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Dear Bogdan

Proposed disposal of part of NTS for Carbon Capture and Storage - Second consultation and initial impact assessment.

We thank you for the opportunity to respond to the above consultation. We fully support the proposal.

National Grid first put forward the re-use concept over two years ago in discussions with parties participating in the first demonstration competition. Our approach to Ofgem followed interest from potential customers who at that time were considering ships as an alternative  $CO_2$  transport solution. Although significant costs have been incurred by many parties, the obvious benefits of re-use have carried the proposal to date. However costs are now escalating to a point where certainty on pipe availability (and associated terms) is essential in order to develop a bid for DECC.

Since the outset we have been keen to understand the basis on which certain assets can be reused, where this maximises asset utilisation and value to consumers. It seems clear that the proposal will deliver value to both gas and electricity consumers in the short term through: a) reduced charges to gas shippers, and; b) reduced levy to electricity suppliers.

Over the long term electricity consumers should also gain, as an early CCS demonstration will either enable rapid deployment of CCS (if cheaper than alternatives) or more appropriate policy decisions if CCS is unsuccessful - either way costs to consumers will be minimised. Gas consumers will benefit in the long term as CCS will demonstrate the extent to which coal (and gas) has a role in the electricity supply mix, whether abated or otherwise. Without this, gas consumers will face higher spending on gas storage and importation infrastructure. Superficially this may not seem a bad thing but much of this infrastructure may be low load factor and hence inefficient by comparison. Gas consumers will also benefit in that successful CCS demonstration will enable Heat decarbonisation investments to be deferred, thereby avoiding boiler/heater systems changeout avoiding both capex and opex. We expect Heat decarbonisation to be less efficient than CCS at its extreme, CCS on major power installations should be cheaper than decarbonising by removing millions of gas central heating systems and installing a similar number of electricity ones. This presumes that a reliable Heat source alternative is available (eg CCS-based electricity), otherwise heavy roll-out of Heat decarbonisation risks former gas consumers going cold as/when the wind levels drop (or poorer consumers being unable to make the switch or pay for Heat on cold days).

Whilst a reader may argue about the comparable level of benefits to gas and electricity consumers in the short term, we are convinced that gas consumer interests will be closely aligned to electricity consumer interests in the future.

National Grid Carbon is a wholly owned subsidiary of National Grid plc formed for the purpose of developing efficient  $CO_2$  transportation services which may enable lower cost demonstration and deployment of CCS. National Grid Carbon is participating in the ScottishPower consortium which is one of only two remaining bidders in the DECC CCS Demonstration Competition. As the proposal has matured the needs of CCS, DECC and the consortium have changed; along with this the roles of NGG and NGC have become clearer, though who takes what risk in the CCS chain is still hazy. It is essential that some key elements of uncertainty are now removed so progress can be made.

The objective of the DECC competition is to demonstrate large-scale post-combustion CCS in the UK by 2014. This is a technical demonstration that must also demonstrate value for money. Electricity consumers will be funding the CCS demonstration through an electricity supply levy and NGC believes that re-use of existing assets could provide a lower cost solution than a new-build alternative.

The timing of the DECC competition is fortuitously aligned with a reducing need for Scottish gas infrastructure and therefore presents a unique opportunity for gas consumers to benefit by extracting additional value from almost-depreciated assets. The changing shape of gas supplies to the UK (declining UKCS production and additional LNG importation facilities) have been the subject of extensive NGG analysis, and verified by Wood Mackenzie in their independent report. It is expected that future supplies to St Fergus can be accommodated through the remaining post-disposal infrastructure, and this reduced network requirement in Scotland is further compounded by a lack of gas shippers' financial commitment through the purchase and/or retention of system entry capacity in the long-term auctions. The residual capability analysis has been independently verified by Pöyry and suggests there should be adequate capability for shippers to flow anticipated volumes in the majority of scenarios.

It should be recognised that NGC have gone to considerable lengths with NGG, to rework the asset transfer proposal such that Ofgem and industry views are accommodated. This has resulted in an asymmetrically-shaped structure that presents no net harm to gas Shippers. In addition to the preservation of baselines, NGC is proposing to bear the downside risk of capacity Buy Backs and other inherent costs resulting from the disposal, such as increased compressor fuel on the remaining feeders. The Buy Back risk could be significant if new supplies materialise at St Fergus, and the asset valuation is therefore linked to the risk/reward balance. The inherent difficulty of valuing the assets has resulted in a payment that recompenses for the book value plus an additional payment that is irrespective of the success of CCS. The development of a mechanism to enable flow-through of additional CCS revenues provides a market proxy and prevents any windfall for either NGC or NGG. There is even a mechanism proposed that allows for any budgeted risks that do not materialise to feed back to consumers. A higher asset transfer value would change the fundamental balance of this proposal, and is unlikely to allow full protection of gas consumers from downside risk.

NGC is appreciative of the opportunity extended by Ofgem over the last two years, to explore the risks and commercial terms on re-use. This has enabled ample discussions and wider external engagement and resulted in a refined proposal that must now be crystallised in order for the project to move forward. The comprehensive nature of the proposal and treatment of all elements therein should allow for a timely decision that is not unduly caveated. NGC believes that maintaining the capacity baseline significantly reduces the difficulty of this decision, and has done so in light of the pressing need to finalise terms under which a CCS demonstration in the UK may be initiated. There is a clear requirement from DECC to reduce the commercial uncertainty; the government's impending Comprehensive Spending Review must be based on accurate costs; the cost of the demonstration is a significant item that calls on the government purse until levy funds start.

NGC believes this proposal is innovative, reducing costs of demonstrating CCS in the short-term and deploying CCS in the long-term. The new Energy Act means that electricity consumers will receive these benefits. In the short-term, any delay, or adverse adjustment to terms or risk allocation, will delay and may put at risk the entire agreement of a very complicated project contract between consortium members and DECC. The success of CCS demonstration relies on cross-industry collaboration, and a preparedness to stretch beyond the comfort and certainty of current core business activities. The investment and commitment of the consortium and DECC to try and make this project work despite the many obstacles presented, is clearly not inexhaustible and now calls for some certainty.

NGC believes that CCS+coal could help to underpin a balanced future energy mix for the UK and provide enhanced security and diversity of supply (most gas will be imported in the future). In addition, re-use of existing assets offers a lower environmental impact than that of a new-build solution.

CCS in the UK can help facilitate a low carbon future whilst creating jobs, skills and experience that the world will look to learn from. We have a unique opportunity to do this now.

Yours sincerely,

PP Jim Ward