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Dear Andrew,

Methodology to determine incremental constraint management costs and incremental compressor costs related to removal of an NTS pipeline

National Grid Carbon (NGC) welcomes the opportunity to respond to this consultation and would like to thank National Grid Gas (NGG) for their efforts in producing the methodology proposal.

NGC is focused on delivering a safe, timely and value for money transportation solution for what could be the first large scale demonstration of post combustion Carbon Capture and Storage (CCS) technology in the world. The reducing need for Scottish transmission gas infrastructure, as a result of decline in North Sea UKCS gas, presents a unique opportunity to re-use a pipeline and for gas consumers to benefit from the disposal of an almost-depreciated asset.

NGC acknowledges that any incremental costs as a result of disposal should not be borne by gas consumers. We broadly agree with NGG's proposed methodology statement to identify these incremental costs and have detailed a response to the specific consultation questions in an attached appendix to this letter. The key points of our response are:

- Appropriate mechanisms should be in place to enable to accurately identify incremental costs that are attributable to the new asset owner (referred to subsequently as the "third party").
- Incentives should be established / maintained to ensure appropriate behaviours from NGG and gas shippers such that any extreme costs and/or unfair apportionment to a third party are avoided.
- We note that constraint management Capacity Buy Back (CBB) actions can be costly. (In July 2006 some buyback bids accepted were tenfold the average buyback bid price). NGC believes a Weighted Average Price (WAP) should be used to ensure that economic and efficient actions are taken in all instances and not just for core business activities to which incentives apply.
- The methodology as written is transparent and provides fairly simple solutions to complex areas. To maintain this, only significantly warranted costs should be considered against the effort and time to determine these. e.g. we believe it is correct that compressor stations along the pipeline route will contribute to incremental CFU but that other compressors with little or no impact are therefore not significant enough to warrant further complex analysis.

- NGC believes that the pipeline disposal may, in certain scenarios, aid the ability to accommodate the decline in St Fergus flows more efficiently. Although it is expected that in some scenarios compressor units may run harder/longer, these units are predominantly designed to be run in a continuous fashion and so may experience / benefit from increased resilience.
- NGC believe that it is right to time limit residual liabilities in this specific situation. These costs would otherwise be picked up by gas consumers at the time of decommissioning, along with associated capex that in this proposal will be avoided.
- The ability to review and challenge the analysis results on an annual basis is a necessary feature of the methodology to ensure appropriate cost management, and will likely be a requirement of the NGC project cost basis.
- Future investment signals at St Fergus (long-term capacity bookings) support the proposed divestment in this specific proposal. This is an opportunity to gain value for gas consumers whilst offering a value solution to NGC.

It is important that gas consumers are not adversely impacted by the disposal. However, it is equally important that a third party is not penalised for making innovative use of an asset through the application of inappropriate mechanisms and incentives. All methodologies employed should align to existing arrangements, to ensure the economic and efficient behaviours of NGG and gas shippers are maintained.

NGC acknowledges that the methodology statement is transparent, concise and presents solutions to a number of complex areas. The success of the methodology is heavily dependent on a significant number of assumptions and network analysis and we hope that NGG will work towards ensuring all assumptions and analysis are fair and robust.

I hope you find our response useful and if you would like any further clarification on our comments then please do not hesitate to contact me.

Kind Regards,



Tony Szabo
CCS Projects Analyst

Appendix 1

1. Do you agree that future changes to the methodology should be restricted as envisaged in the proposal?

Yes. It is important that NGG and the third party have a degree of cost certainty but also the ability to revise, by mutual agreement, as a result of regulatory changes for example.

2. Do you agree that charges calculated according to the methodology should be open to challenge by the pipeline owner?

Yes. A mechanism to challenge results ensures that appropriate due diligence is carried out prior to the pipeline owner being charged.

3. Notwithstanding your answer to 2, are the cut-off values used to prevent spurious challenges set at a fair and reasonable level?

The principle of cut-off values appears sound, however the drafting may benefit from greater clarity so that any subjectivity in the application of these values is minimised. If there are any tolerances already applied to NGG core business activities, it would seem sensible that these are adopted, as already accepted by industry.

4. Do you agree that administrative / processing charges incurred by xoserve should be included within the scope of the methodology?

Not as an additional item. NGC believes that there would be minimal (if any) incremental administrative / processing costs incurred by Xoserve as a result of this disposal, given these are all activities already undertaken by NGG to some extent. Any inherent costs should be considered by NGG as included within the upfront payment, and any subsequent impacts or terms are then for NGG to negotiate with Xoserve.

5. Do you agree that the application of the methodology to any specific pipeline disposal should be time limited?

Yes, in cases where this is appropriate. A time limit ensures that any third party is not exposed to costs that would otherwise have been incurred by NGG / gas consumers when the asset would have been decommissioned or the regulatory arrangements changed. In the case of this disposal, there are very specific physical/tangible factors that support a time bound exposure (ie UKCS supplies, Shippers' long-term capacity bookings).

6. Notwithstanding your answer to 5, do you agree with the proposed criteria for determining the duration of the methodology for specific projects?

Yes, in that for this specific proposal, NGC believes that appropriate incentives should be placed on NGG and gas consumers to ensure third parties are not penalised with long-running costs that discourage future innovative use of assets, beyond their reasonable and expected operational life.

7. Do you agree that Users should not be compensated for any costs incurred as a result of the curtailment of interruptible capacity rights where the curtailment is triggered by a pipeline disposal and hence that NGG should not seek any payment from the pipeline owner?

Yes. Interruptible capacity by its nature is not a firm product and the user takes the risk that this capacity right may be curtailed; hence no compensation should be payable for Interruption.

8. If you disagree with the proposal in question 7, what costs should be recovered, and how should these be determined?

NA

9. Do you agree with an approach that models both the “with pipeline”, and “without pipeline”, scenarios to determine theoretical constraint management action quantities, and hence a theoretical incremental quantity?

Yes, as NGC believes that the new pipeline owner should not be exposed to costs that are not a direct result of the disposal. There must be some assurance for the pipeline owner that the industry is not collectively incentivised to pass through costs that would have been incurred anyway.

10. Do you agree with the approach to scenario modelling that uses actual operational data? Are there any other criteria that should be considered?

Yes. Furthermore, the use of operational data should also be reflected in the theoretical 'with pipeline' scenario in order to maintain consistency and fairness. NGG would need to be explicit that no additional compression or flow regulation was used in this analysis when these were not available (due to maintenance for example) on the constraint day.

11. Do you agree that the methodology should attempt to align the cost of those specific constraint management actions that result from incremental constraints or should an average of all constraint management actions at the relevant point be used, i.e. do you prefer "specific incremental" or WAP prices?

NGC believes there should be an appropriate incentive in place to ensure that the third party is not exposed to an uncapped liability where there is no financial consequence to NGG and gas shippers, who are both incentivised to pass all costs through to the third party. A WAP-based approach alleviates this potential conflict and places an incentive on those who can influence constraint management costs - shippers (who price and place bids) and NGG (who accepts the price and volume).

12. Do you agree that attributing the later constraint management actions to incremental constraints and hence to the pipeline owner is a reasonable approach? If not, what criteria should be used? Is this approach unreasonable in that it exposes the pipeline owner to the most costly buy-back actions?

NGG's approach is understandable, though as explained in the answer to question 11 it should not be expected that a third party would be willing to accept an uncapped risk with no re-balance to NGG and gas shippers.

13. Do you agree that the cost of any counter-balancing actions for locational sells/buys should be included in the determination of costs?

Yes, though only to the extent that (as for other scenarios) they can be directly attributed to the disposal.

14. Do you agree that, in respect of locational actions where income exceeds costs, the surplus should not be paid to the pipeline owner?

Yes, it would seem fair that the System Operator has reasonable recompense for effective trading.

15. To enable modelling of electrically driven compressors, is it appropriate to use the conversion factor of 3:1 taken from the Licence?

Yes. NGC see that this conversion should remain consistent with NGG's licence.

16. Do you agree with the look-up table approach to determination of incremental CFU quantity? Are there any practical alternatives?

