July 2011

Briefing Note

National Policy Statements: failing on climate change

Friends of the Earth

Recommendations for changes

Avoiding lock-in to high-carbon infrastructure

The Government published its National Policy Statements last week, and intends to have a vote in the House of Commons to pass them on **18th July**. It is not waiting for the full report of the Weightman inquiry into the Fukushima disaster, and is hoping that fast designation will restore investor confidence in the nuclear industry, battered by countries such as Germany's announcements to phase out nuclear power and focus on renewables instead.

This rush to get designation before recess has other consequences – mainly that the NPS series has not taken into account the changes since the consultation in October 2010: the recommendations of the Committee on Climate Change (CCC)'s 4th Budget report, the Government's own Electricity Market Reform consultation, and the recommendations of the Energy and Climate Change Select Committee. Ignoring these developments means the UK is racing head-long into a new dash-for-gas, which will wreck our ability to meet the UK's climate change goals, and lead to far greater long-term economic costs.

Take action now

We urge MPs to insist in the Commons vote that the NPSs are amended to:

- Be compatible with the UK's climate change goals and carbon budgets
- Revise the need argument to prevent a dash for gas
- Stop allowing incinerators to be treated as renewable electricity.

In this briefing we set out for each of these three points why the current proposals need revision, and suggest specific amendments to the NPS to ensure that they are effective in delivering on both energy security and environmental goals.

Recommended changes to the NPS:

1 Ensure climate change goals are met

Summary

There is a major hole in the energy NPS on climate change – it does not set out how the UK might get to its 2050 targets. This direction-of-travel is critical to prevent lock-in to high-carbon infrastructure. The Government is currently ignoring both the CCC and the Energy and Climate Change Select Committee on this point; it would be a simple matter to amend the NPS to bring it up-to-date.

Suggested amendment to end of the overarching NPS (EN-1) Section 2.2.8

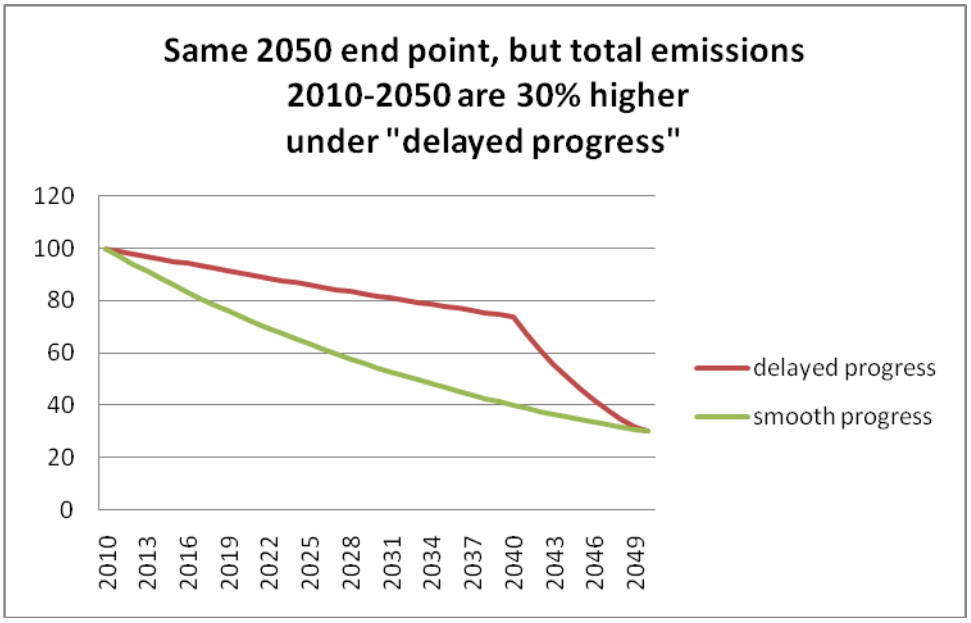
Add the following text:

Further, the Government has recently announced the 4th Carbon Budget (2023-2027) which will require emissions to be reduced by 50% by 2025 against the 1990 baseline.

Emissions will need to fall further beyond 2025; the Committee on Climate Change has recommended a 60% cut by 2030, with average emissions in the power sector falling to 50gCO2e/kWh by that date.[i]

Rationale for this amendment

In the NPS the Government persistently misrepresents the purpose of the Climate Change Act. The purpose of the Act is for the UK to play its part in preventing dangerous climate change – and to do this it is cumulative emissions from now to 2050 that matter, not simply the end point in 2050 (see graph below). Elsewhere, Government accepts this point – it sets carbon budgets, as advised by the CCC, for successive 5 year periods.



