and up to date at the time the NPS is designated.
- f) Direction: The NPSs are policy statements rather than guidance and as such need to be consistently directory in their language – throughout the document the use of ‘must’ rather than ‘should’ is therefore required. For example, at 2.10.5 (EN-1) ‘the decision maker should consider how... effects might affect the environment etc’ – this would be better expressed if it reads ‘must’, given the emphasis on cumulative effects at 2.2.5. This is necessary both to ensure rigorous application of policy principles and to ensure decisions reflect a truly strategic view.
- g) Public participation: The active participation of Local Planning Authorities (LPAs) is an important part of the decision-making process, in particular in the production of Local Impact Reports. Such Reports are likely to require considerable input from planners, supported by their environmental health colleagues. Local authority manpower is under increasing pressure and government has said it will not provide additional funding for LPAs for this purpose. Therefore the IPC needs guidance on how to proceed where a LPA is unable to take part appropriately. Otherwise we risk failing to meet our national obligation to facilitate adequate public participation in the process.
- h) Pollution control: There needs to be some mapping of existing pollution controls to identify potential “residual pollution”, i.e. that which is not covered by predictive pollution control regimes and which therefore needs to be controlled through planning conditions.
- i) Associated developments: Clearer guidance needs to be given on the legitimate limits to these.

- j) Environmental Impact Assessments: The scope of EIAs should not be limited by NPSs, but should be a matter for the applicant in agreement with LPAs and the IPC while their influence should be left to the IPC. It would help if the guidance on general impacts, currently part of the NPSs, were removed and issued as associated guidance.
- k) The Appraisal of Sustainability process is considered to carry risk related to compliance with the SEA Directive (2001/42/EC); of particular concern is the approach taken on the consideration of “reasonable alternatives”, with the Assessment of Sustainability Reports focussing on alternative approaches to the format of the NPS documents rather than appraising substantive issues related to energy policy.
- l) Validation: In the final draft of the NPS references should be qualified as there are a number of instances where they are not. There should also be an overarching statement to ensure the IPC uses the most up to date guidance and applicants commit to using best practice.

Answers to Selected Consultation Questions

1. Do you think that the Government should formally approve ('designate') the draft Overarching Energy National Policy Statement?

While in principle we support the establishment of clear policy guidelines for major infrastructure, this is subject to account being taken of the overarching points above, and more specific points below:

- a) Local Planning Authorities: We welcome the inclusion of this, but it should read 'and other relevant authorities' to ensure the right people are involved.
- b) Structure of the planning system: We are concerned at the lack of clarity of the status of the NPS in the planning system. As this is policy, rather than guidance, this ought to be worded 'must' rather than 'may' be a material consideration in decision making (1.2.1). The further information from CLG promised at 1.2.3 is required to establish this and we trust this will be provided prior to designation of this NPS.
- c) Appraisal of Sustainability: At 1.61, it is stated that the energy NPSs will provide greater clarity for developers – they should at the same time provide greater clarity for potential neighbours of developments on the potential impacts and mitigation of those impacts. This should also be clearly stated – we are concerned that this introductory section only gives overt acknowledgement by the AoS of impacts on ecology – the impact on local environmental quality as it affects people should also be acknowledged. We suggest adding '*The development of new infrastructure may also impact on people living in the vicinity*'.
- d) Climate change: We welcome the stated objective at 2.1 that the NPS should help reduce climate change 'while also minimising negative effects on the local environment', we would also like to see protection of health as an objective, and suggest '*and protecting health, well-being and quality of life.*'
- e) Health: We would like to see more overt consideration given to health protection. At 2.1.2 we suggest an amendment to read: '*energy is vital to economic prosperity, social well-being and health, so it is*

important that we balance all our requirements in working to ensure secure and affordable energy infrastructure'

2. Does the draft Overarching Energy 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?

While much supporting information is included, overall, there are sections where more detail is required to capture all the likely impacts of developments – see our answer to Q. 5 below

3. Does the draft Overarching National Policy Statement provide suitable information to the Infrastructure Planning Commission on the Government's energy and Climate Policy?

Yes

5. Do the assessment principles in the draft Overarching Energy National Policy Statement provide suitable direction to the Infrastructure Planning Commission to inform its decision making?

