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**Subject: State aid SA.36196 (2014/N) – United Kingdom
Electricity Market Reform - Contract for Difference for Renewables –**

Sir,

The European Commission wishes to inform the United Kingdom that, having examined the information supplied by your authorities on the matter referred to above, it has decided to raise no objections to the notified aid scheme.

I. PROCEDURE

1. Following extensive pre-notification contacts, on 25 June 2014 the United Kingdom notified, pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (TFEU), the scheme for supporting the renewable energy transition meeting the UK's legal decarbonisation obligations. The UK provided additional information on 30 June 2014, 1 July 2014, 3 July 2014, 9 July 2014, 11 July 2014, 15 July 2014 and 16 July 2014.

The Rt Hon William HAGUE
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II. DESCRIPTION OF THE SCHEME

Background and objectives of the notified scheme

2. In order to achieve decarbonisation of its electricity supply and to meet the legally binding carbon reduction obligations, the UK undertook a review of its support instruments to renewable electricity production. The notified scheme should allow the UK to pursue its decarbonisation objectives while maintaining security of supply (including a diversity of generation).
3. The notified scheme is part of the UK Electricity Market Reform (ERM), together with the notification for the new nuclear power plant at Hinkley Point C (case SA.34947) and the Capacity Market (case SA.35980).
4. There is currently around 100 GW of installed electricity generation capacity available in the UK. Around 11 GW of electricity generation capacity is due to close over the next decade (by 2023). These 11 GW consist of 3 GW of power plants which have to close by the end of 2015 under the Large Combustion Plant Directive¹ (LCPD) (biomass conversion, oil and coal) and 8 GW of nuclear plant (subject to life extensions – which may reduce this number).
5. An analysis made by the UK authorities in May 2013 suggests that there are a considerable number of renewable power plant projects in the pipeline in the UK, with around 32 GW of potential new capacity in planning, consented or under construction. Onshore wind is the biggest single contributor with over 13 GW of capacity in planning, consented, or under construction. The offshore wind pipeline is currently near 11 GW and is expected to grow. There is currently around 4 GW of potential biomass electricity and energy from waste, either in the pipeline or from conversions of coal power stations.
6. The UK currently has in place two different support systems for renewables, one based on certificates (the Renewable Obligation scheme²) and one based on feed-in tariffs (the FIT scheme³). It intends to restructure its support for renewable energy and to replace Renewable Obligations scheme by one system based on Contract for Difference (CfD), which is known as the CfD for Renewables Scheme (hereinafter referred to as the CfD scheme). The FIT scheme will remain in place to support small scale renewable generation.

¹ Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants, JO L309, 29.11.2011, p.22

² The scheme was originally approved by the Commission Decision of 28 February 2001 in case N504/2000 and subsequently amended several times. In its current form, the scheme was approved by the Commission in its Decision of 2 April 2013 in case SA.35565 (2013/N). Some specific elements were afterwards approved for Northern Ireland (case SA.36084) and Scotland (case SA.37453).

³ The scheme was originally approved by the Commission Decision of 14 April 2010 in case N 94/2010, later amended by the Decision of 30 September 2011 in case SA.33210 and of Decision of 15 March 2013 in case SA.35576.

7. As a transitory measure before the new CfD scheme enters into force, the UK has organised a tender process and selected eight advanced renewable projects⁴. These eight projects will receive Investment Contracts, awarded under the transitional Final Investment Decision Enabling for Renewables process.
8. The geographical scope of the CfD scheme is UK wide. In the longer term, CfDs could be issued to generation outside of the UK, subject to decisions on renewables trading. In January 2013, the UK Government announced that it will sign a Memorandum of Understanding on renewable energy trading with the Irish Government to explore the opportunities of renewable energy trading and exporting wind power from Ireland to the UK. The UK is currently considering how generators outside the UK can participate in the CfD through interconnection or direct connection.

Beneficiaries

9. Any new renewable generation plant which is not eligible for the small-scale FIT (which is currently open to eligible renewable generation with capacity below 5 MW or 2kW in the case of combined heat and power (CHP)) will be eligible to apply for a CfD.
10. The renewable technologies that will be eligible for support under the CfD scheme are listed below and include plants with CHP where applicable.
 - Advanced conversion technology (ACT).
 - Anaerobic digestion.
 - Biomass conversion.
 - Co-firing of biomass.
 - Co-firing of energy crops.
 - Dedicated biomass.
 - Dedicated energy crops.
 - Energy from waste (only with CHP).
 - Geothermal.
 - Geopressure⁵.
 - Hydroelectricity.
 - Landfill gas.
 - Offshore wind.
 - Onshore wind.

⁴ They are, however, subject to a separate State aid decision by Commission, and thus not covered by the present decision. These include five offshore wind projects separately notified by the UK (cases SA.38758, SA.38759, SA.38761, SA.38763 and SA.38812) and three biomass projects, currently in pre-notification phase (cases SA.38760, SA.38762 and SA.38796).

⁵ Electricity using naturally occurring subterranean pressure.

- Solar photovoltaic.
- Sewage gas.
- Tidal impoundment – tidal barrage.
- Tidal impoundment – tidal lagoon.
- Tidal stream.
- Wave.

11. The UK confirmed that all of the technologies supported under the CfD will fall within the definition of renewable energy sources as set out in Article 2 of Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC⁶ (the Renewable Energy Directive).

12. Aid will be granted via a competitive bidding process open to all renewable electricity generators on a non-discriminatory basis, with some limited exceptions.

13. In the 2015 and 2016 auction rounds, renewable energy technologies will be grouped as follows:

- Group 1 - ‘established’ technologies: Onshore Wind (>5 MW), Solar Photovoltaic (>5 MW), Energy from Waste with CHP, Hydro (>5 MW and <50 MW), Landfill Gas and Sewage Gas.
- Group 2 - ‘less established’, new and innovative technologies: Offshore Wind, Wave, Tidal Stream, Advanced Conversion Technologies, Anaerobic Digestion, Dedicated biomass with Combined Heat and Power and Geothermal.
- Group 3 – biomass conversion plants, subject to a technology specific bidding process in the period before 2017.

14. From 1 January 2017 onwards, the allocation for biomass conversion (group 3) will be integrated into that for other established technologies (group 1) unless the UK can convincingly demonstrate that a separate bidding process for biomass is necessary. To this end, the UK commits to undertake an assessment of the first round of the auction to establish how and whether competition could be made more effective through integrating the allocation for biomass conversion with that for onshore wind, solar PV and other well-established technologies by 1 January 2017 at the latest or if the assessment indicates that competition could not be made more effective in that way and to establish the compliance of any future single technology auction with EEAG 126 (b), (c) and (e).

15. For group 1 there is no minimum budget allocated per technology and all technology will compete in an open and non-discriminatory bidding process. However, the technology-specific strike prices as specified in table 3 will define the maximum compensation for each technology.

16. The UK explained more in detailed the selection process and its steps for group 2.

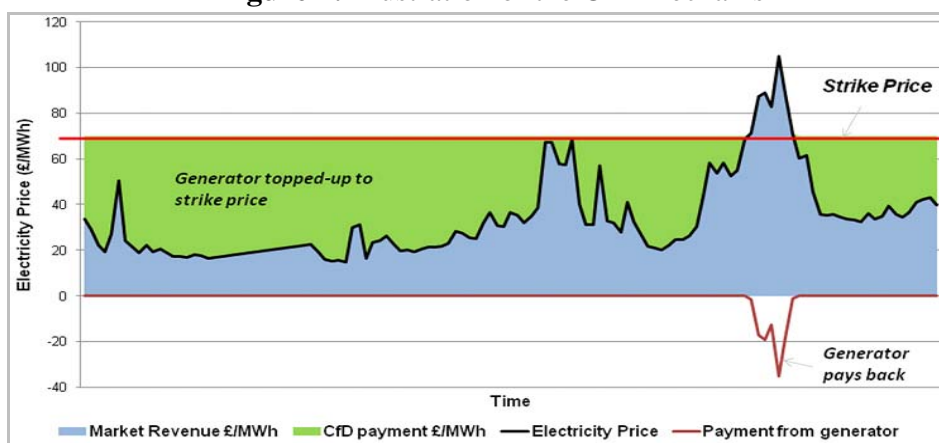
⁶ JO L 140 5.6.2009, p. 16.

- Firstly, any projects utilising a technology with an allocated budget (minimum) will be added together. If they add up to less than the allocated budget, they will all be allocated contracts. If not, then an auction is run for that technology only. The successful bidders will be allocated contracts. Those that are unsuccessful then move into the general auction.
- Second, a general auction is run involving all remaining applicants and all technologies. These are ranked by strike price (whether their default strike price or a lower bid price if they submitted one).
- Starting with the cheapest bid, each project will be awarded a contract until either (i) the maximum budget for a given technology /group is reached (in which case all remaining applicants in that category are rejected) or (ii) the budget for that delivery year is used up, at which point any remaining applicants are rejected.

Form of aid and level of support

17. The aid under the notified scheme is granted based on CfD, and takes the form of a variable premium calculated as the difference payment between an administratively pre-fixed price (the strike price) and a measure of the market price for electricity (the reference price). Generators will earn money from selling their electricity into the market as usual, but when the average wholesale price of electricity is below the strike price, generators will receive a top-up payment from suppliers, through a UK Government-owned counterparty, Low Carbon Contracts Company Ltd (the "CfD Counterparty"), for the difference. The generators will however retain the risks of not achieving the reference price and a volume risk of not achieving the forecasted sales volumes.
18. The support level for each group will be established based on a competitive tender process. However, the maximum support level is capped for each technology at the strike price.
19. When in practice the reference price exceeds the strike price, the CfD mechanism requires the generator to pay the difference between the reference price and the strike price to the CfD Counterparty. In the view of the UK this ensures that the generators are not being overcompensated.

Figure 1: Illustration of the CfD mechanism



Source: the UK authorities

20. The reference price is a price which is based on forward wholesale market electricity prices in a given period⁷. The reference price is therefore not necessarily identical to the electricity price which the generators actually receive for the electricity they sell on the market. This ensures that the generator participates in the electricity market in the normal way by seeking to obtain the best price for the electricity generated by it.
21. The strike price is calculated in such a way as to make a significant volume of a particular low carbon technology economically viable and as such incentivise investment decisions. Details on how the strike prices were calculated are presented below. These strike prices were set at such levels that the support under the CfD scheme is broadly equivalent to that provided under the current Renewable Obligation scheme, in order to enable a smooth transition between the support schemes. Until 31 March 2017 the two support schemes will operate in parallel and the generators will be able to choose the support scheme of their preference.
22. For the calculation of strike prices, the UK in particular considered the ranges of levelised costs presented in table 1 below. The UK presented in detail how these costs were calculated, the sources of data used, and the hurdle rates considered.

Table 1 - Levelised cost estimates for projects commissioning in 2014, 2016, 2020, 2025 and 2030, in £/MWh (2012 prices)

| Technology | 2014 | 2016 | 2020 | 2025 | 2030 |
|--|---------|---------|---------|---------|---------|
| Advanced conversion technologies | 63-224 | 61-220 | 59-210 | 57-205 | 53-199 |
| Anaerobic digestion (with or without CHP) (>5MW) | 36-164 | 66-191 | 97-219 | 97-217 | 97-216 |
| Biomass conversion | 106-116 | 105-115 | | | |
| Dedicated biomass (with CHP) | 179-229 | 177-228 | 174-222 | 172-220 | 171-218 |
| Energy from Waste (with CHP) | 31-58 | 22-45 | 18-41 | 18-40 | 17-40 |
| Geothermal (with/without CHP) | 82-337 | 68-296 | 53-263 | 50-258 | 47-252 |

⁷ The reference price for intermittent generation is currently proposed to be the hourly, day ahead, 'GB Zone' price resulting from market coupling arrangements from 2013. The UK Government is conducting more analyses to determine the reference price for baseload generation.

| | | | | | |
|----------------------------|---------|---------|---------|---------|---------|
| Hydro (>5 MW and <50MW) | 61-107 | 56-97 | 58-100 | 59-103 | 60-103 |
| Landfill gas | 50-116 | 46-102 | 45-100 | 45-100 | 45-100 |
| Sewage gas | 93-195 | 81-166 | 79-159 | 78-157 | 78-156 |
| Offshore wind | 131-189 | 117-172 | 105-152 | 99-145 | 96-135 |
| Onshore wind (>5MW) | 75-115 | 69-104 | 66-100 | 65-98 | 64-96 |
| Solar Photo-Voltaic (>5MW) | 114-131 | 97-111 | 83-94 | 72-81 | 63-71 |
| Tidal stream | | | | 158-258 | 138-230 |
| Wave | | | | 237-287 | 185-223 |

Source: the UK authorities

23. The hurdle rates considered were for most technologies lower than the hurdle rates considered under the Renewable Obligation scheme, as can be seen in table 2 below.

Table 2 - Technology specific hurdle rates for renewable technologies

| | RO hurdle rates (pre-tax) | Hurdle rate (pre-tax) under CfDs |
|-------------------------------|---------------------------|----------------------------------|
| ACT standard | 8.4% | 7.9% |
| AD >5MW | 12.0% | 11.5% |
| Dedicated Biomass CHP | 13.5% | 13.6% |
| Biomass Conversion | 11.6% | 10.9% |
| EfW CHP | 11.9% | 10.8% |
| Geothermal | 22.5% | 22.0% |
| Hydro | 7.0% | 5.8% |
| Landfill gas | 8.4% | 5.7% |
| Offshore Wind | 10.2% | 9.7% |
| Offshore Wind R3 | 10.4% | 10.1% |
| Onshore Wind | 8.3% | 7.1% |
| Sewage gas | 9.4% | 7.5% |
| Large Solar Photo-Voltaic | 6.2% | 5.3% |
| Tidal stream (pre-commercial) | 8.0% | 8.3% |
| Wave (pre-commercial) | 8.0% | 8.3% |

Source: the UK authorities

24. The administratively set strike prices remain constant or decrease over time, reflecting the expected decrease of the levelised costs.

Table 3 - CfD Strike Prices (£/MWh, 2012 prices)

| Technology | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|---|---------|---------|---------|---------|---------|
| Advanced Conversion Technologies (with or without CHP) | 155 | 155 | 150 | 140 | 140 |
| Anaerobic Digestion (with or without CHP) (>5MW) | 150 | 150 | 150 | 140 | 140 |
| Biomass Conversion | 105 | 105 | 105 | 105 | 105 |
| Dedicated Biomass (with CHP) | 125 | 125 | 125 | 125 | 125 |
| Energy from Waste (with CHP) | 80 | 80 | 80 | 80 | 80 |
| Geothermal (with or without CHP) | 145 | 145 | 145 | 140 | 140 |
| Hydro (>5 MW and <50MW) | 100 | 100 | 100 | 100 | 100 |
| Landfill Gas | 55 | 55 | 55 | 55 | 55 |
| Sewage Gas | 75 | 75 | 75 | 75 | 75 |
| Offshore Wind | 155 | 155 | 150 | 140 | 140 |
| Onshore Wind (>5 MW) | 95 | 95 | 95 | 90 | 90 |

| | | | | | |
|--------------------------------------|-----|-----|-----|-----|-----|
| Solar Photo-Voltaic (>5MW) | 120 | 120 | 115 | 110 | 100 |
| Tidal Stream | 305 | 305 | 305 | 305 | 305 |
| Wave | 305 | 305 | 305 | 305 | 305 |

Source: the UK authorities

25. The strike price will be fully or partially index linked to the consumer price index (CPI) and adjusted accordingly on an annual basis. The Commission issued guidance on renewable energy support schemes⁸ which establishes a broad methodological framework for calculating renewable technologies' costs. This is available for the Member States, and could be used in the future with the aim to avoid price distortions across Europe.
26. To address concerns that independent renewable generators might encounter problems securing bankable long-term Power Purchase Agreements (PPA), the UK will give the beneficiaries the possibility to sell their electricity on the market at a specified discount to the market price⁹. The discount price will be significantly lower than the expected market price, ensuring this is a genuine last resort option. Therefore, the UK expects that generators would rarely require access to this guaranteed route. However, the existence of the mechanism would enable investors and lenders to understand the 'worst-case' price that the generator will receive for its power, and provide project finance on that basis.
27. Under the notified scheme, all technologies will be subject to a competitive bidding process. All generators producing electricity from renewable energy sources will be able to bid for a CfD on non-discriminatory basis (albeit that some less established technologies will initially benefit from allocated budgets in order to promote their further development). To ensure that there is effective competition, the available budget will be limited to such extent that not all projects participating to the competition can obtain a contract.
28. The UK confirmed that the beneficiaries of the CfD scheme will be subject to standard balancing responsibilities as defined by national regulation.
29. It also confirmed that the support under the notified scheme will cease before plants are fully depreciated.
30. Furthermore, any investment aid, or other support previously received or granted is deducted from the support under the CfD scheme.

⁸ Decision to the Commission's guidance on renewable energy support schemes (SWD(2013)439).

⁹ Alongside the CfD scheme, the UK is developing an 'Offtaker of Last Resort' scheme, which would provide independent renewable generators holding a CfD with a guaranteed 'backstop' route-to-market. The scheme would be implemented by auctioning standard Backstop PPAs to licenced suppliers, with an obligation on certain suppliers to bid for each Backstop PPA. The UK does not consider that the Offtaker of Last Resort scheme involves State aid. This scheme is outside the scope of the current decision, as it was not assessed by the Commission.

31. By the beginning of 2016, the UK will modify the Contract for Difference to include provision ensuring that generators do not have an incentive to generate electricity under negative prices. If the day-ahead power auction hourly price is below zero support will be capped at the strike price. Moreover, if prices remain negative throughout a six-hour period or longer then the difference amount under the CfD contract will be set to zero for the entirety of that period.

National legal basis

32. The national legal basis is the Energy Act 2013.

Financing: budget, aid intensity and duration

33. The total budget of the scheme is GBP 15 billion.

34. The CfD counterparty will be funded through a statutory levy imposed on all licensed electricity suppliers, based on the suppliers' market share, defined by metered electricity use. Suppliers will have to meet their obligations from their own resources but will be free to pass the costs on to consumers as part of their overall pricing strategies.

35. Aid will be granted under the scheme from 1 April 2015 onwards and the scheme was notified for 10 years (until 31 March 2025). The UK explained that all of the projected renewable generation in 2020 is needed to meet its renewables target. However, as low carbon generation will become the norm, and carbon pricing will adjust to a low carbon economy, the UK expects that the need for CfD will disappear.

36. Support will be granted to individual projects for a period of 15 years.

37. The UK Government proposes several specific measures within the CfD scheme, namely:

- to treat biomass conversion projects as a transitional technology, for which all contracts cease to pay in 2027 (regardless of their start date);
- to allocate minimum 100 MW for marine technologies (wave and tidal stream projects) in the 'less established' technology group;

Transparency

38. The UK will ensure that detailed records regarding all measures involving the granting of aid are maintained. These records will be kept for the duration of the CfD plus an additional period of ten years, including all information relevant to demonstrating that the terms of the proposed CfD have been complied with.