As part of this budget setting process, the CCC have set budgets to 2027 (which the Government has accepted) and said that the UK needs to have made a 60% cut on 1990 levels by 2030. The CCC say this target is the "absolute minimum" compatible with its climate goals (which in themselves are compatible with a 60% chance of exceeding two degrees – a high level of risk to accept for something Government has said it MUST avoid).

Within this 60% overall target, the CCC say that decarbonisation of the electricity sector is required as part of the most cost-effective path to that goal. They say this means cutting average emissions from around 500gCO2e/kWh now, to 50gCO2e/kWh in 2030.

The ECC Select Committee report into NPS agrees with this. They stated: "*we remain adamant that the recommendation of the Committee on Climate Change that the electricity sector should be substantially decarbonised by 2030 should be set out in EN-1 as an explicit goal for consideration in planning applications*".

However, the Government has ignored this - the overarching NPS makes no mention of 2030

targets, focussing instead still on 2050, and insists that any number of pathways to 2050 are possible. The Government's response to the ECC Select Committee argues that "significant amounts of gas-fired generating capacity may not be incompatible with our overall 2050 targets" – it cites its own 2050 Pathways Analysis Pathway 15 as its (only) evidence that this is possible.

But, this pathway:

- By its own admission requires "heroic" efforts on reducing energy demand and producing bioenergy. Government progress in these areas is not currently even adequate, as the CCC's 3rd progress report highlighted in June 2011. The section of Government in charge of electricity policy cannot just assume that other sections of the economy will emit vastly less as a justification for the electricity sector churning out more emissions.
- Requires the UK to import 45% of its energy by 2050. This is surely not something that the Coalition Government is seriously advocating as a responsible course to take, given current and future concerns about energy security?
- Has average emissions of 200gCO2e/kWh in 2030, four times the CCC's target.

In summary, the NPS and Government policy cannot persist with the myth that **<u>any</u>** path to 2050 is compatible with its overall climate goals. It's irresponsible to leave electricity policy so vague and open-ended – the electricity sector needs to be decarbonised by 2030 and this should be explicit in the NPS, not dodged.

2 Revise the argument for need

Summary

The NPS currently states that there is an urgent need for all types of electricity generation, and as such "need" for any proposed power-station is something the decision-maker should take as given, and also given "substantial weight".

The ECC select committee disagreed with this[ii], saying it could lead to a second dash-for-gas, going against the UK's carbon budgets. The CCC have also highlighted this concern. The case set out in the NPS for unbridled amounts of new infrastructure of <u>all</u> types is inaccurate (see 'rationale' section below), and the need case requires urgent revision to prevent high-carbon lock-in.

The need case should be revised in three places:

Suggested amendment to strengthen the "need" case in EN-1:

(italics = new text, non-italics=old text, strike-out = deleted text)

3.1.1 The UK needs ~~all the types~~ *an appropriate mix and quantity* of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions.

3.1.2 It is for industry to propose new energy infrastructure projects within the strategic framework set by Government. The Government ~~does not consider it appropriate for planning policy to set targets for or limits on different technologies~~ *will assess annually the cumulative impacts of the proposals coming forward on both the UK's carbon budgets and on ensuring the UK's energy needs are met, and revise the NPS if appropriate.* [iii]

3.1.3 The IPC should therefore assess all applications for development consent for the types of

infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that ~~there is a need for those types of infrastructure and that~~ *the scale and urgency of the need* for each technology type is as described for each of them in this Part.

~~3.1.4 The IPC should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008~~[16].

Suggested amendment to the fossil-fuel need guidance:

3.6.8 As set out in paragraph 3.3.8 above, a number of fossil fuel generating stations will have to close by the end of 2015. Although this capacity may be replaced by new nuclear and renewable generating capacity in due course, it is clear that there must be some fossil fuel generating capacity to provide back-up for when generation from intermittent renewable generating capacity is low and to help with the transition to low carbon electricity generation. *We note that considerable new gas-fired capacity has been built recently, is under construction or has been given planning permission; if all such permissions lead to constructed stations, the UK would have sufficient gas-fired capacity as part of a balanced mix to meet its energy needs.* It is *also* important that ~~such~~ fossil fuel generating capacity should become low carbon, through development of CCS, in line with carbon reduction targets~~. Therefore there is a need for CCR fossil fuel generating stations~~ and the need for the CCS demonstration projects is urgent. *There is a limit to the cumulative amount of new consented fossil-fuel capacity compatible with the UK's carbon budgets, and the IPC should consult with the Government annually as to whether this limit has been reached.*

Suggested revision to section 5.22 of EN-1on climate change:

5.2.2 CO_2 emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided (even with full deployment of CCS technology). However, given the characteristics of these and other technologies, as noted in Part 3 of this NPS, and the range of non-planning policies aimed at decarbonising electricity generation such as EU ETS (see Section 2.2 above), Government has determined that CO_2 emissions are not reasons to prohibit the consenting of projects which use these technologies or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs (e.g. the CCR and, for coal, CCS requirements), *unless the cumulative impact of already consented applications would be in breach of the electricity sector's contribution to meeting the UK's carbon budgets and associated targets*. Any ES on air emissions will include an assessment of CO_2 emissions, ~~but~~ *and* the policies set out in Section 2, including the EU ETS, apply to these emissions. The IPC ~~does not~~, should therefore ~~need to~~ assess individual applications in terms of carbon emissions *in order to ensure that the cumulative impact of already consented applications is not in breach of the electricity sector's contribution to meeting the UK's carbon budgets.* ~~against carbon budgets and this section does not address CO_2 emissions or any Emissions Performance Standard that may apply to plant~~.

There is an issue that some consented fossil-fuel stations might not get built, but with the above safeguard explicit in the NPS the decision-maker would still be able to take into account the current status of developments in the same way as is currently done for Environmental Impact Assessment. There, assessment of cumulative impacts is carried out on the basis of other developments where consent has been sought or granted, as well as those already in existence. Where work has not started on a site within the timeframe specified in the consent (3 or 5 years depending on the permitting regime) the consent or permission will lapse. It would therefore be taken out of a cumulative assessment of capacity. We believe these safeguards are absolutely essential to ensure

the UK does not lock itself into high carbon infrastructure, as the CCC have warned, and to help ensure the UK meets its climate change targets.

Rationale

The Government has responded to the ECC committee's concerns on need by asserting that it has 'strengthened' its need case. In practice, all it has done is to add the above paragraph 3.6.8 saying we need more gas.

No-one is disputing that some gas will be needed – the question is how much, how much more than now, and when? The Government repeatedly ducks this question, but it is clear from their own figures there is no urgent need at all – because a large amount of new gas has either come on-line recently, is being constructed now, or has planning permission. Indeed, since the NPS went to consultation in October 2010, a further 4 large gas applications - totalling over 5 GW - have been granted planning permission by DECC.

The NPS figures state that 59 GW of new generating capacity is needed in the UK to 2025, and that 26 GW of that is non-renewable. The Government data this is based on say this is broken down 7 GW nuclear, 2.9 GW inter-connectors, and 17 GW other (coal, gas etc)[iv]. The NPS says further that 8 GW non-renewable power is already under construction – as none of this is nuclear or interconnectors, that leaves 9 GW of need for new fossil fuel generation. The NPS also states that there is a further 9 GW of capacity with planning permission (of which 5 GW is fossil fuels) and since the NPS were issued, DECC has given planning permission for another 5 GW of gas. So instead of there being an "urgent" need for new gas, there is in fact "no" need for new gas – beyond the capacity already being built or with planning permission[v]. The new capacity the Government says is needed by 2025 is already either under construction or has planning permission.

3 Treatment of incineration ("energy-from-waste" plants)

Summary

Energy from waste plants are included in the renewables NPS even though the typical incinerator emits at least a third more greenhouse gases than a modern gas-fired power station. They also actively contravene the Waste Hierarchy and make climate goals harder to achieve. These plants should be removed from the renewables NPS, and put into the fossil-fuel NPS where there would be a presumption against them unless it could be shown that going against the Waste Hierarchy was the better environmental option.

Suggested amendments on energy-from-waste plants

EN-1 Insert at beginning of section 5.14.7:

The IPC should consider that energy from waste generating stations of over 50MW are likely to have a disproportionate and detrimental impact on the waste hierarchy, and that there is a presumption against such proposals unless it can be proved that going against the waste hierarchy would be the better environmental option.

EN-3 Remove Energy from Waste plants from covered technologies in EN-3

EN-2 add "Energy-from-waste generating stations" to list of covered technologies in section 1.8.1

Rationale

Friends of the Earth recommends that incineration and similar mass-burn "energy from waste" plants

should not be included in the renewable NPS . We note the parliamentary answer from the Government on 17th January 2011 that these plants emit 540g/kWh CO2e – more than a gas-fired station, over ten times higher than the CCC's recent recommendation for the 2030 decarbonisation target. Incinerators are also in direct competition with recycling and reuse, which are higher up the waste hierarchy, options which lower other negative environmental impacts through reduced resource extraction and processing. They cannot be classified as renewable electricity generators, and should be removed from the renewables NPS.