We have the following points which must be taken into account to provide suitable direction for the assessment principals in the draft NPS. In particular, we repeat our concern at f) above that language must be directional:

4.10 Pollution control and other environmental consenting regimes

- a) 4.10.1 - Issues relating to discharges or emissions to 'land quality' are noticeably absent from this paragraph and should be included.
- b) 4.10.2 - this paragraph should include all potential sources of impact. We suggest it should read as follows:
'Pollution control also aims to protect land from contamination, and to prevent the intrusion of noise and light pollution and of unacceptable odours. Proper management of these impacts is essential to maintain a healthy environment for humans and ecosystems'.
- c) 4.10.6 - We believe applicants must submit applications for permits at the same time, if not before, applying for development consent. Wording here needs to be changed from 'applicants are encouraged to submit' to:
'applicants must submit applications' for any required consents at the same time as applying to the IPC.
- d) 4.10.9 - Applicants '*must*' make early contact before pre-application, with relevant regulators.
- e) 4.13.1 - This should mirror the Ports NPS (2.5) and recognise potential impact on quality of life as well as health and well being – this needs to read:
'Energy production has the potential to impact on health, well being and quality of life'
- f) 4.13.2 - We welcome the requirement to identify measures to 'avoid, reduce or compensate' for impacts.

4.14 Common Law nuisance and statutory nuisance

We are pleased to see a detailed consideration of the application of statutory authority – as the inclusion of the nuisance exemption in the Planning Act 2008 continues to be a cause for concern.

The NPS states at Paragraph 4.14.1 that developers may request a defence of statutory authority in respect of nuisance. Whilst such a permissive approach would be welcome, it appears to be at odds with Section 158 of the Planning Act 2008, which automatically attaches the defence to any development consent, for proceedings in respect of nuisances that are statutory nuisances under Part III of the Environmental Protection Act 1990, unless disapplied by the decision-maker in any particular case (as stated at 4.14.3). It is in the interests of all parties that this is clarified, to ensure there is no confusion as to the application of the Planning Act across the sectoral NPSs. It would be helpful to the decision maker also, if statutory nuisances under Part III of the EPA were clearly listed.

Regardless of the previous point, it is important that the potential for nuisance impacts and mitigation measures are subject to thorough and detailed examination in all cases, in order to ensure that any application of statutory authority does not jeopardise protection of neighbours of any development. We therefore feel that the additional considerations should be included.

Air Emissions

We are pleased to see that the draft NPS includes a full consideration of potential air quality impacts in section 4.17, and have the following comments to make on the draft text.

- a) 4.17.1/2 - Whilst we agree with the content of these two introductory paragraphs, the focus on eutrophication sits somewhat at odds with the main impact of poor air quality – its effects on human health. We also feel that mention needs to be made of air quality targets and limit values in the Air Quality Strategy, as currently these are referenced in paragraph 4.17.7 without introducing what they actually are. With this in mind, we suggest that the text is changed to the following

'4.17.1 Infrastructure development can have adverse effects on air quality. The construction, operation and decommissioning phases can involve emissions to air which could lead to adverse impacts on health, on protected species and habitats, or on the wider countryside. Impacts on protected species and habitats are covered in Section 4.18.

'4.17.2 Poor air quality has a significant impact on human health. Air pollution is currently estimated to reduce the average life expectancy of every person in the UK by an average of 7-8 months with estimated health costs of up to £20 billion each year¹.

'4.17.2 Another potential effect of air emissions may be eutrophication, which is the excessive build-up of nutrients (mainly phosphorus and nitrogen derived from human activities) in bodies of water and exposure of plants to gases, such as NOx. Eutrophication can lead to algal blooms and changes to aquatic life. Atmospheric eutrophication may affect plant growth and development.

'4.17.3 The Government's Air Quality Strategy includes standards and objectives for levels of health-threatening pollutants. These include benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide, particles, sulphur dioxide, ground level

¹ This second sentence is taken from the introduction to the Air Quality Strategy (2007)

ozone, and PAH. Objectives have also been set for the preservation of ecosystems and vegetation'

