

Gassco response to Ofgem Consultation Document: “Proposed disposal of part of NTS for carbon capture and storage”.

(Numbers relate to the sections of the CD where Ofgem have posed questions for responses.)

2. Proposal to dispose of assets for CO₂ transportation.

Question 1

In principle the concept of re-using assets for a secondary duty when their useful primary use has come to an end is prudent as long as the primary purpose is not compromised by the disposal. However, determining the point at which useful life has ended can be problematic, particularly when the incumbent owner can see a new growth business opportunity and future revenue stream opening up.

Once removed it is extremely unlikely that the assets would be returned to the gas network even though the disposal may have been undertaken too soon. Therefore, there must be absolute certainty that the assets are no longer required for the transportation of natural gas.

Question 2

The CO₂ transportation business should cover the costs of additional compression due to the increased workload demanded of them. However, it is not just the additional fuel costs that should be borne by the CO₂ business but also other costs related to longer and harder operation for the compressors. For example additional maintenance costs will result due to longer hours, harder operation, additional starts etc. In addition the life of the compressors will be reduced and replacement required earlier than that if disposal had not taken place.

The fuel cost estimate of £5m could be significantly higher if these other operating costs are taken into account. There may be other additional costs. If the NTS becomes more expensive to operate, then gas consumers should not be exposed to any of these additional costs. A thorough analysis is required by an independent party.

It is stated in 2.2 that the feeders with circa 25 years service, are coming close to the end of their regulatory economic life. If this is the case why would a CO₂ transportation company wish to take over the assets when pipeline integrity is paramount? The feeders have been inspected internally on several occasions and could be no doubt validated at little cost for a further 20 or 30 years service. If this is the case then the value of the pipelines could be significantly higher than current book value and should be reflected in the disposal price. Again analysis by an independent is required.

NGG’s proposal to maintain existing capacity obligations is insufficient when there is the possibility of selling additional capacity for gas transportation at a later stage but for which no booking are able to be made at present. The alternatives of installing a new compressor or buy-back are insufficient if limited to existing base line capacity. The installation of a future compressor will probably require existing capital expenditure tests to be met whereas if the capacity is already installed, as it is, then the test is not required. This suggests that NGG will revert to the buy-back option, which

satisfies existing bookings but does not satisfy capacity requirements for new connections.

In 2.7 it is stated that various sections of a feeder pipe would be disposed of. What criteria are used to determine which sections are selected? Could the gas network be left in a less robust state by removing the “newer” sections and retaining the less new or previously suspect sections?

Disposal into a NG subsidiary, which will fund and manage the new assets, suggests ring fencing of costs. Does this work effectively? Why can't the CO₂ transportation business be a service within NGG?

3 Regulatory Issues

Question 1

Yes.

Questions 2 and 3

We do not agree with the projected flows at St Fergus. The Norwegian volumes do not reflect the information given to NGG during meetings in preparation of the 10 year Statement in 2008, which has been used as the basis for this document.

There is a high probability that additional supplies from Norway and West of Shetland in UK waters will be routed to the UK. Whilst NGG have taken account of the West of Shetland volumes in their assumption on volumes arriving at St Fergus they have not taken account of additional Norwegian volumes over and above Langeled, Vesterled and wet gas deliveries through Tampen/FLAGS. This could amount to an additional 30 MScm/d and potentially more depending on how discoveries in the Norwegian Sea are developed and the decision on infrastructure solutions.

The potential reduction in entry capacity at St Fergus and the proposed substitution of entry capacity away from St Fergus threaten this location in respect of future Norwegian infrastructure developments

A scenario considering a new additional pipeline from Norway into St Fergus should be taken into account in the next stage of analysis and consultation.

Question 4

There need to be an independent assessment of the flow capability with the assets in place and removed. The consultation document states in table 1 (page 15) that the loss in capacity is only 16 – 22 mcm/d when compared with the baseline capacity but that is an arbitrary datum. The physical capacity loss is much greater than the loss in baseline capacity therefore the reduction in capacity is much higher than stated..

Question 5

The projected buy back costs are indeterminate and with the proposed substitution could be much higher, if as anticipated substitution bites into available entry capacity at St Fergus. An independent view and impact assessment is required.

Question 6

Are there any offtakes connected to the proposed assets to be removed? If so, what is the cost of relocating these? Will the choice of asset for disposal take account condition? Will the assets in the best condition and integrity be retained? A report on damage and repairs undertaken on all pipelines in that area should be undertaken and made available before selection of the assets proposed to be removed. Consideration should be given to the anticipated consequence on maintenance etc for the retained assets arising from any disposal. If NG expects the CO₂ to be the growth business it is natural they will want the longer lasting assets transferred to that side of the business. This be the right course of action is the valuation is appropriate.

What will be the consequence at each existing compressor station on the three feeders from St Fergus? Is there a need for any consequential work or modifications at the time of removal, or later? Will compressor duties change and will additional ageing effects be introduced?

Question 7

In principle the disposal is a sensible way forward but only when it is beyond doubt that there is no need for the existing capacity. Gassco's view is that this is not the case at present. Evidence has been presented to the Select committee on Energy and Climate Change by Professor Alex Kemp who indicates the uncertainties surrounding west of Shetland volumes which could be much higher than currently planned and which require a "substantial pipeline" to get the volumes ashore. He also refers to similar problems on the Norwegian shelf where there are also new provinces with confirmed volumes yet to be exploited and which require substantial capacity. His evidence also refers to the UK's security of supply situation and the fact that new infrastructure encourages further exploration. Gassco concurs with that view.