39. The UK will publish details of calculations and awards under the CfD. The UK will perform an evaluation of the first round of auctions

Cumulation

40. The UK explained that any investment aid, or other support previously received or granted is deducted from the support under the CfD scheme.
41. The UK clarified that renewable energy generation already accredited under the Renewable Obligation scheme will not be permitted to transfer to the CfD scheme. Once the CfD scheme is introduced and until 31 March 2017 (when the Renewable Obligation scheme expires), new renewable generation will have a choice to be supported either under the Renewable Obligation scheme or under the CfD scheme.
42. Similarly, renewable plants will not be eligible to receive support under both the small-scale FIT and the CfD scheme for the same electricity generation.
43. Co-generation in the form of renewable CHP plants will be eligible for support through the CfD scheme for costs associated with the electricity that they generate while support for costs associated with the generation of heat will be provided through the UK's Renewable Heat Incentive (RHI).
44. Renewable generation that receives support under the CfD scheme will not be able to participate in the Capacity Market throughout the duration of the CfD contract.
45. The UK have explained that Climate Change Levy Exemption Certificates ("LECs") are available for renewable electricity generation. LECs are not considered to be State aid by the UK. Nevertheless, since it has been assumed that CfD plants (including those with Investment Contracts) will receive LEC revenue, the strike price has been reduced to account for this.
46. Finally, the UK has confirmed it will not cumulate state aid through the CfD scheme with other state aid where this results in overcompensation and unless the ability to cumulate with the CfD scheme is specifically approved by the Commission (either through a scheme or individual aid) or covered by the de minimis or block exemption provisions.

III. ASSESSMENT

Presence of state aid

47. A measure constitutes State aid in the meaning of Article 107 (1) TFEU if it is *"granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods [...] in so far as it affects trade between Member States."*
48. Under the notified scheme, renewable generators receive support from the UK Government-owned counterparty, Low Carbon Contracts Company Ltd, for the electricity generated. The notified scheme favours the generation of electricity from renewable sources by the selected beneficiaries Electricity is widely traded between Member States, for which reason the notified scheme is likely to distort the competition on the electricity

market and affect trade between Member States. Therefore the notified measures constitute State aid in the meaning of Article 107 TFEU.

Legality of the aid

49. The CfD scheme is scheduled to enter into force on 1 March 2015. The UK authorities have therefore not put the aid scheme into effect before a final Commission decision on the compatibility of the scheme has been taken. Thus, the United Kingdom has complied with the stand-still obligation set out in Article 108(3) TFEU.

Compatibility of the aid

50. The Commission notes that the notified scheme aims at promoting the generation of electricity from renewable sources. Consequently, the notified scheme falls within the scope of the Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG). Any aid granted under the scheme will be paid out as a variable premium, on top of a reference electricity price. The Commission has therefore assessed the notified measures on the basis of the general compatibility provisions of the EEAG (set out in its section 3.2.) and the specific compatibility criteria for operating aid granted for electricity from renewable energy sources (section 3.3.2.1. of the EEAG).
51. The UK have explained that, in its view, the CfD support mechanism displays characteristics of investment support, creating the incentives necessary for the desired investments in low carbon generation capacity to proceed. However, the CfD scheme provides support to the beneficiaries by providing difference payments based on production output over a certain period of time after the original investment. From this perspective, the UK agrees that the mechanism resembles operating aid, and consequently, although it considers that the CfD scheme constitutes an investment support scheme, the UK provided the necessary information for the assessment of the notified scheme under the operating aid section of the EEAG.

Objective of common interest

52. The aim of the notified aid measures is to help the UK achieve the renewable energy targets set by the EU as part of its 2020 strategy, in particular to meet its target to reduce its greenhouse gas emissions in 2020 by 34% as well as its longer-term goals to reduce CO₂ emissions.
53. The Commission considers that the notified scheme is clearly aimed at an objective of common interest in accordance with Article 107(3) of the Treaty.

Need for state aid and appropriate instrument

54. In point 107 EEAG, the Commission acknowledges that "under certain conditions State aid can be an appropriate instrument to contribute to the achievement of the EU objectives and related national targets".

55. For the notified scheme, the UK demonstrated that without the aid there would be a significant risk to miss the decarbonisation and renewable energy targets. The UK provided a detailed impact assessment of the notified measure, illustrating the costs and benefits of the support scheme. The UK argued that a combination of market failures and other barriers to investment affects electricity generation in general and low-carbon generation more specifically. The key market failures include:

- residual carbon externality – current policies do not provide sufficient long-term certainty or a strong enough price signal to internalise fully the negative carbon externality and facilitate investments in low carbon plant;
- positive externalities, leading to under-provision of security and diversity of supply by the market;
- positive externalities leading to insufficient incentives to achieve the learning benefits of deploying First of a Kind (“FOAK”) and immature technologies (a failure to coordinate); and
- financial market failures which restrict the funds available to energy infrastructure projects.

56. The Commission noted that, due to persistent negative externalities, large scale deployment of renewable energy sources would not be financially viable without state aid.

57. According to point 116 of the EEAG, in order to allow Member States to achieve their national energy and climate change targets, the Commission presumes aid to energy from renewable sources to be appropriate and have limited distortive effects provided all other compatibility conditions are met.