- b) 4.17.4 – We feel that the version of this paragraph in the draft Ports NPS provides a better description of the air quality contents of an Environmental Statement. This paragraph, along with our suggested changes (included in our response to the draft Ports NPS) would read as follows:
- 4.17.4 *The ES should describe:*
- *current concentrations of air pollutants in the area that could potentially be affected by the proposed project;*
 - *any significant air emissions that may arise from the proposed project, their mitigation and any residual effects distinguishing between the construction and operation stages, taking account of any significant emissions from any road traffic generated by the project. These should cover not only the absolute emission levels of the proposed project during construction and operation, after mitigation methods have been applied, but also the relative change in air quality from existing concentrations;*
 - *any relevant contribution of the air emissions to critical levels and loads for the protection of vegetation and ecosystems; and*
 - *any cumulative effects on air quality from developments related to the proposed project.*
- c) 4.17.8/9 – Useful reference could be made here to a wide range of guidance on the control and mitigation of emissions including:
- The London Best Practice Guidance: The control of dust and emissions from construction and demolition (http://www.london.gov.uk/mayor/environment/air_quality/construction-dust.jsp)
 - Guidance provided by DEFRA to local authorities under the Local Air Quality Management Process - <http://www.defra.gov.uk/environment/quality/air/airquality/local/guidance/>
 - 'Development Control: Planning for Air Quality' guidance produced by Environmental Protection UK www.environmental-protection.org.uk/.../Development_Control_planning_for_air_quality.pdf
- d) 4.21.1 – This paragraph states that some nuisance emission such as dust and smoke are covered in the section on Air Emissions. However there is no reference to these in the Air Emissions section, which needs to be rectified in the final NPS.

4.21 Dust, Odour, Artificial Light, Smoke, Steam and Insect Infestation

Although there is currently no specific government policy on artificial light beyond nuisance regulations in the Clean Neighbourhoods and Environment Act 2005, there is an increasing recognition that reducing the use of unnecessary lighting can reduce CO2 emissions and light obstruction on the natural and built environment. We believe a separate section on light would be appropriate to ensure that the opportunity for energy conservation and environmental protection are maximised.

- a) 4.21.2 - This is misleading (see comments on 4.14).
- b) 4.21.3 - We welcome this statement – it *must* be the aim rather than should.
- c) 4.21.6 - This should read as follows:

'The applicant must consult with the relevant planning authority etc'

It must also be clearer that local environmental health specialists should be consulted about these impacts.

- d) 4.21.10 - Again, here we find the wording too lax. It should read as follows:
'In particular, where it is likely that problematic emissions of dust, artificial light, smoke, steam and insect infestation might arise, the IPC must require the applicant to abide by a scheme of management to mitigate any potential impacts of these.'

4.25 Land use including open space, green infrastructure and green belt

- a) 4.24/5 - We are concerned that the consideration of impacts on land are limited to its value as a landscape or as a social amenity. Land and specifically soil provide a number of vital ecosystem services that are fundamental for local environmental quality, such as reducing urban flooding and supporting biodiversity. It is essential that impacts on land quality and land use are considered holistically and on the basis of soil functions, and not solely as a visual or social amenity. As promoted in Defra's soil strategy 'Safeguarding our Soils', managing the impact of construction and development on soil's essential functions is vital. In order to guide decisions makers towards an appropriate consideration of the impacts of energy infrastructure on the natural environment, it is essential the importance of soil and land quality is recognised explicitly. We recommend that this is done by renaming the impacts 4.24 and 4.25, to assimilate these under the single heading 'land and soil quality including ecological, social and visual amenities'.

Some acknowledgement of these services is given in the detail of the impacts, such as the recognition that a brownfield site may have a significant biodiversity or geological interest in paragraph 4.25.7. However, policy needs to promote a holistic approach in order to ensure important impacts are not overlooked.

Some of the geological considerations currently addressed under section 4.18 may also sit better under this revised section. This should be reflected through out the technology specific national policy statements to ensure consistency and clarity.

- b) 4.25.10 and 4.25.15 – These paragraphs offer some protection against the use of the best and most versatile agricultural land and notes that loss of high quality soil should be taken into account. Defining soil as 'high quality' in this way fails to protect soil on the basis of its functions. High quality soils in urban areas for example, are unlikely to exist, however there are soils performing vital functions to maintain local environmental quality in urban areas which need protecting. This wording therefore needs to be amended. The need to protect agricultural land is recognised however it is also essential that this policy statement directs the IPC to protect land serving other vital social, ecological and economic functions, such as peat land which acts as a nationally significant store of carbon.
- c) 4.25.2 - We welcome the recognition that green open space is vital in promoting healthy living and underpinning quality of life. The crucial ecological services that green open spaces play, such as helping to regulate surface water or reducing the urban heat island effect, are disappointingly overlooked.
- d) 4.25.4 - We believe further definition of Green Belt land beyond 'open' would be more informative for the IPC. Green Belt is a planning designation which does not just serve to protect 'openness' but also to protect the numerous social and ecological services which are supported by green belt land. These include protection against urban sprawl; preserving character of existing towns and that

of the countryside; assisting urban regeneration by encouraging reuse of land; providing access to the countryside, supporting physical and mental health and well-being; providing opportunities for sports and recreation; retaining landscapes; securing nature conservation, habitats and wildlife corridors and retaining land for forestry and agriculture.

