



EUROPEAN COMMISSION

Brussels, 8.04.2009

C(2009) 2480 final

**Subject: State aid N 74/2009 – United Kingdom  
CCS Demonstration Competition - FEED**

Sir,

## **1. PROCEDURE**

1. By letter dated 11 February 2009 registered on the same day, the UK authorities notified the Commission that they intend to grant [...] <sup>\*</sup> to two undertakings to conduct Front End Engineering and Development Studies (FEED studies) on the technical, environmental and financial aspects of the construction of full scale coal-fuelled power plants equipped with the technology for Carbon Capture and Storage (CCS).

## **2. DESCRIPTION OF THE AID**

### **2.1. Background and Objective**

2. The UK authorities see the FEED studies as a vital step towards the construction of a CCS project in the UK. The UK authorities confirm that they consider such a CCS project to be necessary in order to establish the CCS technology on a commercial scale. This is seen as a decisive step towards the reduction of CO<sub>2</sub> emissions in particular and therefore for the protection of the environment in general.
3. The UK authorities claim that the FEED studies are necessary in order to reduce the financial, technical and environmental risks of the final CCS project. In particular the UK authorities point out that cost uncertainties for the final CCS project are currently [...]. The UK authorities submit that the two (competing) FEED studies are necessary to reduce these uncertainties [...]. The funding of two FEED studies should keep up the competitive pressure, increase the financial transparency and enable the UK authorities to

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\* Covered by the obligation of professional secrecy.

The Rt Hon David MILIBAND  
Secretary of State for Foreign Affairs  
Foreign and Commonwealth Office  
King Charles Street  
London SW1A 2AH  
United Kingdom

avoid overcompensation with regard to the final CCS project. The UK authorities pointed out that the FEED studies are thus likely to reduce the amount of State aid paid to the final CCS project. In view of the uncertainties faced by the companies so far, the UK authorities claim that they would not be able to select the best bidder for the CCS project without FEED studies. Furthermore the UK authorities point out that, [...]

### ***CCS Technology***

4. Coal still constitutes the largest conventional energy resource currently available worldwide. Also, the combustion of coal in power generation is responsible for a large part of the world's CO<sub>2</sub> emissions. One option to reduce these emissions is the CCS technology. The CCS technology enables power generators to capture CO<sub>2</sub> emissions (before or after the combustion process) and store the CO<sub>2</sub> in geological formations under ground (usually in depleted gas or oil fields or deep saline aquifers). The CCS process chain has three main stages, first, the CO<sub>2</sub> from the combustion process is captured and compressed, secondly, the compressed CO<sub>2</sub> is transported by pipeline, truck or tanker to the storage site, and, thirdly, the compressed CO<sub>2</sub> is injected into the respective geological formation for long term isolation from the atmosphere. Although the CCS technology as such is established, so far the existing CCS projects are of minor scale and often do not cover the whole process chain from the combustion to the capturing, transport and final storage of the CO<sub>2</sub>. No project has yet been up-scaled to commercial level. Therefore the EU and several Member States aim to support industrial-scale CCS projects.

### ***EU Policy Background***

5. The EU institutions have recognised the importance of CCS technology on several occasions. Already the 2006 Energy Green Paper of the Commission pointed out the importance of CCS technology and the need for '*large scale demonstration projects (...) to bring the technology towards reduced costs*'<sup>1</sup>. The January 2007 Commission Communication on Sustainable Power Generation from Fossil Fuels emphasised the need to implement up to twelve large scale CCS demonstration projects across Europe by 2015<sup>2</sup>. This position was endorsed by the March 2007 European Council. The November 2007 Commission Communication on A European strategic energy technology plan (SET-plan) counts the '*... commercial use of technologies for CO<sub>2</sub> capture, transport and storage...*' among the key EU technology challenges for the next years and calls for a series of European Industrial Initiatives in this respect<sup>3</sup>. The January 2008 Commission Communication on Supporting Early Demonstration of Sustainable Power Generation from Fossil Fuels set out plans for a knowledge sharing network for CCS demonstration projects and stated that '*(in) view of the importance of early demonstration of CCS in power generation (...) the Commission is ready (...) to view favourably the use of state aid for covering the additional costs related to CCS demonstration in power generation projects*'<sup>4</sup>. The November 2008 Commission's Strategic Energy Review reiterated these

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<sup>1</sup> Commission Green Paper - A European Strategy for Sustainable, Competitive and Secure Energy COM(2006) 105 final.

<sup>2</sup> Communication from the Commission to the Council and the European Parliament - Sustainable power generation from fossil fuels: aiming for near-zero emissions from coal after 2020, COM(2006) 843 final.

<sup>3</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - A European strategic energy technology plan (SET-plan) - 'Towards a low carbon future' COM(2007) 723 final.

<sup>4</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Supporting Early Demonstration of Sustainable Power Generation from Fossil Fuels, COM(2008) 13 final.

positions and stressed the urgent need for the proposed twelve large scale CCS demonstration projects<sup>5</sup>.

6. Furthermore in December 2008 the Climate Change Package was agreed which included a proposal on a Directive to Improve and Extend the Greenhouse Gas Emission Allowance Trading System (ETS Directive)<sup>6</sup> and a proposal on a Directive on the Geological Storage of Carbon Dioxide (CCS Directive)<sup>7</sup>. The proposed CCS Directive provides a legal framework for the CCS technology. The proposed ETS Directive states in Article 10 a (8) that *'(u)p to 300 million allowances in the new entrants reserve shall be available until 31 December 2015 to help stimulate the construction and operation of up to 12 commercial demonstration projects that are aiming at the environmentally safe capture and geological storage of carbon dioxide as well as the demonstration of innovative renewable energy technologies...'*
7. Most recently the Commission has adopted a proposal for a Regulation establishing a Programme to Aid Economic Recovery by Granting Community Financial Assistance to Projects in the Field of Energy (EEPR Regulation) listing thirteen possible CCS projects in different locations seven of which might at one point receive funding from the EU<sup>8</sup>. It should be noted that one of the conditions for funding should be that the project promoters make the generic knowledge generated by the demonstration plant available to the wider industry.

### ***UK CCS Project Background***

8. In 2007 the UK authorities decided to support a full scale CCS project in form of a 300-400 MW pulverised coal-fired power plant with post-combustion CCS technology. According to the UK authorities this should maximise the value from demonstration since pulverised coal-fired power plants represent the majority of coal-fired power plants in the UK and internationally and the post-combustion CCS technology is apt not only for newly build plants but also for retrofitting existing plants. The UK authorities further decided to determine the beneficiary in an open selection process, consisting of a prequalification stage which would determine possible beneficiaries, a negotiation phase which would determine the details for the final bid and the final tender phase which would determine the beneficiary.
9. In that regard in November 2007 the UK authorities published a Contract Notice in the Official Journal of the European Union. The Contract Notice invited any interested party to submit pre-qualification questionnaires in order to demonstrate the interest in the project and capability to carry it out. The questionnaires consisted of a variety of questions concerning technical, financial and knowledge-based capacity necessary for the planned CCS project. The questions focussed on the technical capacities and abilities for power generation in general and CO<sub>2</sub> capture, transport and storage in particular, on

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<sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Second Strategic Energy Review – An EU Energy and Solidarity Action Plan, COM(2008) 781 final.

<sup>6</sup> Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community

<sup>7</sup> Proposal for a Directive of the European Parliament and of the Council on the geological storage of carbon dioxide and amending Council Directives 85/337/EEC, 96/61/EC, Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC and Regulation (EC) No 1013/2006.

<sup>8</sup> Proposal for a Regulation of the European Parliament and of the Council establishing a programme to aid economic recovery by granting Community financial assistance to projects in the field of energy, COM(2009) 35 final.

financial strength and experience to secure funding for large projects as well as on references for good governance, project management and delivery. The UK authorities also published the evaluation methodology on the basis of which they intended to select pre-qualified bidders. Following the publication of these documents the UK authorities received nine completed pre-qualification questionnaires. The answers were then assessed on the basis of the published evaluation methodology. The UK authorities attributed score points as to how the bidders demonstrated their possibility to achieve the different requirements. The result were then weighted into an overall score and ranked. On the basis of this ranking the UK authorities selected four pre-qualified bidders in June 2008. These bidders were E.ON UK, Scottish Power Generation, Peel Energy and BP Alternative Energy International. However, in October 2008 BP Alternative Energy International withdrew from the selection process.

10. After having determined the pre-qualified bidders the UK authorities issued a formal invitation to negotiate (ITN) which opened the negotiation phase. During the negotiations in summer 2008 it became apparent that the uncertainties of the project remained very high. In particular the UK authorities point out that cost uncertainties for the final CCS project are currently [...]. The UK authorities thus concluded that it is necessary to conduct FEED studies in order to reduce the financial, technical and environmental risks of the final CCS project. However, in the negotiations it became also clear that the costs of such FEED studies are significant [...]. The UK authorities thus concluded that it was necessary to grant financial support for the FEED studies. In order to keep up the competitive pressure of the selection process the UK intended to support more than one pre-qualified bidder to conduct FEED studies. At the same time the UK authorities found it too expensive to support all three pre-qualified bidders. The UK authorities therefore decided to select two out of the remaining pre-qualified bidders to conduct FEED studies. The UK authorities submit that with the help of two competing FEED studies the cost uncertainties of the final CCS project will be reduced [...].
11. The UK authorities thus prolonged the negotiation phase in order to establish the formal project requirements, the general rules of engagement and the evaluation methodology on the basis of which the two beneficiaries out of the remaining bidders will be chosen to conduct the FEED studies. In that regard the UK authorities submitted a list of evaluation requirements. These requirements focus on the ability of the bidders to construct a commercial scale coal-fired power plant with full-scale CCS technology (minimum of 90% capture rate) in the UK in a technically, financially and environmentally viable way. In particular the FEED studies will specify the costs of up-scaling the CCS technology and the safety aspects of the project<sup>9</sup>. An additional requirement is concerned with the transfer of the knowledge from the FEED studies to a wider public. On the basis of the information provided by the remaining bidders the UK authorities will then select the two beneficiaries who will conduct the FEED studies. The UK authorities plan to sign the contracts for the FEED studies in May 2009. Then the two beneficiaries will enter into the design and development phase during which the FEED studies are conducted. The UK authorities expect the FEED studies to be completed by June 2010. The UK authorities will then invite the two beneficiaries to submit a detailed solution for the final tender between August and September 2010. On the basis of the information provided by the two beneficiaries the UK authorities will then select the preferred bidder in October

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<sup>9</sup> The FEED studies mainly include transportation system design, project integration and project programme development; they also feature i.a. project operability review, project safety studies, capture/compression plant design as well as existing asset integrity testing.

2010. The preferred bidder will start the construction works on final CCS project in late 2010. The plant is supposed to go on stream by late 2014.

## **2.2. National Legal Basis**

12. The UK authorities base the decision to grant the aid for the FEED studies on the 1965 Science and Technology Act.

## **2.3. Beneficiaries**

13. The beneficiaries will be selected through a competitive bidding process. Currently there are three undertakings left to bid for the contract on the FEED studies (E.ON UK, ScottishPower and Peel Energy International). All of these companies are large enterprises within the meaning of the Commission Recommendation Concerning the Definition of Micro, Small and Medium-sized Enterprises<sup>10</sup>. Two out of these three companies will be chosen to undertake the FEED studies.

## **2.4. Budget**

14. The aid consists of two direct grants with a total amount of [...]. The UK authorities confirmed that the aid for this project will not cumulate with any other aid.

## **2.5. Aid Instrument and Funding**

15. The notified measure consists of individual aid granted in form of two direct non-reimbursable grants. The aid is funded through the general budget of the UK central government. The total amount of the aid [...]. In that regard the UK authorities sought the advice of the consulting engineers and technical advisors of the Department for Energy and Climate Change (DECC). These experts developed a list with indicative costs for the various components of the FEED study. On the basis of this information the UK authorities estimate that [...]. The UK authorities submitted that they will [...]. Furthermore the UK authorities confirmed that [...].

## **2.6. Duration**

16. The project is supposed to start in June 2009 and should be completed in June 2010. However, the UK authorities confirmed that the aid will not be put into effect without the approval by the Commission.

## **2.7. Cumulation**

17. The UK authorities confirmed that the aid for the FEED studies will not cumulate with any other forms of aid. The DECC monitors the implementation of the cumulation rules. In this respect the beneficiaries are required to notify the DECC of any additional aid requested or received.

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<sup>10</sup> Annex to the Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises.

### 3. ASSESSMENT

18. The Commission has examined the proposed amendment in accordance with Article 87 et seq. of the EC Treaty and Article 61 et seq. EEA Agreement<sup>11</sup> and has decided not to raise objections to its implementation.

#### 3.1. Presence of State Aid Pursuant to Article 87(1) of the EC Treaty

19. The aid for the FEED studies constitutes State aid within the meaning of Article 87(1) of the EC Treaty. A measure constitutes state Aid under Article 87(1) of the EC Treaty if it fulfils four conditions. Firstly, the measure is funded by the state or through state resources. Secondly, the measure confers an advantage to the recipients. Thirdly, the measure favours selected undertakings or economic activities. And fourthly, the measure affects trade between Member States and distorts or threatens to distort competition in the common market.
20. The aid to the beneficiaries fulfils all the conditions mentioned above. The aid is funded by the budget of UK central government and thus financed through State resources. The aid is selective since it is granted to only two companies. The aid has the potential to affect the trade between Member States and to distort competition because the beneficiaries are active in a sector where trade between Member States takes place. In this respect it should be noted that the economic situation of coal-fired power plants will be significantly influenced by their ability to reduce their CO<sub>2</sub> costs.
21. Furthermore, both beneficiaries also gain competitive advantages which they would not have obtained under normal market conditions. It should be noted that companies usually undertake FEED studies at their own expenses. The financing of the studies by the UK authorities thus constitutes a financial advantage for the beneficiaries. Furthermore, the FEED studies enable the beneficiaries to stay in the competition for the final contract for the UK CCS project. Moreover, the FEED studies provide the beneficiaries with additional know-how that they can use commercially, e.g. to compete for further CCS projects. It should be noted that the UK authorities do not expect any (significant) additional intellectual property rights (IPR) stemming from the FEED studies. The technologies as such are established and the up-scaling of the technology is unlikely to result in new IPRs. Also, a large part of the knowledge from the FEED studies will be site-specific according to the UK authorities. This concerns mostly knowledge on the suitability of the respective sites for the storage of CO<sub>2</sub>. Finally, the more general know-how will be shared publicly according to the terms of the FEED contract. The UK authorities will [...]. This requirement concerns in particular the findings of the FEED studies on costs, risks, design and procurement. [...] Although the advantages in terms of know-how are to some extent mitigated, the beneficiaries will nevertheless retain beneficial know-how for themselves as 'first movers'. In particular, the beneficiaries will develop project know-how and will have trained experts within their company as well as a (ready to use) network of subcontractors outside the company. Therefore, albeit limited the beneficiaries receive some competitive advantages which they would not have received under normal market conditions.
22. The aid granted to the beneficiaries thus constitutes State aid pursuant to Article 87 (1) of the EC Treaty.

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<sup>11</sup> The following assessment is based on both the EC Treaty and the EEA Agreement, but for reasons of simplification, in the following assessment it will only be referred to the EC Treaty provisions.

### **3.2. Legality of the Aid**

23. By notifying the measure before its implementation, the UK authorities have fulfilled their obligation according to Article 88 (3) of the EC Treaty. Any disbursements will only be made after the authorisation of the notified measure by the Commission.

### **3.3. Compatibility of the Aid with Article 87(3)(c) of the Treaty**

24. The Commission finds that the notified measure can be found compatible with Article 87(3)(c) of the EC Treaty.

#### *Assessment directly under Article 87 (3) (c) of the EC Treaty*

25. Point 69 of the Environmental Aid Guidelines reaffirms the support of aid for the construction of industrial-scale CCS demonstration plants, but also states that, in view of the lack of experience, it is too early to lay down guidelines relating to the authorisation of any such aid. It concludes that such projects should be assessed under Article 87 (3) (b) or (c) of the EC Treaty. Although the notified measure does not directly support the construction of an industrial-scale CCS demonstration plant, the FEED studies are a necessary preparatory step towards the realisation of such project in the UK.
26. The UK authorities have notified the measure under Article 87 (3) (c) of the EC Treaty which states that '*... aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest ...*' may be considered to be compatible with the common market.

#### *Analysis*

27. In order to be compatible under article 87(3)(c) of the EC Treaty, an aid must pursue an objective of common interest in a necessary and proportionate way. In this regard, the Commission considers it appropriate to assess the following questions:
- (1) Is the aid measure aimed at a well-defined objective of common interest (i.e. does the proposed aid address a market failure or another objective of common interest)?
  - (2) Is the aid well designed to deliver the objective of common interest? In particular:
    - (a) Is the aid measure an appropriate instrument, i.e. are there other, better-placed instruments?
    - (b) Is there an incentive effect, i.e. does the aid change the behaviour of firms?
    - (c) Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?
  - (3) Are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

### *Objective of Common Interest*

28. The aid measure has to aim at a well-defined objective of common interest. An objective of common interest is an objective which has been recognised by the EU as being in the common interest of the EU Member States. The EU institutions have recognised on many occasions that the protection of the environment and the reduction of CO<sub>2</sub> emissions are in the common interest of the Member States. In that regard the EU institutions have also recognised that the CCS technology will play a key role in the reduction of CO<sub>2</sub> emissions. Furthermore the EU institutions have expressed the need to establish full-scale demonstration projects<sup>12</sup>. Moreover, in point 69 of the Environmental Aid Guidelines the Commission has explicitly recognised its generally positive attitude towards State aid for CCS projects. The aid supports the conduct of two FEED studies for the construction of such a full-scale demonstration project. The FEED studies will contribute to the development of the CCS technology which in turn is expected to help reducing CO<sub>2</sub> emissions. Finally the FEED studies help to make the planned CCS project environmentally safer. In fact a considerable part of the budget for the FEED studies is dedicated to improving the safety design of the final CCS project thus contributing to environmental protection. The aid measure therefore aims at well-defined objectives of common interest.

### *Appropriate Instrument*

29. The aid granted for the FEED studies is an appropriate instrument to achieve the increase in environmental protection through CO<sub>2</sub> reductions. An instrument is appropriate if there are no other less distortive instruments to achieve the same results.

### *Making CCS mandatory*

30. In the present case the UK authorities could have envisaged not to grant any aid for CCS projects and to make CCS mandatory for all carbon fuelled power generation instead. However, it should be noted that the EU itself has not made proposals in this direction because of the high risks and costs attached to such projects. On the contrary, the Commission has recognised that the CCS technology is not sufficiently developed at an industrial scale to balance the financial and technological risks of such a project and decided to adopt the CCS Directive as an enabling framework without imposing CCS obligation. This approach was justified by the impact assessment accompanying the proposal for the Directive<sup>13</sup>. For these reasons the option not to grant any aid for CCS projects and to make CCS mandatory does not seem appropriate.

