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Dear Jan

#### Discussion Document NTS GCD01: Introduction of NTS Exit (flat) Capacity Charges under the Enduring Offtake Arrangements

Thank you for providing Scottish and Southern Energy plc (SSE) with the opportunity to comment on the specific questions raised in the above Discussion Document.

Inaddition to answering the specific questions SSE would like to make the following comments:

- 1. We note that the Transportation and Transcost models result in substantial variation in charges to Users. For its own sites SSE has costs that are 75 % higher when comparing models. This illustrates the difficulty in using forward looking Long Run Marginal Cost models to set charges. It is clear that the differences in the models are driven by the choice of particular subjective assumptions, which in turn produces winners & losers across Users. SSE has no confidence that these charges will not change significantly in the future. With such potential instability and great uncertainty over locational investment signals, new investment will be impacted and security of supply adversely affected.
- 2. Based on the indicative Transportation model charges SSE will experience more than a doubling of costs compared to current charges, this excludes loss of interruption benefit. This an unacceptable level of cost increase and SSE is currently unable to verify the accuracy and cost reflectiveness of the model. SSE will need NGG to explain the reason for the large increase at its sites. SSE will also require the Transportation model to be made available with sufficient time for robust analysis to be undertaken before Enduring Consultation responses are required.
- 3. Acknowledging the above points and based on the discussions at the workstream meetings and subsequent reports SSE relucantly offers qualified support for the Transportation model. NGG have informed the industry that by using this model a higher degree of cost reflectivity, transparency, repeatability, stability and ease of usage can be achieved than by using the Transcost model.

- 4. It has been proposed that once LRMC's have been converted into prices using a tariff model, no adjustment is to be made to meet allowed revenue. Following discussions with NGG we understand this under-recovery to be approximately 50 % of allowed revenue or £130 m, assuming all baseline volume is sold at reserve prices.
- 5. SSE considers that devising a set of charges to under-recover at this magnitude to be unacceptable and consider it questionable in terms of licence obligations to knowingly set charges to under/over recover allowed revenue. Exit capacity charges and reserve prices should be altered in an appropriate manner to recover the total TO exit capacity charge revenue. The proposal means that a TO Exit commodity charge will be required to recover allowed revenue. This introduces further complexity and cost to managing the network and is neither economic nor efficient. As throughput is not a constant fraction of peak capacity at offtakes it will also result in a re-distribution of revenue that cannot be cost reflective and weakens the capacity signal.
- 6. SSE believes that additional information should be made available by NGG to help inform a decision on how allowed revenue should be recovered. At this stage SSE would like to understand the impact on TO exit capacity charges of recovering all of the allowed TO exit capacity revenue by adjustment and scaling of the capacity charge. This approach has been suggested in the transitional arrangements and is considered to be a more appropriate proposal. SSE believes that most exit capacity will be purchased through prevailing rights at the reserve price with competition rarely occurring at a node. The prevailing rights mechanism will be more closely aligned to an administered scheme rather than a true auction where competition can be expected at nodes. We also consider that re-distribution of revenue through Commodity charges is just as likely to influence participants' auction behaviour (albeit in another way) as re-distribution through Capacity. Therefore, SSE considers it more appropriate to adjust or scale prices to recover allowed revenue.
- 7. Following the release of corrected transitional transportation model charges, SSE believe that there may be indirect consequences for charges in the enduring arrangements. As a consequence SSE would like NGG to make available and consider implementing charges that are not floored at 0.0001 p/kwh (following adjustment) but are unconstrained and permitted to be negative. SSE considers that this may be even more cost reflective and would provide locational pricing and allow more informed investment decisions to be made by Users. Negative capacity charges are used in electricity and provide unbiased locational signals for investment. For example, it is clear that Peterhead power station provides benefits to the gas network because of its location close to St Fergus. The Transport model would suggest that it is in such a location on the gas network that its charges should be negative.