- e) 4.25.6 - We fail to understand why the technology-specific infrastructure NPSs provide exceptions to the policy of seeking to re-use previously developed land (e.g. 2.7.34 of EN-3). We appreciate that for certain infrastructure, brownfield land of the size or location required is unlikely to be available however this does not justify this exception. Where no appropriate site is available or other considerations make the use of the brownfield site untenable, an alternative will be used. The policy merely ensures applicants *seek* to re-use brownfield land, if no appropriate sites are available then other land will be considered. This should also be applied as a matter of course for nationally significant infrastructure projects. By providing this exception, opportunities will be missed to ensure suitable brownfield sites are considered. We strongly urge for this exception to be removed from both the over-arching national policy statement and each technology-specific policy statement.
- f) 4.25.23 - We commend the recognition of the need to ensure the 'connectivity' of green infrastructure is maintained. As outlined in our general comments, the language is considered too lax. Furthermore, whilst 4.25.1 notes that this infrastructure will also have effects on the land in the vicinity, mitigation measures appear limited to the proposed site. Due to the potential impacts on land in the vicinity and the potential for blight, mitigation measures need to be considered.

4.26 Noise

- a) 4.26.1 - We welcome the statement that it is essential that the impact of noise and its management are carefully considered.
- b) 4.26.6/7 - Reference should be made here to the Environmental Noise Directive 2002/49 EC and to noise maps and Noise Action Plans (published for Wales, expected soon for England), and the Mayor of London's Ambient Noise Strategy 2004, which are set to provide a framework for environmental noise management.
- c) 4.26.11 - In order to ensure compliance with the Environmental Noise Directive to protect quiet areas of open country, the following needs to be added:
 - *Avoid significant adverse impacts on existing areas that are valued for quiet.*
- d) 4.26.15 - We would like to see the following added so that regard is given to temporal impacts on communities as well as wildlife:
 - *Administrative: restricting activities allowed on the site; specifying acceptable noise limits; taking into account temporal use of any nearby noise sensitive premises and the seasonality of wildlife in nearby designated sites.*
- e) 4.28 (Traffic and Transport Impacts) - It would help if cross reference was made here to the air and noise sections, in particular to the Air Quality Strategy and to Noise Action Plans (which will hopefully be available for England by the time this NPS is approved).

6. Does the draft Overarching Energy National Policy Statement appropriately cover the generic impacts of new energy infrastructure and potential options to mitigate those impacts?

Please see our answer to 5 above.

8. Do you think that the Government should formally approve ('designate'):

- a. The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)?
- b. The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)?
- c. 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)?

Prior to approval we recommend that comments at Q.10 below should be taken into account.

9. Do the following draft National Policy Statements provide the Infrastructure Planning Commission with the information it needs to reach a decision on whether or not to grant development consent?

- a. The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)
- b. The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)
- c. The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)
- d. The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)

Our comments focus on impacts – please see answer to Q.10 below.

10. Do the following draft National Policy Statements appropriately cover the impacts of the specific types of new energy infrastructure covered in them and potential options to mitigate those impacts:

a. The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)

2.5 Air Emissions

2.5.5 - We welcome the assertion that applicants are required to consult with statutory authorities – it should be emphasised that it is in the interest of all parties for this to be done at the earliest stages of project development.

2.6 Landscape and Visual

Given the large land requirements of these projects (acknowledged at 2.2.1), impacts on land and soil must be considered. Impacts on land use and soil function need greater consideration and should be included as a specific impact in order to ensure that issues such as soil sealing are considered as a matter of course. This would

help ensure these policy statements encourage best practice and do not under-represent the importance of this vital non-renewable natural resource.

2.7 Noise

- a. 2.7.2 - This should be more robustly worded to accord with EN-1
We recommend: *'The ES must include a noise assessment of impacts on sensitive premises, habitats and amenity areas.'*
- b. 2.7.4 - This should read 'noise sensitive premises' rather than exclusively referring to residential properties - schools, health care facilities and office premises are all sensitive to excessive noise.

2.8 Dust

2.8.7 The IPC must be satisfied – given statutory authority in respect of nuisance conferred by the Planning Act (EN-1, 4.21). We believe this should be very clear to the IPC, and recommend cross reference to this section, which we believe should be reworded as suggested in our answer to Q.5.

b. The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)

2.5 Biomass and Waste Combustion

- a. 2.5.32 - We believe careful consideration needs to be given to air quality, noise and any other local environmental impacts, as well as visual impacts. While covered in subsequent sections, this section should be inclusive. Noise and other potential nuisance impacts should also be included.
- b. 2.5.39/40 – Whilst we understand the intentions of these paragraphs, the wording that 'the IPC should not regard the proposed waste plant as being detrimental to health' needs to be in line with the medical evidence. Several pollutants, for example PM_{2.5}, have no safe threshold for human exposure, and increases in emissions associated with a combustion plant will therefore have a health impact. The IPC should not be asked to regard infrastructure as not being detrimental to health if it demonstrably is, no matter how small the impact might be. We suggest that this statement should read as follows:
'..., the IPC should regard the proposed waste plant/ biomass infrastructure to have an acceptable impact on health'

2.6 Offshore Wind

2.6.77 - While we accept that 24 hour working practices in deployment of these may be expedient to reduce ecosystem and other impacts, it is important, where this is the case, that noise impacts of activity at night are properly accounted for– for example where materials are transported. piling etc.

2.7 Onshore Wind

Factors influencing site selection by applicant

2.7.9 - While we welcome the acknowledgement that appropriate distances should be maintained between wind turbines and residential properties, we believe regard should also be given to other noise sensitive premises – in particular schools and healthcare facilities.

Project lifetimes

2.7.16 – 2.7.19 - We accept that wind turbines have a limited design life of around 25 years, and that procedure should be in place for decommissioning. However there is an implied assumption here that sites will only be used for a limited time - we believe this might prove to be misleading. We are not comfortable with the implication that wind farm sites are necessarily time limited and non-permanent. Given projections for energy demand and the limited availability of suitable sites for power generation, and that it would in some instances be more harmful to remove elements such as tracks and cabling – is it not likely that, should a site prove to be both efficient and low impact (which we trust is the aim of this NPS), that it could continue to be used as a wind farm? The power mix we will require in 25 years is uncertain.

Therefore, we would like to see added:

'2.7.20 - While consent for wind farms is time limited, the IPC must consider that, should a site prove efficient and any impacts are acceptable, it is possible, given the limited number of sites suitable for wind farms, and the potential continuing demand for energy from this source, that a location may be reconsidered for use as a wind farm beyond the lifetime of the initial application. This is acknowledged at 2.7.27 – Repowering.'

Flexibility in the project details

We feel wording here could be much clearer, as it is at 2.5.29 on Biomass and Waste Combustion – we would prefer, therefore, 2.7.24 to read:

'2.7.24 Where precise details are not known, the applicant should assess the maximum potential adverse effects the project could have to ensure that the project as it may be constructed has been properly assessed. In this way the maximum adverse case scenario will be assessed and the IPC should allow for this uncertainty in its consideration of the application and consent.'

Repowering

We welcome the acknowledgement here that applications for repowering of existing sites, with different layout and plant, are likely, and that applications should be determined on individual merits – taking into account generating potential and impacts.

Green Belts

2.7.33 We believe the IPC should be more clearly directed to consider all potential impacts – not solely the visual impact of any development proposed for Green Belt land.

Biodiversity and Geological Conservation

2.7.37 We commend the acknowledgement that many proposed onshore wind farms sites are on peat land and that this is a sensitive habitat however this section needs strengthening to ensure effective protection of this important resource. As the UK's largest carbon reserve, peatlands store an estimated 3 billion tonnes of carbon, this is compared to 150 million tonnes in UK woodland. It has the potential to sequester an additional 400,000 tonnes annually in pristine condition however much is degraded and is no longer peat forming. This ancient resource is extremely complex - the construction, operation and de-commissioning of wind farms can cause severe and irreversible damage to its integrity and it's ability to absorb and retain carbon. The combination of national and international conservation designation for some of our peatland and existing guidance for site selection inadvertently pushes development onto unprotected areas. Importantly for the IPC, on degraded bog it may be possible to marry the windfarm developments with measures to improve its condition. As a Biodiversity Action Plan (BAP) priority habitat, the UK has a target to restore 70% of the degraded area.

We recommend that 2.7.37 is re-written along the following lines:

'Many proposed onshore wind farm sites within England and Wales are proposed on peat. Peat is a sensitive habitat; it is the largest terrestrial carbon store in the UK and is important for many species of flora and fauna. Soil disturbance is likely to lead to changes in the local hydrological regime which can irreversibly affect peat's ability to absorb and store carbon and can also affect biodiversity.'

We also recommend that a paragraph is added to note that the construction, operation and decommissioning of wind farms can significantly affect the integrity of peat along with a requirement for the applicant to demonstrate that the proposed development will be carried out in such a way as to preserve and improve the condition of the peat.

A recent report considers these impacts in detail and provides useful assessment criteria and guidance, please see

<http://naturalengland.etraderstores.com/NaturalEnglandShop/NECR032>.

Landscape and Visual

As per our answer to Question 5 and Question 10a, land we are concerned that the consideration of impacts on land are limited to its value as a landscape or as a social amenity. It is essential that impacts on land quality and land use are considered holistically and on the basis of soil functions, and not solely as a visual or social amenity and we recommend that this be addressed by renaming the impacts.

Historic Environment

See comments above on 2.7.24 and repowering.

Noise

2.7.61 - The assertion that noise from wind turbines 'diminishes with distance' is misleading and should be removed. While noise levels, as measured in decibels, may reduce, other acoustic effects, such as amplitude modulation, may be experienced at distance from the turbine².

2.7.63 - 2.7.64 - ETSU refers only to residential properties – no regard is given to other 'occupied premises' (which could be for example, schools, health care premises) as it is at 2.7.75, shadow flicker. We believe the wording here could cause some confusion to the IPC, citing as it does the use of ETSU-R-97 in accordance with current industry good practice. Some noise consultants are currently using an adaptation of ETSU-R-97³, which is not accepted by government, but which they have agreed is required to account for the potential impacts of turbines currently being deployed. There is acknowledgment that any successor guidance to ETSU should be used. We are of the view that, in order to clarify assessment requirements for the IPC an urgent independent review of the ETSU guidance must be undertaken, to clarify the process for all concerned.

2.7.66 - This paragraph is also poorly worded and highly misleading. Given the professional misgivings about ETSU outlined above, and recent planning decisions, it

² See for example, Wind Shear, Andrew Bullmore, IOA Wind Turbine Noise Conference, Jan 2008

³ Agreement about relevant factors for noise assessment for wind energy projects, Bowdler et al, IOA Bulletin, March/April 2009

⁴ <http://www.denbrookvalley.co.uk/resources/Denbrook+APPEAL+DECISION-1.pdf> see 71 on

is dishonset to advise the IPC that little regard need to given to potential noise impacts if ETSU-R-97 has been used.

2.7.68 - The reference to ground transmitted low frequency noise here is misleading, as potential LFN from wind turbines is not solely transmitted through the ground. As research relating to this source is conflicting, it is wrong to recommend that the IPC dismiss any concerns about LFN.⁵ This statement should read:

'There is to date no clear, independent, accepted research that demonstrates that low frequency noise form wind turbines is at a sufficient level to be harmful to human health. Until such evidence is available, the IPC should not dismiss potential impacts of low frequency noise.'

Shadow Flicker

2.7.75 There is an anomaly between the regard given here to potential noise impacts and to shadow flicker. It is proposed that the applicants assess the impact of shadow flicker on an existing 'occupied building' – this affords more consideration than the required assessment for noise, which refers only to residential properties. (See Noise Above)

c. The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

2.4 - While the Hazardous Substances Authority and the IPC are designated here to deal with consents, it is not clear who will deal with any variations of consent required. This needs clarification.

Gas and Oil Pipelines Imapcts: Noise and Vibration

2.9.11 - Given the acknowledgement in the NPS that potential impacts include vibration, we would like to see the evidence base on which 300 m corridor for identification of noise sensitive corridors is based. Overall we welcome the recognition that noise and vibration impacts must be managed, and regard here should be given to our comments on EN-1.