58. The UK considers that the CfD scheme is the most appropriate policy instrument to bring forward new renewable generation on a timeframe that is necessary to meet UK and EU common objectives for decarbonisation, security and diversity of supply, and that it will achieve these objectives while minimising the amount of aid provided to generators. The impact assessment provided by the UK provides evidence of the economic benefits of the CfD scheme over a range of alternatives.

59. Consequently, the Commission considers that for the notified scheme the aid is necessary and that it is an appropriate instrument to address the objective of common interest.

Incentive effect

60. In line with point 49 of the EEAG, the incentive effect occurs if the aid induces the beneficiary to change his behaviour towards reaching the objective of common interest which it would not do without the aid.

61. The Commission notes that in the absence of aid renewable energy technologies will not be deployed at the required scale and pace, as without the aid such projects would not be financially viable. The aid has therefore an incentive effect, since it determines the beneficiaries to change their behaviour and invest in renewable energy projects.

62. The UK confirmed that the applicants for CfD will have to fill in an application form to receive support. The Commission notes that the notified scheme complies with the obligation to use an application form for obtaining aid, set out in point 51 of the EEAG.

Proportionality

63. According to point 69 of the EEAG, environmental aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection objective aimed for.

64. Point 109 of the EEAG indicates that in the view of the Commission market instruments, such as auctioning or competitive bidding processes to select beneficiaries of aid to renewable sources should normally ensure that subsidies are reduced to a minimum.

65. The CfD is a market-based instrument, retaining commercial incentives on the operator to sell its electricity on the market in the normal market way, subject to competitive pressures from other market participants. The difference payment is capped at the difference between the strike price and the reference price. When the beneficiary sells electricity at a price below the reference price, its overall sale price will be below the strike price (even after the difference payment is paid). The mechanism therefore exposes the operator to a certain risk. Furthermore, in exchange for a certain stability and predictability of its revenues, the beneficiary will not be able to benefit of very high electricity prices. When the reference price exceeds the strike price, the generators have to pay the difference to the CfD Counterparty. Finally, the support is capped at the level of the strike price, and in case of negative prices the generators will not receive the full difference between the strike price and the reference price.

66. The Commission notes that the strike price paid will be established via a competitive bidding process, and it cannot in any event exceed the administrative strike price for each technology. Moreover, the UK calculated the administrative strike prices based on the levelised costs of the eligible technologies and on reasonable hurdle rates (similar hurdle rates were approved by the Commission for the Renewable Obligation scheme).

67. In line with point 110 of the EEAG, technology specific tenders can be carried out by Member States, under certain circumstances. Point 126 of the EEAG provides that in the transitional phase covering 2015 and 2016 competitive bidding is required for at least 5% of the planned new electricity capacity from renewable energy sources. From 1 January 2017 onwards, however, all aid to renewable installations should in principle be granted by means of a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria. Additionally, when such competitive bidding process is open to all generators producing electricity from renewable energy sources on a non-discriminatory basis, the proportionality of the aid will be presumed.

68. As described in recital 15, aid to technologies in group 1 will be granted by means of an open competitive bidding process. For technologies in group 2, there will be separate

bidding processes as described in recital 16 and in line with provision of paragraph 126(a) of the EEAG regarding new and innovative technologies with long-term potential.

69. In line with the requirement of point 124 of the EEAG, the aid is provided in the form of a variable premium, on top of the reference price for electricity. This premium consists in the difference between the strike price and the reference price of electricity. The UK confirmed that beneficiaries will have standard balancing responsibilities. As of 1 January 2016, the support for the beneficiaries will be set to zero in case negative electricity price episodes last more than 6 hours, for the whole duration of such episodes. When negative electricity prices occur for less than 6 hours, beneficiaries will receive at a maximum the strike price, but not the full difference between the strike price and the reference price. In line with point 124 of the EEAG, it is expected that these measures will contribute to integrating renewable electricity in the market.
70. In view of the above the Commission considers that the notified measure is in line with point 124 of the EEAG.
71. The Commission notes that, from the outset, all aid will be granted through a competitive bidding process on the basis of clear transparent and non-discriminatory criteria. In the period 2015-2016, the UK intends to divide the auction into three large groups, as explained at recital 13. As explained in recital 14, the UK has committed to make an assessment of the first round of the auction to establish how and whether competition could be made more effective through integrating the allocation for biomass conversion (initially group 3) with that for onshore wind, solar PV and other well-established technologies (initially group 1) by 1 January 2017 at the latest, unless the evaluation of the first auctions will demonstrate the need to maintain the biomass conversion projects as a separate group, due to the need to achieve diversification, network constraints and grid stability or the need to avoid distortions on the raw material markets, in line with point 126 fifth paragraph (b) (c) and (e) of the EEAG. The European Commission will review the assessment.
72. The Commission accepted the arguments of the UK in favour of organising separate tenders for less established technologies, and allocate dedicated budgets for them, in light of point 126 fifth paragraph (a) and (b), due to their longer-term potential and considering the need to achieve diversification.
73. The EEAG requires individual notification subject to two cumulative conditions: absence of a competitive bidding selection process and installed capacity exceeding the threshold of 250 MW (section 2, paragraph 20 of the EEAG). The UK expects that a number of contracts for investment in renewable electricity generation under the CfD scheme will exceed the 250 MW threshold. However, as aid through the CfD scheme will be granted in a competitive bidding process, the waiver for individual notification applies.
74. The Commission considers that for the group of the established technologies the selection process is a competitive bidding process open to all generators producing electricity from renewable sources on a non-discriminatory basis. Therefore for this group, it is presumed

that the aid is proportionate and does not distort competition to an extent contrary to the internal market, in accordance with point 126 of the EEAG. For this group the Commission also considers that there is no need to individually notify projects larger than 250 MW, in line with point 20 of the EEAG.

