Monday 3 March 2014

RE: EIR 14/0016

Thank you for your emails of 4 January and 4 February 2014 where you requested the following information:

1) *Documents relating to DECC's work towards preventing the RO generators - existing and new entries - from benefitting from the windfall bonus from the Carbon Price Floor that started in 2013. For example, please include documents relating to inter-departmental communications between DECC and HMT relating to this work.*
2) *In the Govt. answer to Peter Lilley it is stated that according to government analysis, existing renewable generators will receive total additional revenues from electricity sales of between £0.9 billion and £2.6 billion over the period 2013 to 2020 (in net present value terms). Please send me DECC's workings of these statements showing that the cost effect of the CPF is included in the calculation.*
3) *Re statement on the high level of uncertainty (on cost (£/tonne CO2) to the fossil power generators costs), please send DECC analysis which proves this uncertainty.*
4) *I understand that HM Treasury has recently announced changes to the level and timing of the Carbon Price Floor. Please can they be added to the response*

We have considered your requests in accordance with the Environmental Information Regulations 2004 (EIRs) as the information you have sought disclosure of, does in our view, fall within the definition of 'environmental information' as stated in the EIRs.

Each element of your request is considered, in turn, below:

1) Documents relating to DECC's work towards preventing the RO generators - existing and new entries - from benefitting from the windfall bonus from the Carbon Price Floor that started in 2013. For example, please include documents relating to inter-departmental communications between DECC and HMT relating to this work.

I can confirm that the Department holds information falling within the terms of your request. Annex A sets out excerpts of briefing prepared by DECC officials relevant to your request.

Further information is exempt from disclosure under regulation 12(4)(e) (internal communications) of the EIRs and is therefore being withheld.

This exception is subject to the public interest test. The key public interest considerations we have taken into account are set out below. In considering the public interest we have applied a presumption in favour of disclosure as required by regulation 12(2) of the EIRs.

The information being withheld relates to communications between central government departments. Releasing internal communications may assist the public's understanding of the workings of government. However, there is a contravening public interest in providing space in which officials may communicate confidentially. In order to ensure the effective conduct of government business, officials should be able to express views in a free and frank manner. Disclosure of the information we hold is likely to result in officials being less candid, which would undermine the department's ability to have open and frank discussions with other government departments, which would have a detrimental effect on the development of future energy policy.

Having considered the public interest, the Department's decision is therefore to withhold the information.

In addition, some of this information constitutes personal data and has been withheld. Regulation 12(3) and 13(1) of the EIRs provides an absolute exemption for personal data which then falls to be dealt with under the Data Protection Act. Personal data of third parties can only be disclosed in accordance with the data protection principles. In particular, the first data protection principle requires that disclosure must be fair and lawful and must comply with one of the conditions in Schedule 2 of the Data Protection Act. We do

not think that it is fair to release the names of junior members of staff and do not think that any of the relevant conditions apply.

2) ***In the Govt. answer to Peter Lilley it is stated that according to government analysis, existing renewable generators will receive total additional revenues from electricity sales of between £0.9 billion and £2.6 billion over the period 2013 to 2020 (in net present value terms). Please send me DECC's workings of these statements showing that the cost effect of the CPF is included in the calculation.***

Annex B sets out the methodology and data sources used to arrive at these estimates.

3) ***Re statement on the high level of uncertainty (on cost (£/tonne CO2) to the fossil power generators costs), please send DECC analysis which proves this uncertainty.***

Carbon prices contribute to costs faced by fossil fuel power generators and the precise magnitude of these costs is uncertain because the market price of allowances under the EU ETS varies with demand for allowances and costs of abatement for a given emissions reduction target. The overall target and annual levels of the EU ETS cap have been set up to 2020 and although the European Commission has recently proposed a package of targets for 2030 and measures to reform the EU ETS, currently there are no agreed targets in place for the period beyond 2020. This makes carbon prices even more uncertain for the period post-2020.