Soil Geology

We commend the inclusion of the impact on soils however this needs to address the impacts to soil functions, not just soil quality, unnecessary damage to soil functions should be avoided and mitigation measures should be carried out where this is not possible.

d. The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)

Noise

2.8.13 Given the potential for noise on power lines to be caused by contamination, a maintenance plan must be a condition of development consent.

11. Do you have any comments on any aspect of the following draft National Policy Statements not covered by the previous questions:

- a. The draft National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)

⁵ Wind Shear, Andrew Bullmore, IOA Wind Turbine Noise Conference, Jan 2008
<http://www.nhs.uk/news/2010/01January/Pages/Wind-turbine-sound-and-health.aspx>

- b. The draft National Policy Statement for Renewable Energy Infrastructure (EN-3)
- c. The draft National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)
- d. The draft National Policy Statement for Electricity Networks Infrastructure (EN-5)

For consistency, consideration of impacts relating to soil, geology, landuse and landscapes need reviewing. Whilst we appreciate different impacts need to be considered for different types of infrastructure, impacts to land vary throughout and are considered confusing. For example, EN-3 refers to biodiversity and geological conservation whilst EN-4 includes a section on soil geology. To re-iterate, it is essential that impacts on land quality and land use are considered holistically and on the basis of soil functions, and not solely as a visual or social amenity. As promoted in Defra's soil strategy 'Safeguarding our Soils', managing the impact of construction and development on soil's essential functions is vital. In order to guide decisions makers towards an appropriate consideration of the impacts of infrastructure on the natural environment, the importance of soil and land quality should be recognised explicitly. We recommend that this is done by renaming the impact to assimilate these under the single heading 'land and soil quality including ecological, social and visual amenities'.

12. Do you agree with the findings from the following Appraisal of Sustainability Reports?

a. Appraisal of Sustainability for the draft Overarching National Policy Statement (EN-1)

We believe an AoS objective on light would be a helpful addition. The ports NPS gives regard to light. Light pollution impacts on our night sky, on habitats and can cause intrusion at properties, and has increased over past years. Regard to proper management of light is needed both to ensure energy conservation, protection of the countryside and reduction of obtrusion impacts.

Annex B

8. Noise

We believe the following plans, policies and programmes should be included:

- The WHO Guidelines for Community Noise 1999
- WHO Night Noise Guidelines for Europe 2009
- Mayor's Ambient Noise Strategy for London 2004
- Noise Action Plans Wales
- Noise Action Plans England (assuming they are published)

Annex F – Baseline information

8.Noise

We question the basis of this – given no reference to the body of existing research or numerical data on noise is included in the baseline (While in 11.Air Quality, references air quality information). We therefore disagree with the statement that environmental noise is likely to increase, particularly in urban areas. This assumption is at odds with the ongoing implementation of the Environmental Noise Directive (acknowledged in Annex B), which aims to reduce environmental noise and protect quiet areas in cities and protect existing quiet rural areas. Also, many climate change adaptation and mitigation measures (electric vehicles, modal transport shifts, greening cities) should also improve the noise climate. This baseline assessment

should be presented at least in a similar format to air quality – giving reference to noise mapping in England and Wales and Noise Action Plans (those for England due to be published Spring 2010). Noise standards for vehicles and tyres are being addressed at EU level, and this should also be referenced. With new legislative drivers and policy guidance in place, greater awareness of noise across policy areas (as demonstrated by acknowledgment of noise impacts across the NPSs) and quieter technologies in place we do not believe that increase in baseline noise levels is a given.

AoS EN2 - 4

We have not had the resources to look at the AoS for the following, but should they be presented in a similar fashion, the comments above apply.

14. Do you have any comments on any aspect of the following Appraisal of Sustainability reports not covered by the previous questions?

a. Appraisal of Sustainability for the draft Overarching National Policy Statement (EN-1)?

Annex B Noise

While this does cover the Environmental Noise Regulations, England and Wales, the strategic Noise Maps and Noise Action Plans Wales are not included. Noise Action plans England are expected in the coming weeks and should also be there.

Soil and Geology

The appraisal appears to have failed to consider land quality and soil functions holistically. Soil and geology states ‘to promote the use of brownfield land, and where this is not possible to prioritise the protection of geologically important sites and agriculturally important land’. This is a very narrow consideration of the issues that fails to ensure adequate protection of land and soil and as such is considered fundamentally flawed.

AoS EN2 - 4

We have not had the resources to look at the AoS for the following, but should they be presented in a similar fashion, the comments above apply

Contact Us

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