We can understand the logic that is applied to not allow negative charges to end users of energy. This also applies in electricity. It is imposed for environmental and energy efficiency reasons so that end users of energy should not be paid to use more energy. However, power stations are in a unique position in that they link both the gas and electricity markets, but they are not end users of gas energy. Electricity customers are the end customers of the gas energy.

An appropriately floored (i.e. it can't go negative) locational signal is already provided to the end users of electrical energy. Not allowing gas charges to power stations to go negative will in addition apply a second and inappropriate charge that will flow to these end electricity users. In these circumstances, the electricity customer is being charged for its location on the electricity network, but is not seeing any benefit from the location of the power station (e.g. Peterhead) on the gas network. The result is that the positive gas charge to the power station is not cost-reflective of the power station's location on the gas network, and inappropriately increases the costs to the electricity customer, the only end user of the gas energy through the power station.

- 8. Implementation of enduring exit reform will have a significant cost impact due to use of the transportation model and the loss of interruptible status. As a result SSE request a phasing of cost increases to be implemented over the enduring period. Such a mechanism would only pass through a percentage of anticipated costs each year to provide a buffer against step changes. SSE note that Ofgem have determined that changes to electricity DUoS charges are capped at 10 %/annum. SSE support a similar cap being applied to Gas Transmission charges to help maintain cost stability.
- 9. Irrespective of the model chosen, the same model should be used for deriving Entry & Exit prices. As yet the Enduring Entry prices have not been made available and SSE are unable to provide comment on the whole package of prices and therefore the validity of the models. SSE wish to extend this comment to Distribution charges that as yet have not been made available.
- 10. That 50 % of allowed revenue should be recovered from Exit and 50 % from Entry.

# Q1. LRMCs are calculated from either a Transportation model of the NTS or are calculated from Transcost.

SSE gives qualified support to the use of a Transportation model to calculate LRMCs and does not support the use of the Transcost model.

The indicative prices included in appendix C for the Transportation model are intuitively more explainable. Exit nodes that are geographically distant from sources of supply have higher charges and those exit nodes that are close to sources of supply are lower. The prices resulting from the Transcost model do not reflect this intuitive expectation.

# **Option 1 – Transportation Model Based Approach**

- Q2. LRMCs are calculated from a Transportation model of the NTS, consequentially excluding spare capacity and including a backhaul benefit equal to the avoided cost of reinforcement.
- Q3. NTS Exit (Flat) Capacity Prices are determined separately for each gas year from analysis of a single year Supply & Demand forecast using the relevant Gas Year's base case data and network model for the capacity released.
- Q4. Entry and exit LRMCs be calculated from the cost from a "reference node" to each relevant offtake point and the cost from each entry point to the "reference node" and that the LRMCs is adjusted to give a 50:50 split between average positive value of these adjusted Entry & Exit costs;

#### Q2. & Q4.

SSE support the concept of the Transportation model as it is in theory the simplest model to use. NGG have informed the industry that by using this model a higher degree of cost reflectivity, transparency, repeatability, stability and usage can be achieved than by using the Transcost model. Although the Transportation model has been demonstrated we await the release of the model so that a greater understanding can be developed and the claims made by NGG validated by ourselves.

SSE understand that the LRMC's are calculated by transporting gas from each entry point to a notional reference point and then to each relevant offtake node. The model minimises the flow distance of gas around the network given the forecast supply and demand assumptions and the constraint that what flows out of a node must equal what flows in. The model does not attempt to model load flows based on system pressures, unlike Transcost. Any change in flow down a pipe is assumed to result in a reinforcement requirement at a standard cost. As a result the model excludes spare capacity and includes backhaul benefit equal to the avoided cost of reinforcement.

SSE believe the Transportation model will produce changes that are less susceptible to subjective assessments and more suited to a network that is experiencing radical changes to network flows rather than incremental increases at entry points.

Q3.