Whilst initially there is a proposal to retain baseline capacities at present levels this may not continue to be the case. Over time these may be eroded further. Without existing infrastructure being left in place the remaining reserves may be insufficient to enable reinvestment to recover the lost capacity. Given the maturity on the UK side of the NCS it could be left to Norwegian developers and shippers to fund replacement capacity if the existing assets are removed too early.

There is the question of whether a recovery in oil and gas prices could enable marginal projects to again become viable but a potential lack of entry capacity proving to be a high risk and it being too costly to reinstate substituted capacity and capacity lost through asset disposal.

The Norwegian Sea is a large frontier gas and oil area from which discoveries that have already been made need to find a route to market. As energy prices increase, further exploration will recommence but NGG may not be ready to accept newly discovered volumes. Furthermore, the long term sale of capacity is not be the best indicator for St Fergus capacity since this is an entry point where swing gas is delivered into the UK from Norway, which does not justify long term entry capacity commitments but does provide security of supply benefits. This aspect is further complicated by anomalies in the tariff regime which encourages short term booking of entry capacity. A similar anomaly is evident at Bacton.

NGG are protected from the effect of insufficient capacity for future deliveries as it is the shippers who bear the cost of additional investment if new gas fields are located and developed. This begs the question of whether a new carbon transportation

business being promoted to the detriment of the future gas industry for which the assets have been provided.

Operationally the loss of capacity also implies loss of line pack and security in the event of an incident. The removal on one 36" pipeline is perhaps of little significance with regard to line pack but this should be demonstrated and as should any reduction in reliability. Will precedents be set if further CO₂ clusters are targeted by NGG with other asset disposals?

NG has stated that a decision must be made within 2009 on the assumption that this then fits with one of the CO₂ competition projects. The concern is in that doing so the capacity for future gas deliveries and additional security of supply appears to become secondary to emissions targets. In consequence the UK could become more reliant on LNG deliveries as opposed to pipeline gas from Norway. Gas delivered by pipeline from Norway to other European markets effectively places the UK at the end of the transport infrastructure for these particular volumes rather than at the start.

4 Valuation of Assets

Question 1 -5

There appears to be an anomaly on page 32 where the definition for "Economic life adjusted" is assumed to be 5 years after 2013 but in para 3.52 it is stated that the pipeline would be taken out of service around 2020, which is a period of 7 years.

If assets have been fully depreciated then NGG and its shareholders have been fully remunerated through the revenue recovery allowance and any remaining value should be returned to the consumer. The disposal of any redundant asset is in the interest of the operator if only to remove any responsibility and operating costs from its overhead if no revenue can be generated from its' retention. A true open market price should be determined for its disposal. NG should not receive the benefit of the asset at little or no cost to the cost of the gas consumer.

Are there examples of other transmission lines being taken out of service after reaching their expected life? Some NG pipelines have probably been in service for considerably longer than expected life. A few have had their operating pressure down-rated but others have been in service without pressure reduction and transporting volumes that were not anticipated at the time. With the uncertainty of future volumes arriving at St Fergus the "Economic life adjusted" methodology could arrive at much lower valuations than the true asset value.

In time carbon transportation could be a growth business for NG with several sections of the NTS being transferred to another arm of their organisation under current proposals. The consumer should not go unrewarded each time assets are moved into the carbon business. The carbon transportation business could operate alongside NGG and result in revenue being transferred to the gas consumer who has paid for the infrastructure. This revenue would help to offset rising energy prices for consumers.

Developing the above, could there be an alternative commercial structure where the asset remains in NGG and revenues received from the transportation of third party gas (ie CO₂) feed into NGG's income stream rather than an unregulated external NG subsidiary. Admittedly there are regulatory hurdles to this but this would also be the case if the carbon business is to be regulated anyway. It is assumed that regulations will be introduced to manage the collection, transportation and disposal of CO₂.

The valuation of the asset may be dependent on the structure of the carbon business. If NGG retain the asset does this not become a question of internal asset value and tariff setting rather than determining a value for disposal? The risk of under or over valuing the asset will then be adjusted via future tariffs.

Work has been undertaken to investigate the cost of ship-borne CO₂ transportation. Independent evidence of these alternative costs need to be presented and fed into the comparison. Furthermore we recall that the ships themselves were significant CO₂ emission contributors.

5 Commercial Options

Each commercial alternative is premised on the assumption that there is an NG subsidiary transporting the carbon. This may not be the only solution. Carbon transportation is likely to be a growth industry and income will eventually be generated, Should this not be passed back to gas consumers who have funded the investments? If there is a continued secondary use for the infrastructure why should they be denied an income from it through reduced energy costs or by offsetting future carbon taxes that will arise in one form or another? Analysis should be undertaken to investigate if there is a mechanism that retains the income in the gas business for the benefit of the consumer.

The commercial proposals appear to favour the gas consumer funding a low cost entry into the carbon transportation business for NG without due reward to the existing gas consumers who have paid for the infrastructure. An independent assessment is required. The proposal for a lump sum settlement does not on the face of it appear to be acceptable or good value for consumers if NG continues to argue that an approach using a high residual value is not viable.

In para 5.10 a cap is suggested which is equivalent to 6M tonnes/year. This relates to the free flow capacity of the asset but with a small investment in compression the capacity can be increased to 10M tonnes/year. Increasing the cap to 10M tonnes/year may prove to yield better results for the consumer than the cap proposed by NG.