DECC's published traded carbon values[1] provide an indication of the possible range of uncertainty in carbon prices.

4) ***I understand that HM Treasury has recently announced changes to the level and timing of the Carbon Price Floor. Please can they be added to the response***

The Carbon Price Floor is a HM Treasury policy. Its trajectory begins at around £16/tCO2 in 2013 and follows a straight line to £30/tCO2 in 2020, rising to £70/tCO2 in 2030 (real 2009 prices). This is the trajectory as announced at Budget 2011. No changes to this trajectory have been announced.

[1] Available online at: https://www.gov.uk/government/collections/carbon-valuation--2.

Annex A: Excerpts of briefing

Item 1: Excerpt from Carbon Price Support Master Brief (Multiple versions dated between April 2012 and January 2014)

[IF PRESSED]: Government has no plans to introduce a windfall tax for existing low carbon generation. This would create unnecessary uncertainty for investment.

Item 2: Excerpt from Energy Bill briefing for the Secretary of State (Dated 14 April 2011)

The Government keeps all tax policy under review as part of the Budget process.

Annex B: Methodology for calculating revenues to existing low-carbon generators from the Carbon Price Floor

This was done by calculating the impact of the CPF on wholesale electricity prices, by making assumptions of the carbon price support rate under different EU ETS carbon value scenarios and of the emissions factor for a marginal generating plant (the price setting plant – typically gas CCGT). This creates estimated revenues for low-carbon plant operators that will not have increased costs due to the CPF (as they do not pay the price of carbon) but will benefit from higher wholesale electricity prices.

The revenues were calculated for a given year, discounted at the social discount rate and then summed together from 2013 to 2020. Yearly revenues were calculated as follows:

(Carbon Price Support rate) x (Emission factor for a gas plant) x (Total generation from all relevant plants) x (Discount rate)

CARBON PRICE SUPPORT RATES

Carbon price support (CPS) rates for financial years to 2015/16 have already been announced.[2]
For subsequent years, the tax rates to be applied were calculated by:

(Carbon Price Floor trajectory value) - (EU ETS price assumptions under different scenarios)

The EU ETS prices used are DECC's published carbon price assumptions.[3] These include a low, central and high sensitivity, which were used to construct the range of estimates.

EMISSION FACTOR FOR A GAS PLANT

A constant marginal emission factor is used here, with that of gas plants used as they are assumed to be the marginal plants brought online.[4]

GENERATION

Nuclear

Generation output of all nuclear plants in a given year was summed, with output for an individual nuclear plant calculated as follows:

(Capacity of plant) x (Load factor)

Capacities have been sourced from published figures on EDF's and Magnox's websites.[5] Future load factors for nuclear plants are held constant at 70.8% (the average of nuclear plants in 2012, see table 5.10 of DUKES 2013).[6]

Renewables

Generation output of all renewable plants built up to Q1 2013 was calculated by taking published renewable generation figures from Energy Trends publication (June 2013).[7]

DISCOUNT RATE

The HMT Green Book social discount rate of 3.5% real has been used to calculate the NPV estimates.[8]

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[2] See relevant Budget documents.

[3] Available online at: https://www.gov.uk/government/collections/carbon-valuation--2#update-to-traded-carbon-values-2013. Two sets are available (for policy appraisal and modelling), both are consistent up to and including 2020.

[4] 0.375MtCO$_2$/TWh, consistent with a gas plant of 49.13% efficiency as used by ICIS Heren in their clean spark spread calculations.

[5] Source: http://www.edfenergy.com/about-us/energy-generation/nuclear-generation/nuclear-power-stations/ and http://www.magnoxsites.co.uk/remit

[6] Available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65881/5949-dukes-2012-exc-cover.pdf

[7] Available online at: https://www.gov.uk/government/publications/energy-trends-june-2013.

[8] Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf