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Proposed disposal of part of the NTS for Carbon Capture and Storage (CCS)

Dear Bogdan,

RWE npower welcomes the opportunity to comment on the above consultation. Our response is not confidential and can be posted on Ofgem's website.

CCS technology, despite being at a nascent stage of development, is expected to play a crucial role in helping to combat CO₂ emissions that are responsible for climate change, whilst maintaining energy supply diversity and security. The UK Government has set challenging targets for CO₂ reduction and is seeking to encourage the development of CCS by way of a competition to build a commercial scale demonstration plant and, as recently announced, by way of a new consumer levy. We support the UK Government's desire to lead the world in CCS and as a leading fossil fuel generator in the UK and Germany we recognise the responsibilities and opportunities that the development, and ultimate deployment of CCS technology, presents us with. To this extent we are pleased to now be part of a consortium of companies bidding to build a commercial scale post combustion demonstration plant at Tilbury Power Station. We expect to submit our outline proposal to Government in accordance with the competition's rules and timescales later this year.

This consultation focuses on the key issues, regulatory concerns and benefits associated with the proposal by National Grid Gas (NGG) to be allowed to divest of a section of the NTS to a non regulated subsidiary, so as to provide a CO₂ transportation service to one¹ of the parties bidding in the Government's competition. Whilst it is right for Ofgem to consult widely on such a proposal, any decision the Authority reaches must be considered in the wider context of the impact such a decision might have on the Government's competition, the development of carbon capture technology in the UK as a whole and the future role of NGG in providing a CO₂ transportation service on a regulated or non regulated basis. Our responses to the specific questions raised in the consultation are included in the attached appendix. However at the outset we would like to highlight the serious concerns we have about NGG's proposal in this wider context.

At the industry event held on the 11th May to accompany this consultation NGG made it clear it was not aware of any other NTS pipelines that might be used to provide CO₂ transportation services to the other bidders² in the Government's demonstration plant competition. As such its proposal represents a unique opportunity specific to

¹ Scottish Power at Longannet Power Station

² E.On UK and a consortium of RWE Npower, Peel Energy and Dong Energy

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only one of the bidders and so it is incumbent on the Authority to consider its decision on NGG's proposal in this wider context, so as to avoid any discrimination occurring in the Government's competition and any distortion or unfair commercial advantage in the market for low carbon electricity generation. Any such discrimination could swing the development path of post combustion carbon capture firmly down the route of a particular capture technology which may not be the most economic and efficient process. As the Government's competition was set up specifically to avoid "picking winners" and to ensure the rigours of competition delivered the most technically and commercially efficient CCS solution for UK taxpayers, there is a very real danger that any decision on NGG's proposal taken in isolation could end up overcharging taxpayers and consumers for many years to come, as well as undermining the UK's strategy for combating climate change.

Clearly NGG recognises the potential lead time and cost advantages its proposal gives to one of the bidders but it seems to believe that such distortion should be ignored, for the greater good of CCS development and to minimise costs to customers. At the industry event on the 11th May it also rejected the notion of auctioning the assets on the grounds that any delays that might result risked closing off this unique opportunity and that competition was not worthwhile bearing in mind the highly depreciated value of the assets.

We strongly disagree with this view and note that the Authority has previously considered competition to be an appropriate basis for developing other nascent technologies, namely offshore transmission and smart metering. We also note that NGG has recently organised a tender for the sale of assets at Dynevor Arms LNG storage facility in a very timely manner, and see no reason why the same could not be done for the St Fergus feeders given an appropriate degree of commitment.

NGG has been keen to stress its expertise in the field of pipeline transportation and considers itself best placed to bring individual projects together on a co-ordinated basis. Whilst this may be true, it would be wholly wrong at this point to assume that other companies are not capable or interested in providing CO₂ transportation to clusters of CCS ready power stations. Full and proper consultation will need to be undertaken on whether a regulated monopoly model (based on the principles of common carriage) is the most economic and efficient way for CO₂ transportation services to progress in the longer term, or whether a competitive model is preferable. However until such time as these issues have been properly considered the Authority should be wary of affording NGG, or its unregulated subsidiary, any unfair advantage in developing a CO₂ transportation system operator role (CO₂ TSO) or business model, as this may act to prematurely foreclose the market for CO₂ transportation services in the longer term.

Also in order to encourage development and competition in future CO₂ transportation services it would be helpful if there were greater transparency over the levels of gas that are typically expected to flow through each of the many pipeline sections making up the NTS, both now and in the future. NGG could perhaps be obliged to provide such information in its annual Ten Year Statement or as a separate report which could be updated to take account of future developments in gas demand/supply.

Should you wish to discuss our response in more detail please do not hesitate to contact me.

Yours sincerely,

Steve Rose*
Economic Regulation

* sent by e-mail therefore unsigned

Proposal to dispose of assets for CO₂ transportation

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

We do think the proposal is a good idea in principle but firmly believe that the statutory objectives and duties the Authority relies upon when considering it should be exercised within the wider context of the Government's demonstration plant competition and the development of CCS in general.