The Government's response to its consultation notes that:

"*Some respondents felt that energy from the incineration of waste (energy from waste or EfW) should not be regarded as a "renewable" source of electricity. They argued that not all waste can be classed as renewable and therefore EfW plants will release net carbon dioxide emissions, and should be classified as a "fossil fuel*" (3.3.35).

However, the Government then makes no response to this at all.

Incineration has the major potential to negatively affect the Waste Hierarchy. The Government's response to the consultation says: "*Further, some respondents felt no waste should be incinerated at all, that the IPC should not grant development consent to any waste incineration plants, and that waste strategies and movement of waste for incineration should be examined in greater depth."*

The Government's response to this was to state that the waste hierarchy set out in the Waste Framework Directive is very important, will be transposed into UK law, and that recycling was higher in that hierarchy than energy recovery. It said that recycling is "better than other types of recovery for most waste materials" but that the Directive "allows for departure from the hierarchy where that would deliver a better overall environmental outcome". Given this, there should be a presumption-against incineration unless it can be proved it was a better environmental option.

There are also major environmental concerns with the scale of the proposals in the NPS. The minimum of over 50MW and the inclusion of incineration as an "energy generating station" is promoting incineration on a huge scale. The current 65MW project proposed for Merthyr Tydfil would have a stack visible from large areas of South Wales, a building larger than a football stadium and would require a third of Wales' total waste arising to run at its planned capacity. Veolia's deputy chief executive has said that, in response to concerns about the freighting in of waste to service large plants: "*It's important that we convince local people that the plants are for their waste. We have not been helped by the Infrastructure Planning Commission which put in place a 50MW minimum which encouraged larger plants than appropriately-sized plants*."[vi]

Climate change is also an issue for incinerators, particularly given their different status in the UK's policy framework. Para 2.5.38 (EN-3) strongly implies that although carbon emissions may be a "significant adverse impact of…waste combustion plant", because there are other policies (set out in EN-1) "including the EU-ETS", the impacts on carbon budgets can be ignored. However, hazardous or municipal waste incinerators are not included in the EUETS. As they are not, this undermines EN-1 NPS's guidance that incinerations greenhouse gas impacts can be dismissed.

Overall, >50MW energy from waste plants are not renewable, not compatible with the UK's carbon budgets or the waste hierarchy, and should have a presumption-against them within the NPS series.

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Notes

[i] Elsewhere in the NPS, the Government highlights the CCC's other recent recommendations – for example in EN-1 section 3.4.2 says: "The Committee on Climate Change's May 2011 report included advice on moving to 30% renewable energy capacity by 2030 and a central scenario of 40% renewable electricity"

[ii] The ECC committee said: "The NPS need case may have a perverse impact on the development on new capacity, by encouraging too much new gas plant. We recognise the continuing importance of gas-fired generation in the UK but are worried that as drafted the NPSs could lead to a second 'dash for gas'. This would make it very difficult for the UK to meet its renewable energy and greenhouse gas emissions targets, especially if carbon capture and storage does not prove viable in the short term....the Secretary of State must take into account the volume and kind of capacity already consented or under construction

[iii] This clause is taken direct from section 3.34 of the Government's response to the Energy Select Committee's report.

[iv] www.decc.gov.uk/en/content/cms/about/ec_social_res/analytic_projs/en_emis_projs/en_emis_projs.aspx Annex I, tab "high prices".

[v] There are arguments DECC would deploy here – in summary: DECC could claim that the UK will need more capacity beyond 2025, but the capacity to 2025 already has an emissions profile greater than 200gCO2e/kWh. So to get to the CCC's target of 50gCO2e will require all post 2025 new capacity to be low carbon – ie unabated gas would not be permissible.

DECC could also claim that these figures are "just scenarios", but if anything their chosen scenario already has too much gas in it – getting from 200gCO2e/kWh in 2025 to 50gCO2e/kWh in 5 years is a tough ask. Their scenario has an almost complete tail-off in renewables deployment post 2020 – it would be reasonable to expect far greater renewables take-up, as is the case in the CCC's central scenario in its May 2011 renewables report.

DECC also already claim that having planning permission does not always lead to a built power station. This is true. However, the response to there being no need for any FURTHER capacity should be that the NPS is amended to state that the Government will not grant any more applications for any further gas fired power stations unless they have CCS fitted – ie a similar policy to the CCS policy for coal. If it transpires that any of the existing permissions do not turn into built plants, ie their permissions lapse (after 3 or 5 years depending on licensing regime) and as gas-fired plants are fast to build, there is plenty of time to allow replacement plant for these. It would be unlikely however that an existing permission were not used, given that these would be the last unabated stations allowed.

[vi] 7th December 2010 at a meeting of the Associate Parliamentary Sustainable Resource Group,Westminster.