SSE support the principle of using a single year forecast of supply and demand for a particular individual year as this should be more accurate than forecasting supply and demand for a 10 year period and hence should be more cost reflective.

## **Option 2 – Transcost Based Approach**

- Q5. LRMCs are calculated from Transcost, consequentially including spare capacity and excluding any backhaul benefit.
- Q6. NTS Exit (Flat) Capacity Prices and auction reserve prices for all relevant Gas years are determined from a single weighted average analysis of the ten year Supply & Demand forecast using the current Gas Year's base model.
- Q7. Entry and exit LRMCs be calculated from route costs associated with an incremental flow of 2.834 Mscm<sup>7</sup> for every combination of entry and exit point and that the route LRMCs are disaggregated into entry and exit LRMCs using an excel based solver constrained to give a 50:50 split between average positive values of these adjusted Entry & Exit costs;

#### Q5. & Q7.

SSE does not support the usage of the Transcost model as the indicative prices included in Appendix C do not reflect intuitive expectations. For example, exit nodes next to large entry sources are predicted to have large increases compared to current prices. This appears counter-intuitive considering that each GWh of offtake in such a situation should reduce the requirement for investment to transport the gas to a more distant exit node. NGG have informed the industry that by using this model a lower degree of cost reflectivity, transparency, repeatability, stability and ease of usage can be achieved compared with the Transportation model.

Q6.

SSE does not support the principle of forecasting supply and demand for a 10 year period that is then weighted to produce a single average value. Given the difficulty with accurate forecasting this methodology introduces potential errors compared with the Transportation model solution of using a single year forecast of supply and demand for a particular individual year. This generate inaccurate charges which are misleading and have inadequate transparency. To illustrate this point, the Transcost charges for SSE are lower in the enduring arrangements than in the transitional, even though interruptible discounts are withdrawn. This is the exact opposite of the Transportation model once charges are changed to recover allowed revenue.

#### **Common Proposal Features**

- Q8. Prices are set at a nodal level rather than an exit Zone level for all NTS Exit points.
- Q9. Exit LRMCs are converted into prices using the anuitisation factor set out in National Grid's NTS Transportation Licence.
- Q10. No year-on-year capping of NTS Exit Capacity prices is included in the methodology.
- Q11. Interruptible NTS Exit (Flat) Capacity Prices are discounted by 100%

#### Q8.

SSE supports the proposal of nodal exit points and therefore nodal pricing.

#### Q9.

SSE supports the calculation of LRMCs being converted into prices using the annuitisation factor set in NG's NTS Transportation Licence.

## Q10.

SSE does not support the removal of a cap on year on year price changes. Large year on year changes to charges will lead to a lack of stability and greater uncertainty. This lack of stability and increased risk will dissuade investment in the UK, potentially having a detrimental affect on security of supply.

SSE note that Ofgem have determined that changes to electricity DUoS charges are capped at 10 %/annum. SSE request a similar cap is applied to Gas Transmission charges to help maintain cost stability.

## Q11.

SSE agrees that Interruptible NTS Exit (flat) capacity prices should be discounted by 100 %. SSE would also like to know the level of interruption that NGG think it will contract for and the location of such requirements. This is important as the potential cost increases may be offset by offering interruptible services.

SSE considers that the Transportation model will provide more transparent, cost reflective, repeatable and locational investment signals than the Transcost model. However, SSE wants NGG to provide more information to investigate if the models can be improved:

- Adjust charges to recover the full TO exit capacity revenue from capacity charges.
- Scale charges to recover the full TO exit capacity revenue from capacity charges.
- Do not remove negative capacity charges, as in the case of the electricity capacity charges.
- Cap year on year changes to charges at 10 % as per the electricity DUoS charges.
- Introduce a phasing of cost increases.
- Explain why certain sites have dramatic increases in cost.

If you would like to discuss any of the above points please do not hesitate to contact me.

Yours sincerely

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