Yes. NGC believe that NGG should look to develop an automated approach as has been indicated in the text and that the suggested look-up table is a fair basis for this, being both transparent and simple.

17. Do you agree that an automated approach is preferable and should be used when available?

Yes.

18. Based on the look-up table, do you agree that the two modelled quantities should be used to determine the incremental quantity by ratio, rather than by difference?

Yes.

19. Should analysis be limited to specified compressors as determined by paragraph 3.54? If not, which compressors should be included and how should such analysis be undertaken?

Yes. Until proven that other compressors significantly impact on incremental CFU then only compressors along the pipeline route should be considered. Any additional compressors should have been considered at the point of external validation, and this may be a requirement of any expansion to the compressors included.

20. Do you agree with the use of reference prices for the determination of incremental CFU price? Are there any practical alternatives that should be considered?

Yes. In principle it seems a reasonable approach to use the reference price as it aligns with NGG's incentive and should represent a challenging price.

21. Do you agree that incremental compressor related costs that fall on Users should be included in the methodology statement? Have these been fully identified by NGG?

Yes, where these are directly attributed to the disposal and reflected within the disposal terms. The key costs in this case appear to have been identified. It is important to keep the methodology transparent and simple.

22. Do you agree with NGG's proposal that incremental costs not falling on Users should be excluded from the methodology?

Yes.

23. Do you agree with NGG's conclusion that incremental venting losses are likely to be small and not justifying of the additional resource required for their determination?

Yes. It should be expected that NGG will minimise venting losses in accordance with its economic and efficient licence obligations and that the majority of the linepack value will be a benefit to gas consumers

24. If in disagreement with 23, how would you suggest that incremental venting losses might be determined?

NA

25. Do you agree with the pass through of incremental shrinkage incentive costs as detailed?

Yes. Users should be compensated for the incremental costs associated with higher CFU and therefore emission costs under the shrinkage incentive. However, NGC would highlight that the shadow price of carbon would impact differently for electric and gas consumption.

26. Do you agree that unplanned maintenance and routine annual maintenance should be excluded from the methodology?

Yes, as NGC believe that in some cases compression resilience will be increased in Scotland. These compressors may be run more consistently in line with their original design specification and therefore possibly incur less trips and/or maintenance.

27. Do you agree with the proposed methodology to determine incremental compressor running hours? If not, what alternatives would you propose?

Yes though the principle of only those directly resulting from the disposal must apply. However, the third party should not be exposed to costs where compressor units / stations are not available for long periods.

28. Do you agree that incremental compressor running hours should be re-assessed annually?

Yes as this should ensure the latest data and assumptions are factored into the analysis without adding too much to the workload.

29. Do you agree with the indexation of overhaul costs? Should an alternative, e.g. cost pass through, be used? Would this create unnecessary uncertainty?

NGC believe that a cost pass through should apply as this ensures that the third party are exposed to the true costs of incremental compressor maintenance. The third party need to be content that NGG are appropriately incentivised that these costs are minimised. In the case of NGC, full transparency and perhaps even market sounding may be necessary to ensure their own cost recovery to the extent these are pass through costs.

30. Should full analysis of incremental compressor running time be assessed in advance, using projected demand and flow levels, or should the methodology be backward looking and use actual demand and flow?

Use of actual demand and flows against a 'lookup table' determined by NGG would seem more appropriate and should be relatively straight forward to apply.

31. Is the example useful and/or relevant?

Yes and it would be useful to see the example expanded to incorporate locational actions.

32. Do you agree that the automated approach to determining incremental CFU should be introduced when available or should the look-up table be continued?

Yes the automated approach should be used. This should ensure further accuracy once the models have been validated and approved.

33. Is it appropriate to provide the information stated in Annex 3 in the methodology statement or should this be stated elsewhere? If not, where should it be stated?

Yes as this provides a clear basis for the analysis of incremental costs. However, it should be noted that any contractual arrangement between NGG and the third party may override these.

34. Is the data provided in Annex 3 accurate and complete?

NGC believes that further analysis is required by NGG to establish if any further data is significant enough to include in Annex 3.

**National Grid Carbon
December 2010**