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?

Were the feeder section to be removed it would not be appropriate for any compression costs (gas or electricity) over and above pre-disposal levels to be borne by NGG, gas shippers or end consumers. Should the proposal go ahead therefore any additional compression costs resulting from working the four affected compressors stations harder would have to be separately identified and ring fenced from NGG's shrinkage incentive, for payment by the CO₂ TSO.

The mechanism for separately identifying and ring fencing such costs is likely to be complex and may need independent verification. Whilst we accept that this will be consulted on as part of NGG's next Transmission Price Control we believe a clear principle that should apply to any such mechanism is that the CO₂ TSO shall be fully responsible for such costs. We are concerned therefore that NGG's proposal envisages these costs being capped in some way.

Passing on any increased compression costs (and buy back costs) fully to the CO₂ TSO places the risks and opportunities arising from this proposal clearly where they belong. The CO₂ TSO should be able to mitigate such risks by funding any investment in extra compression and such arrangements demonstrably avoid any cross subsidy benefiting the CO₂ TSO, or the party it intends to provide a CO₂ transportation service to.

Regulatory issues

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

As previously stated, we firmly believe that the statutory objectives and duties the Authority relies upon when considering this proposal should be exercised within the wider context of the Government's demonstration plant competition and the development of CCS in general.

The regulatory framework for CCS can be expected to develop over time and we look forward to contributing to this process subject to the appropriate governance arrangements. However, it would a deeply retrograde step if that development is hampered or tied to a particular path by the decisions taken by the Authority in relation to this proposal.

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

We have no reason to disagree with the projected forecast flows at St Fergus as we understand these

are based on Ten Year Statement data, which represents NGG's best case view of future GB gas demand and supply drawn up from information provided by all relevant market participants.

Having said that, at the industry event on the 11th May a representative of Gassco questioned the apparent exclusion of proven reserves of Norwegian gas from the projected flows at St Fergus which are likely to be delivered around 2013/14. We would expect NGG's projections to be reviewed in light of this and any other concerns arising from this consultation. There may also be merit in carrying out independent verification of NGG's supply projections at St Fergus and other relevant entry points.

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

NGG does not appear to have taken full account of credible future flow scenarios at Teesside. Gas flows at Teesside have on many occasions over the last winter exceeded the 25 mcm/d assumption NGG has used in its modelling, and further beach gas is due there in the coming years.

To the extent that beach and LNG gas entry capability at Teesside is likely to significantly exceed NGG's 25 mcm/d assumption this could be expected to increase the possibility of buyback occurring at St Fergus (and Barrow). It is not clear the extent to which NGG's buyback assumptions take account of this.

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

We are not able to judge whether NGG's modelling of the St Fergus capability, with or without the feeder removed or with additional compression added, is robust or not and suggest that independent verification of NGG's figure may be appropriate.

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

Entry capacity buy back has been very infrequent over the last few years, however when it has occurred it has proven to be costly to shippers. Based on instances of buy back in summer 2006 a buy back price of 1 p/kwh does not seem overly conservative, although we have no way of judging the adequacy of NGG's base/high case buy back volumes. However, as previously stated we are concerned that NGG's buy back assumptions may not adequately reflect the impact of higher flows at Teesside.

Should this proposal go ahead the CO₂ TSO must be exposed to the full costs of any buy back at St Fergus resulting from the removal of the feeder and we do not think it appropriate for this exposure to be capped at the cost of providing a new compressor. Should the CO₂ TSO wish to mitigate its exposure to these costs going forward the terms of sale should provide a mechanism whereby it can fund the cost of any new compression needed to restore St Fergus capability back to its current capability.

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

We note NGG's view that removal of the feeder is not anticipated to have any significant cost or operational implications on its provision of flow flexibility services or the amount of linepack it holds. Whilst we are not in a position to disagree with this view we would welcome NGG making more information available about the extent to which the proposal will reduce linepack volume and the 22 mcm/d notional flexibility baseline NGG has previously quoted. Also it is not clear the extent to which the statement reflects actual flow patterns at St Fergus and other related entry points in the Northern triangle (which typically exhibit an element of front/back loading) or the UNC expectation of a constant 1/24th flow rate.

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

Any disposal of these assets should be structured in such a manner as to ensure that future compression and buyback costs resulting from the removal of the feeders are met fully by the CO₂ TSO. The terms of any disposal agreement, and NGG's price control, should provide for mechanisms whereby in the event the CO₂ TSO wishes to mitigate their exposure to greater than expected compression and/or buy back costs they can provide NGG with funding for an additional compressor.

Valuation of assets

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

All of the possible ranges of valuations contained in this consultation are based on historic cost accounting principles and take no account of the replacement or opportunity cost of the assets NGG's subsidiary hopes to re-use.

Whilst historic cost accounting (and MEA based valuation in particular) may be appropriate for the sale of assets between regulated businesses it is not an appropriate basis for valuing assets being transferred between a regulated business and its unregulated subsidiary, or where such assets have significant added value in a competitive market compared to a regulated one.