75. The Commission further agrees that the technologies in group 2 are in a similar situation, and the selection process will be competitive enough to presume that the aid is proportionate and does not distort competition to an extent contrary to the internal market, in accordance with point 126 of the EEAG. Also for this group the Commission considers that there is no need to individually notify projects larger than 250 MW, in line with point 20 of the EEAG.
76. However, the Commission considers that the case of the biomass conversion projects is different. In particular the Commission notes that while the selection process for technologies in groups 1 and 2 is open to any new project, biomass conversion projects concern mainly existing plants currently using fossil fuels (i.e. no new plants could participate). The UK identified a limited number of potential beneficiaries, in particular four potential beneficiaries, all of them exceeding by far the 250 MW threshold. Furthermore, the UK indicated that there is a risk that the budget required by bidders is less than the available budget which undermines the conditions in point 19 definition (43) of the EEAG. In view of the above, the Commission considers that the bidding process for the biomass conversion projects does not qualify as a competitive bidding process as defined in the EEAG¹⁰. In this respect, the UK authorities committed to individually notify biomass conversion projects larger than 250 MW that will receive aid based on the dedicated tender for group 3¹¹.
77. The notified scheme is in line with point 129 of the EEAG, as the duration of support is limited to 15 years (therefore not exceeding the lifetime of the projects) and as the aid granted by means of the CfD auctions will not be cumulated with any other aid, any investment aid, or other support previously received or granted being deducted from the support under the CfD scheme.
78. Based on the above, the Commission considers that the aid granted for the notified projects is proportional.

Distortion of competition and balancing test

¹⁰ According to the EEAG (point 19 definition (43)), a ‘competitive bidding process’ means a non-discriminatory bidding process that provides for the participation of a sufficient number of undertakings and where the aid is granted on the basis of either the initial bid submitted by the bidder or a clearing price. In addition, the budget or volume related to the bidding process is a binding constraint leading to a situation where not all bidders can receive aid.

¹¹ While not sufficient to waive the requirement for individual notifications, the bidding process or tender for biomass conversion projects is considered by the Commission a positive element.

79. According to point 90 of the EEAG, the Commission considers that aid for environmental purposes will by its very nature tend to favour environmentally friendly products and technologies at the expense of other, more polluting ones. Moreover, the effect of the aid will in principle not be viewed as an undue distortion of competition since it is inherently linked to its very objective. Furthermore, the CfD is a market based instrument.
80. The UK confirmed that the Directive 2000/60/EC of the European Parliament and the Council of 23 October 2000 establishing a framework for Community action in the field of water policy¹² is entirely respected, with regard to the support provided to hydro power plants under the notified scheme (in line with point 117 EEAG). All hydropower developments are required to obtain relevant environmental permits.
81. Furthermore, the UK confirmed that the waste hierarchy, as set out in the Directive 2008/98/EC of the European Parliament and of the Council 19 November 2008 on waste and repealing certain Directives¹³ (Waste Framework Directive) is respected, with regard to the support provided under the notified scheme to plants using waste (in line with point 118 EEAG). The UK has implemented this Directive and has put in place a programme to deliver a “zero waste” economy where resources are fully valued, financially and environmentally whereby the focus is on waste reduction, reuse and recycling. Any plant using waste will need to meet the requirements of the Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste¹⁴ (Waste Incineration Directive), as regulated and permitted by the Environment Agency, where that is applicable.
82. The Commission considers that aid to renewable energy does not have undue distortive effects on competition and trade because the applicable conditions laid out in Section 3.3.2.1 of the EEAG are fulfilled, as discussed above.
83. As mentioned in recital 57 above, according to point 116 of the EEAG, the Commission presumes aid to energy from renewable sources to have limited distortive effects provided all other compatibility conditions are met. As illustrated above, the Commission considers that these conditions are met.
84. Consequently, the Commission concludes that the distortion of competition caused by the notified scheme is balanced by the positive contribution towards common policy objectives.

Transparency

85. According to point 104 of the EEAG, Member States have the obligation to ensure the transparency of the aid granted, by publishing certain information on a comprehensive

¹² OJ L 327, 22.12.2000, p. 1

¹³ OJ L 312, 22.11.2008, p. 3

¹⁴ OJ L332 of 28.12.2000, p.91

State aid website. In line with point 106 of the EEAG, Member States are requested to comply with this obligation as of 1 July 2016.