### *Aid only for the Final CCS Project*

31. The UK authorities could have also envisaged granting aid for the final CCS project only without granting aid for the preparatory FEED studies. However, the UK authorities explained that [...]. Furthermore, this option is unlikely to be less distortive than the planned aid. Although not conducting the FEED studies would avoid granting aid to the two beneficiaries at this stage, the British authorities provided credible information according to which this would result in more State aid and a higher risk of overcompensation with regard to the final CCS project. The fact that the UK authorities

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<sup>12</sup> See paragraph 5 and 6 above.

<sup>13</sup> Commission Staff Working Document - Accompanying document to the Proposal for a Directive of the European Parliament and of the Council on the geological storage of carbon dioxide - Impact Assessment (available at: [http://ec.europa.eu/environment/climat/ccs/pdf/ccs\\_ia\\_jan2008.pdf](http://ec.europa.eu/environment/climat/ccs/pdf/ccs_ia_jan2008.pdf)).

support two competitive FEED studies increases the financial and technical transparency of the project. It will enable the UK authorities to compare the cost elements of both studies thus having a better control of the financial implications. Furthermore the UK authorities will be able to compare the environmental and technical aspects of both studies and will thus be in a position to choose the project with the best 'value-for-money'. Therefore granting aid for two competing FEED studies prior to the realisation of the final CCS project achieves the policy objectives in a better way and seems likely to be less distortive than granting aid to the final CCS project in the absence of the FEED studies.

#### *Conclusion*

32. Consequently, the funding of the FEED studies is an appropriate instrument to achieve the increase in environmental protection through CO<sub>2</sub> reductions.

#### *Incentive Effect*

33. The aid granted for the FEED studies provides the necessary incentive effect. State aid provides an incentive effect if the aid changes the recipients' behaviour towards reaching the objective of common interest. According to the UK authorities the market does not provide enough incentives for the beneficiaries to undertake the FEED studies at their own expense. In that regard the UK authorities claim that there is a market failure. A market failure exists where the market forces are not capable of providing the best results with regard to the objective of common interest. In the present case the UK authorities have provided credible evidence according to which [...]. In particular, they indicated that the know-how gained through the FEED studies would not be sufficient to justify the investment in view of the risks. By the same virtue, the likely evolution of the price for emission rights would not provide sufficient incentive for a commercial investment in a CCS project in the short term. Therefore it can be concluded that the aid has - a priori - an incentive effect, except if the incentive effect is reduced by other possible advantages or the possibility of future mandatory standards which could motivate investors to conduct the studies even in the absence of aid.

#### *Possibility to Take Part in the Final Bid*

34. Sometimes the absence of a profit directly linked the investment can be outbalanced by other advantages indirectly linked to the investment. Then the incentive effect is normally lower. In the present case such an advantage could consist of the beneficiaries being able to bid in the tender for the final CCS project. However, taking into account that only one of the two bidders can win the bid, the chances to be contracted for the final CCS project are 50%. Moreover, there is no guarantee that the final CCS project will materialise at all. The UK authorities maintain the opportunity to cancel the final project. Consequently the chances to be contracted for the final CCS project are below 50%. Still, sometimes investors might risk an investment if the possible returns are disproportionately high. But this is unlikely to be the case here. The price of CO<sub>2</sub> allowances is currently relatively low and does not promise disproportionately high returns from a CCS project. For these reasons the advantage of taking part in the final bid is not a sufficient incentive for the beneficiaries to conduct the FEED studies at their own expenses.