Any valuation based solely on historic cost principles will not properly reflect the replacement costs of the assets or the opportunity cost to NGG's subsidiary arising from the proposal. Therefore in the absence of a commitment by NGG's subsidiary to offer all bidders in the Government's demonstration plant competition with CO₂ transportation charges based on the principles of "common carriage", NGG's subsidiary is likely to be able to offer significantly more competitive terms for CO₂ transportation to one of the bidders compared to the other two.

Such positive discrimination in favour of one bidder will distort the demonstration plant competition and undermines the reasons why the Government adopted a competitive approach to the development of CCS in the first place.

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

We have no reason to dispute the assumptions underpinning the range of asset valuations but consider them to be irrelevant as they are used solely to derive valuations based on historic cost accounting principles.

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

A more appropriate basis for valuing the assets would be on their replacement costs as this is the most equitable basis for avoiding distortion in the Government's demonstration plant competition. It might also provide gas network users and consumers with some of the opportunity cost this proposal offers to NGG's shareholders.

However, we recognise that valuing the assets based on their replacement cost risks stifling the proposal prematurely, which would not be in the best interests of the Government's demonstration plant competition and CCS development in general. Instead therefore we propose that valuation of the assets should be based on their opportunity cost, as determined by way of an auction.

Requiring NGG to hold an auction for the assets would be the most fair and transparent way of establishing their true value and would ensure the Government's demonstration plant competition proceeds without any one party gaining the advantage of a potential cross subsidy from gas network users. It will also provide other potential CO₂ TSOs with an opportunity to offer CO₂ transportation services in competition with NGG's subsidiary, thus ensuring that the nascent market for CO₂ transportation develops on an economic and efficient footing.

NGG's subsidiary will be required to evaluate what the true opportunity cost of acquiring these assets is. To the extent it believes this is one based on a historic cost valuation, or that other parties will not be prepared to take on the risk of acquiring these assets (or are incapable of providing an efficient CO₂ transportation service), it can structure its bid accordingly. It would however be open to the Authority to set a reserve price in any auction based on its view of what is fair value for gas consumers, a view that will not doubt be informed by responses to this consultation.

Auctioning is the only efficient method of establishing the value of assets which may prove either to be of little value or of considerable value, and is more fair and transparent than arbitrarily determining their value based on the length of time they have been in the ground or the extent to which they have depreciated under a regulatory framework.

Question 4: Do you agree with the assessment of benefits associated with asset disposal and alternative use?

We agree that because these assets appear to be surplus to requirements and have largely depreciated NGG's shareholders have already been properly remunerated for them. Allowing NGG to transfer these assets to a subsidiary company based on a historic cost valuation could provide NGG's shareholders with a windfall gain and a valuable first mover advantage in the wider provision of CO₂ transportation services. Bearing in mind these assets are the regulated assets of a monopoly business it is inappropriate simply to allow an unregulated subsidiary of NGG to acquire them on potentially favourable terms for use in a competitive market environment. This would not be in the interest of gas network users and consumers or UK taxpayers in general.

Question 5: Are there any other considerations that should be taken into account?

Our concerns about NGG's proposed range of valuations for these assets have been fully described above.

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?

Providing gas network users and consumers with an opportunity to share in the benefits of CCS may, on the face of it, provide a mechanism for capturing any extra value NGG's subsidiary may accrue over and above the historic cost value which they acquired them for. However, it does not avoid the risk of distorting the Government's demonstration plant competition.

The fact that NGG propose capping the key risk they face (increased buy back costs) and the key benefit they would derive (volumes of CO₂ transported) from acquiring these assets also suggests that establishing a proper balance of risk/reward between gas network users and NGG's subsidiary will not be straight forward, and may over time prove to be inequitable.

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

We firmly believe that auctioning these assets represents the most fair and transparent basis for establishing their true value and that whoever acquires them should make a one off lump sum payment to NGG, which would be fed back into its price control. Our preference would be for the CO₂ TSO to remain fully responsible for increased compression and buy back costs, at least until such time as the assets reach the end of their regulated life. However, it might be possible to structure the auction in such a way as to allow parties to bid for the assets based on these costs being capped or uncapped.

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

We do not support a participatory royalty arrangement based on any of the range of historic cost valuations included in the proposal. It might however be possible to structure an auction such that bidders compete on the level of royalty payment they make to NGG for providing CO₂ transportation services using these assets. However, our preference is for a lump sum payment as this is the most clean cut option and delivers the full opportunity cost to gas network users and consumers immediately, rather than spread out over time.

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

Whilst it is recognised that whatever value NGG eventually realises from the sale of these assets will benefit gas network users and consumers through an adjustment to NGG's price control, there is a risk that the precise basis for how this is achieved will not be fully understood by all parties. To this extent we suggest that Ofgem should clearly explain what changes they would expect to make to the specific licence conditions comprising NGG's price control well in advance of any sale.