86. The Commission notes that the UK undertook to ensure the transparency of the aid granted and publish details of calculations and awards under the CfD.

Other aspects – Compliance with Article 30 and 110 TFEU

87. As indicated in point 29 of the EEAG, if a State aid measure or the conditions attached to it (including its financing method when it forms an integral part of it) entail a non-severable violation of Union law, the aid cannot be declared compatible with the internal market. In the field of energy, any levy that has the aim of financing a State aid measure needs to comply in particular with Articles 30 and 110 TFEU. The Commission has therefore verified if the financing mechanism of the notified aid measures complies with Articles 30 and 110 TFEU.

88. As explained in recital 34 above, the payments under Contracts for Difference will be financed by a levy imposed on electricity suppliers (the “supplier obligation”). It is envisaged that, once the secondary legislation necessary to introduce the supplier obligation is in force, the CfD Counterparty will calculate and collect the payments under the supplier obligation. The UK explained that the supplier obligation will be imposed on all licensed suppliers in relation to their market share based on energy volumes sold.

89. According to the UK, the supplier obligation will be a compulsory levy, likely to be classified as a direct tax. The Commission considers however that the tax, as planned by the UK, will be very similar to a tax on the electricity consumed. Should the levy be an indirect tax, the UK shall ensure that it complies with Directive 2003/96/EC and Directive 2008/118/EC.

90. In order to alleviate any concern regarding compliance with Article 30 and 110 TFEU, the UK will ensure that the imported renewable generation does not bear the costs of CfD payments.

91. In that respect, the UK has committed that it will, for so long as the CfD scheme is not open to electricity generators located outside of Great Britain, adjust the way in which electricity suppliers’ liabilities for CfD payments are calculated so that eligible renewable electricity generated in EU Member States outside Great Britain and supplied to customers in Great Britain is not counted towards suppliers’ markets shares. The UK will remove this exemption once non-Great Britain generators are eligible to apply for CfDs.

92. The UK will use of ‘Guarantees of Origin’ certificates issued by other EU Member States to identify eligible electricity, together with evidence that the electricity has been supplied to a consumer in Great Britain during the relevant period for which suppliers’ liabilities for CfD payments are being calculated. Once the eligible electricity is identified, this will be used to calculate a supplier’s final liability and will be the basis for any reimbursement from interim payments already made by the supplier. To ensure that the scope of the

exemption is in line with the potential market distortion, the UK will (subject to administrative practicality) restrict it to those generators that would have been eligible for CfDs had they been located in Great Britain¹⁵.

93. Furthermore, the UK will introduce a quantitative limit on the total amount of generation exempted (the current level of imported renewable energy) in order to prevent the overall impact of the exemption becoming distortive, due to a large and sudden increase of imported renewable electricity. In order to allow for an increase of imports of eligible renewable energy, the maximum reimbursement for imported renewable energy will increase by 10% compared to the previous year (adjusted to reflect the quarterly payment reconciliation of our current mechanism but in any event recognising the 10% year on year growth).
94. Lastly, the UK will ensure that no payments are made to CfD generators or holders of investment contracts before this exemption is in place, or if this is not possible the UK will put in place a mechanism to reimburse suppliers for any imported eligible renewable electricity supplied before the exemption comes into effect but after CfD payments have started to be made.
95. In the light of the above, the Commission considers that the financing mechanism of the notified aid measures does not introduce any restrictions that would infringe Article 30 or Article 110 TFEU.
96. The UK explained that the proposed intervention is not a tendering procedure within the scope of Article 8(1) of Directive 2009/72 concerning common rules for the internal market in electricity¹⁶. However, the UK confirmed that the CfD allocation process is transparent and non-discriminatory and, consequently, in any event compatible with Article 8(1).

Conclusion with regard to the compatibility of the measure

97. In light of the above assessment, the Commission considers that the notified aid scheme pursues an objective of common interest in a necessary and proportionate way and that therefore the aid is compatible with the internal market on the basis of the EEAG.

IV. CONCLUSION

98. The Commission has decided, on the basis of the foregoing assessment, to consider the notified aid measures compatible with Article 107(3)(c) of the Treaty on the Functioning of the European Union.

¹⁵ Specifically, this means that imported renewable will only be eligible for an exemption if it was generated by a plant which is commissioned after the CfD regime comes into effect (1 April 2015, because generators that commissioned before this date would not be eligible for CfDs) and is of a technology that would be eligible for a renewable CfD was it generated in a plant located in the UK.

¹⁶ Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L 221, 14.08.2009, p.55

99. If this letter contains confidential information which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site:
<http://ec.europa.eu/competition/elojade/isef/index.cfm>.

Your request should be sent to:

European Commission
Directorate-General for Competition
State Aid Registry
B-1049 BRUSSELS
Fax no: + 32-2-296.12.42
Stateaidgreffe@ec.europa.eu

Yours faithfully,

For the Commission

Joaquin ALMUNIA
Vice-President