#### *Benefits from the FEED studies and from Additional Know-How*

35. Another benefit could consist of accumulating the necessary know-how to realise a different CCS project. At this stage, the bidders have only limited possibilities of making

an alternative use of the findings of the FEED studies for their respective sites or other sites elsewhere in Europe. Although the losing bidder would in theory be able to construct a CCS project at his site without further delay, this is highly unlikely in practice without public support. The UK authorities pointed out that they are not planning to support more than one full scale CCS project in the coming years. However, the Commission notes that funding from other sources might become available for additional projects in the coming years, in which case the know-how gained through the FEED study can be used to compete for such projects, be it by applying for funding from other sources for the same project or by using the know-how of the FEED study to participate in another project. Still, at this stage, the conditions for such funding have not been established. Also, the findings of the FEED studies are very much centred on the storage of CO<sub>2</sub> so that the results can hardly be used for other possible economic activities of the bidders (e.g. the storage of gas, etc.). Consequently the losing bidder will most likely not be able to make an alternative use of the results of the FEED studies on his own site. As far as the results of the FEED studies are of general value, they will be made publicly available by the UK authorities. Competitors of the beneficiaries will thus have equal access to this information and the competitive advantage gained from the studies is thus reduced accordingly. Overall, it can be concluded that at this stage of the development of the CCS market the benefits stemming from conducting a FEED studies are not sufficient for the beneficiaries to conduct the FEED studies at their own expenses.

#### *Conclusion*

36. Consequently the incentive effect of the aid for the FEED studies is not mitigated by other advantages or by possible future mandatory standards.

#### *Proportionality*

37. The aid for the FEED studies is proportional. A State aid measure is proportional if the aid as such is kept to the minimum and if the beneficiaries are selected in a non-discriminatory, transparent and open process.

#### *Selection Process*

38. The UK authorities provided sufficient information according to which the selection process is non-discriminatory, transparent and open. In 2007 the UK authorities published a Contract Notice inviting any interested party to submit pre-qualification questionnaires on the basis of which the UK authorities selected the pre-qualified bidders<sup>14</sup>. The UK authorities now plan to issue a formal invitation to negotiate the terms of the FEED contract which will establish the requirements on the basis of which the two beneficiaries shall be chosen<sup>15</sup>. These requirements focus on the capability of the beneficiaries to construct the final CCS project in a technically, financially and environmentally viable way<sup>16</sup>. The information provided by the UK authorities shows that the beneficiaries will be chosen in an objective manner. The fact that the UK initially invited interested parties to compete for the final CCS project, rather than for the FEED studies, does not alter this view. As shown earlier, the FEED studies are very closely linked to the financial and technical ability of the bidders to carry out the final CCS project. Thus, even if the UK initially had invited interested parties to compete for the FEED studies, this would have only attracted participation from companies with the technical and financial capacity to carry out the final CCS project. There are no indications of non-transparent or

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<sup>14</sup> See paragraph 8 above.

<sup>15</sup> See paragraph 10 above.

<sup>16</sup> See paragraph 10 above.

discriminatory behaviour. It can thus be concluded, that the selection process will be non-discriminatory, transparent and open.

#### *Aid limited to the Minimum*

39. The UK authorities provided sufficient information on how the State aid for the FEED studies will be kept to a minimum. As shown above, the aid will be granted to the beneficiaries in a genuinely competitive bidding process on the basis of clear, transparent and non discriminatory criteria. Furthermore, it should be noted that the UK authorities will [...] It can thus be concluded that the aid will – a priori – be limited to the minimum. Also, this process will increase transparency as to the details of the costs of the FEED studies. It will enable the UK authorities to compare the different offers and establish a competitive price for each element of the FEED study. Furthermore it should be noted that the UK authorities submitted comprehensive information according to which DECC's experts will survey the payments and will ensure that there will be no overcompensation<sup>17</sup>. Also, the UK authorities confirmed that the contract with the beneficiaries will provide [...] <sup>18</sup>. Therefore the UK authorities provided sufficient information to the extent that State aid for the FEED studies will be kept to a minimum.

#### *Conclusion*

40. In view of the above it can thus be concluded that the State aid granted for the FEED studies is proportional, since the selection process is non discriminatory, transparent and open and the aid is limited to a minimum.

#### ***Distortion of Competition and Trade and Balancing***

41. The distortion of competition and trade resulting from the State aid for the FEED studies is limited, so that the overall balance with regard to the objective of common interest is positive.

