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22 May 2009

Dear Bogdan

EDF Energy Response to Ofgem Consultation 35/09: “Proposed Disposal of part of the NTS for Carbon capture and Storage”.

EDF Energy welcomes the opportunity to respond to Ofgem’s consultation on National Grid’s proposal to dispose of part of the NTS for CCS.

EDF Energy supports the need for diversity in the UK’s energy mix, and therefore believes there is a role for clean coal alongside new nuclear, renewables and gas. We fully support the UK Government’s ambitions to reduce CO₂ emissions and believe that the decarbonisation of electricity supply is essential to deliver the long term reduction targets. Robust policy frameworks, including a long term CO₂ price signal, should be the primary driver to stimulate investments in low carbon and carbon free technologies on a level playing field.

We therefore support the introduction of a regulatory regime to enable CCS deployment. However any regime and asset sale should ensure that there are no cross subsidies between CCS and gas transportation. Additional support or subsidies for CCS should be delivered by a well-designed, transparent market that gives visibility on long term CO₂ abatement costs. The arrangements should therefore ensure that gas Shippers are not exposed to increased System Operator costs in the long run and that an appropriate value is attributed to the assets which are then removed from National Grid Gas’ (NGG’s) RAV.

EDF Energy welcome’s Ofgem’s work to attempt to identify the RAV of the assets. However we believe that Ofgem’s proposition, that once NGG’s shareholders have been remunerated for their investment then any additional monies should flow to consumers, requires further discussion. It could be argued that the role of the price control is to determine the revenues that NGG should receive in order to fund its business. In a competitive environment this role is facilitated by the market in setting prices based on the supply and demand balance. When disposing of assets in a competitive market the monies for these assets does not flow to consumers, but instead flows to shareholders who can chose whether to invest for revenues and profit, take the cash as a dividend or reduce debt. Further shareholders will be exposed to any movements in share prices as a result of the asset disposal depending on whether the market perceives that it has added value to the company or not. EDF Energy therefore believes that further clarity is required on the principles

that will be applied in determining the terminal value of assets removed from the regulatory gas network asset base to an independent CCS network.

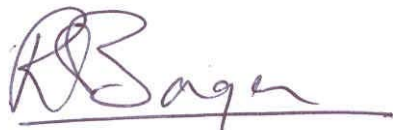
EDF Energy also believes that arrangements should be put in place to ensure that gas Shippers and consumers are not exposed to a long term increase in System Operation costs as a result of any disposal. Again in a competitive market any increase in operating costs over a reasonable time period would be built into the value of the assets when they were sold. As identified by Ofgem there are numerous contractual means of facilitating this including upfront payments, royalty fees or a combination of both. We therefore believe that Ofgem should ensure that consumers are not exposed to an increase in compressor costs and buy back risks and should consider the merits of conducting an independent audit to verify any potential increase in costs and ensure that there will be no adverse impacts on the potential to transfer or trade capacity from the St Fergus ASEP.

In addition EDF Energy would seek clarity on the following issues and how these will be resolved:

- Use It or Lose It (UIOLI) arrangements. As recognised by NGG the section of pipeline identified is capable of transporting a significant amount of CO₂. We would therefore seek clarity as to how interested parties could seek access to this capacity and what measures will be in place to prevent the hoarding of capacity.
- Health and Safety implications. We would note that the characteristics of CO₂ are different to that of methane in that CO₂ is heavier than air and so in the event of a leak there is a risk that it can accumulate. We would therefore seek clarity as to how this would be addressed and resolved.
- Corrosion. CCS is in the very early stages of development and there is limited knowledge on the impact that transporting CO₂ can have on corrosion of pipes. We therefore seek clarity as to whether NGG will be imposing quality requirements on CO₂ being transported and what would happen in the event that a CO₂ source did not meet these requirements.

We have answered the specific questions that you raised in your consultation in the appendix below. If you would like to discuss any of the issues raised in this response please contact Stefan Leedham (Stefan.leedham@edfenergy.com; 020 3126 2312).

Yours sincerely,

A handwritten signature in purple ink, appearing to read 'R S Baga', with a horizontal line underneath.

Ravinder S. Baga

Appendix 1 Response to Questions

CHAPTER 2: Proposal to dispose of assets for CO₂ transportation

Question 1: Do you think this proposal is a good idea in principle?

Yes, the reduction of CO₂ to meet climate change commitments is important. However any asset disposal should ensure that there no cross subsidies between gas and CCS. The long term CO₂ price signal should be the primary driver to stimulate investments in low carbon and carbon free technologies. Additional support for CCS should not distort markets and is best delivered by a well-designed, transparent market that gives long-term visibility of CO₂ abatement costs.

Question 2: In the event that a feeder section is removed, existing compressors may be required to work harder to transport the same volumes of gas through fewer pipes. It is proposed to capture these additional compressor fuel costs and to introduce a capped volume for these additional fuel costs, based on pre-disposal levels, over which the new CO₂ transportation business would bear the costs and make payment to NGG. What is your view of this proposed treatment of these additional compressor fuel costs?

We agree with this principal – there should not be any cross subsidies between CCS and gas customers. However we would require further information as to how the shrinkage incentive and the sharing factors operate to develop a more informed view. We would also seek clarity as to how Ofgem would determine the cap based on pre-disposal levels? Under the current arrangements NGG's exposure to shrinkage costs is capped so that any additional exposure is funded 100% by Shippers and consumers. This may ensure that costs do not go above a pre-determined level; however there are sharing factors below this cap. A mechanism therefore needs to be developed so that any additional compressor costs are funded by the new CCS project and are not allocated to consumers through the sharing factors. This will require a significant amount of transparency.

CHAPTER 3: Regulatory issues

Question 1: Do you agree with our view of the regulatory issues of the proposed asset disposal?

We support the introduction of a regulatory regime to enable CCS deployment. In addition to the regulatory issues identified by Ofgem we believe that the following also need consideration:

- HSE implications for the transportation of CO₂ and potential leakages.
- The impact that CO₂ transportation could have on corrosion.
- What arrangements will be in place to prevent hoarding of capacity and whether there will be any UIoLI arrangements developed.

Question 2: Do you agree with the projected forecast flows at St. Fergus?

We can not comment on whether NGG's analysis of capacity is accurate. However we note that there is a view that NGG is underestimating potential flows from Norway in its analysis. We would therefore welcome some independent analysis to validate this.

Question 3: Are there other flow forecasts or scenarios which should be taken into account?

We are unable to identify any specific scenarios. However more information on how NGG developed its views on potential Shetland and Norwegian flows through St Fergus would be beneficial along with the underlying assumptions.

Question 4: What is your view of the indicated capability at St. Fergus with the feeder removed, with and without additional compression?

We cannot validate NGG's figures; however recent experience would suggest that it may be beneficial to appoint an independent auditor to review this. We agree that baselines should be maintained and hope that this continues into the next price control. We believe that any changes to baselines should be accompanied with sufficient notice to ensure that Shippers are able to mitigate against any unexpected changes and limit the impact of regulatory risk. EDF Energy believes that this will ensure that the UK's security of supply is maintained and the UK remains an attractive destination for imported gas and investment.

Question 5: What is your view of the projected buyback costs which have been identified?

We can not validate these figures however given that NGG has stated it can meet its baseline capacity obligation at St. Fergus it is not clear why buyback risks will increase as a result of this project. Any increase in costs or risk should be borne by the CCS project.

Question 6: Are there any other issues that you believe are relevant?

The focus of the consultation has been on ensuring that there is no cross subsidy from gas to CCS. At the same time we also believe that there should be no cross subsidy flowing the opposite direction. There is a risk that in developing a new regime issues are over looked or assumptions are made that with hindsight turn out to be incorrect. There may therefore be a need to review these arrangements to ensure that they are operating as envisaged, however this should only be facilitated through a clear predefined mechanism to limit the impact of regulatory risk.

Question 7: What is your view of the proposed disposal of these assets?

The reduction of CO₂ to meet climate change commitments is important. We therefore support the disposal of the assets provided that there are no cross subsidies between gas and CCS.

CHAPTER 4: Valuation of assets

Question 1: Do you agree with the possible ranges of valuations for the assets which have been identified?

The range of valuations is sufficiently wide to ensure that the true value of the assets has been captured. However it is hard to comment on which valuation is more accurate without further information.

Question 2: Do you agree with the assumptions which underpin the asset valuations?

The assumptions appear reasonable; however we would raise the following questions:

1. Why is the surplus asset date 2018 when calculating the MEA?
2. Why is the MEA valuation only based upon the length of the DECC competition? If a CO₂ price develops CCS may continue past the end of the competition.

3. What depreciation methodology does NGG use when calculating its depreciated balance sheet value?
4. Why is pipeline life assumed to be 50 years? It is reasonably clear that NGG expects this pipeline to be available post 2020 for the DECC competition.
5. When calculating the MEA the first year of use for the pipeline varies between 1975-78, however when calculating the pipeline years adjusted value the year of commissioning is 1970. Why is there a difference?

Question 3: Is there an alternative method of asset valuation which should be considered?

Depreciated cost – cost of original construction of pipeline depreciated so only 7 years of value remaining. This should provide an equivalent of the current RAV value.

CHAPTER 5: Commercial options

Question 1: Do you consider that the opportunity to potentially share in the benefits of CCS using ex NTS assets represents an appropriate balance of risk and reward?

The issue of risk and rewards is that it has the potential to create cross subsidies if they are not set at the appropriate level. Arguably it is NGG's shareholders who should be exposed to the risk that their CCS project fails as well as being exposed to the rewards if it is a success.

Question 2: What is your view of a lump sum payment, in the event that consent is granted for disposal?

We believe the lump sum payment could co-exist with the royalty payment scheme. The lump payment should cover the RAV of the assets being disposed, whilst the royalty payments should be set to recover any additional compressor or buy back costs. However it is not clear why this should be linked to the volume of CO₂ transported. In this instance NGG is creating a legally separate company to supply a CCS service, and as terms of the sale they may be requiring compensation from NGG CCS to cover additional system operator costs. How these costs are recovered from NGG CCS' customers should be decided through commercially negotiated contracts.

Question 3: What is your view of a participatory royalty arrangement, in the event that consent is granted for disposal?

We believe this represents a more cost reflective way of remuneration however it is unclear why it is linked to volume CO₂ transported and not an annual payment?

Question 4: Are there other risks / benefits which should be taken into account?

The main risk is that the disposal is agreed and enacted, only for an incremental signal to be received at St Fergus, which could have been facilitated through the use of the disposed assets. We would therefore seek clarity from Ofgem as to how they would approach this scenario and how would investment costs be treated. Is this a risk to be faced by consumers of NGG's shareholders?