#### *Distortion of Competition and Trade*

42. In the present case the distortions of competition and the effect on trade resulting from the aid for the FEED studies correspond with the advantages that the beneficiaries obtain as opposed to their competitors. As described above the advantages for the beneficiaries consist of the financial advantages from obtaining financing for the FEED study, the additional know-how gained in the course of the FEED studies, and the possibility to compete for the contract on the final CCS projects.
43. The financial aid is kept to the minimum through the competitive selection process. As regards the advantage of taking part in the bid for the final CCS project it should be noted that there is no guarantee that the final project will indeed materialise. If so, the final CCS project would be subject to a separate State aid notification and the aid granted for the FEED studies would have to be taken into account in the subsequent funding of the final CCS project. Therefore the advantage of taking part in the bid for the final CCS project is limited. As to advantages in terms of additional know-how from the FEED studies, this advantage is mitigated in many ways. First of all it should be noted that the FEED studies are unlikely to result into new IPRs. Furthermore, the results of the FEED studies will be to a significant extent site specific since they are determined by the geological characteristics of the CO storage facility. In the near future, the emergence of other CCS projects for which the findings and know-how stemming from the FEED study

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<sup>17</sup> See paragraph 15 above.

<sup>18</sup> See paragraph 15 above.

could be deployed, will depend largely on the availability of public funding. However, at this stage, the conditions for such funding have not been established. Also, the UK authorities confirmed that they do not plan to finance a second project in the coming years. Moreover, the UK authorities submitted that they will [...] in order to promote CCS technology in general. Therefore the competitors of the beneficiaries will also profit from the findings of the FEED studies as far as they are of general use.

44. For these reasons the distortion of competition and the effect on trade resulting from the State aid granted for the FEED studies will be limited.

#### *Balancing*

45. The overall balance of the aid measure is positive. As described above the distortion of competition and the effect on trade is limited. In particular it should be noted that the UK authorities grant the contracts for the FEED studies in a tender procedure in a non discriminatory, transparent and open manner. Also the UK authorities will take various precautions in order to ensure that the aid amount is limited to the minimum necessary. Furthermore the UK authorities will require [...]. On the other hand the aid measure promotes the CCS technology which has been recognised by the EU Member States as being in the common interest. The FEED studies will help to introduce CCS technology in power generation at a commercially viable scale and in an environmentally sound manner. The FEED studies will thus contribute significantly to the development of the CCS technology which in turn is expected to lead to CO<sub>2</sub> reductions. In view of the above it can be concluded that the negative effects of the measure on competition and trade are outbalanced by the positive effects of the aid for the environment so that the overall balance of the measure is positive.

#### *Cumulation*

46. The UK authorities confirmed that there will be no further aid granted for the conduct of the FEED studies.

#### *Conclusion*

47. It can thus be concluded that the aid for the FEED studies is compatible with Article 87 (3) (c) of the EC Treaty. It should be noted that this assessment merely concerns the compatibility of the FEED studies and does not prejudice the assessment of any future State aid with regard to the final CCS project.

#### **4. DECISION**

48. The Commission has accordingly decided not to raise objections to the notified measure, because the aid can be found compatible with the common market in accordance with Article 87 (3) (c) of the EC Treaty and Article 61 (3) (c) of the EEA Agreement.
49. The Commission reminds the UK Authorities that, in accordance with article 88 (3) of the EC Treaty, plans to refinance, alter or change this aid have to be notified to the Commission pursuant to provisions of the Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 (now 88) of the EC Treaty (OJ L 140, 30.4.2004, p.1).

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/community\\_law/state\\_aids/index.htm](http://ec.europa.eu/community_law/state_aids/index.htm).

Your request should be sent by registered letter or fax to:

European Commission  
Directorate-General for Competition  
Directorate for State Aid  
State Aid Greffe  
B-1049 Brussels  
Fax No: (0032) 2-296.12.42

For the Commission  
*Neelie KROES*  
Member of the Commission