

Scottish & Southern Energy
Grampian House
200 Dunkeld Road
Perth
PH1 3GH

Direct Tel: 01738 457909

Direct Fax: 01738 456194

Email: Jeff.chandler@scottish-southern.co.uk

30 November 2006

Jan Gascoigne
Regulatory Frameworks
National grid
National Grid House
Gallows Hill
Warwick
CV34 6DA

Dear Jan

**Consultation Document NTS GCM 01:
Alternative Methodologies for Determination of NTS Entry & Exit Capacity
Prices- Transition Arrangements**

Thank you for providing Scottish and Southern Energy plc (SSE) with the opportunity to comment on the specific questions raised in the above Consultation Document. SSE are disappointed that the indicative transportation charges were changed only 1 week before the consultation was due to close. SSE believe this to be unacceptable and that NGG should reconsult. SSE are very disappointed that they have not and believe it is inconsistent with their licence obligations since 28 days have not been made available.

In addition 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 20 % different 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 50 % increase in costs and a 100% increase for the Transcost model when compared to current charges. This is an unacceptable level of cost increase and SSE is currently unable to verify the accuracy and cost reflectiveness of the models. SSE will need NGG to explain the reason for the large increase at its sites.
3. Acknowledging the above points and based on the discussions at the workstream meetings and subsequent reports SSE reluctantly 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 is proposed that once LRMC's have been converted into prices using a tariff model, that alterations are made to meet allowed revenue. SSE supports this approach as it means that most of the targeted revenue will be collected via the capacity charge, minimising the need for an additional recovery mechanism. This reduces complexity and cost of managing the network and will be more economic and efficient.
5. SSE would like NGG to investigate the following alternative mechanisms for recovering allowed revenue and make available the results as they that may prove to be more cost reflective:
 - 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. 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.

- Scaling LRMCs to recover allowed revenue through charges, rather than adjusting.

Q1. LRMCs are calculated from either;

- (a) Option 1: The Engineering model Transcost, consequentially including peak spare capacity but excluding any backhaul benefit, or;**
- (b) Option 2: a Transportation model of the NTS, consequentially excluding spare transmission capacity and including a backhaul benefit equal to the avoided cost of reinforcement, or;**
- (c) An alternative approach outlined in the Gas TCMF Progress Report GTCMF PR 01.**

Q1.

SSE gives qualified support to the use of a Transportation model, option 2, to calculate LRMCs and does not support the use of the Transcost model and other variants.

The indicative prices included in appendix D & E 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.

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.

SSE understands that the Transportation models LRMCs' 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 does not support the usage of the Transcost model as the indicative prices included in Appendix D & E 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 usage can be achieved compared with the Transportation model.

Q2. NTS Capacity Prices are determined from either;

- (a) Option 1: a ten year Supply & Demand forecast using the current Gas Year's Base Case data and network model, or;**
- (b) Option 2: a single year Supply & Demand forecast using the relevant Gas Year's Base Case data and network model for the capacity released.**

Q2.

SSE supports option 2, 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 and stable. SSE understands that if a single year model is chosen then it would be more appropriate to exclude spare capacity as this would result in more stable charges due to the removal of lumpiness of network investment.

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. Also the smearing of costs that results from taking a weighted average will not be as cost reflective as a taking a single years forecast.

Q3. Baseline Entry capacity prices are determined either;

- (a) Option 1: using a single analysis of the Base Case scenario adjusted to the 1-in-20 demand level, or;**
- (b) Option 2: from the TYS base case scenario, with Entry point specific analysis, such that each NTS Entry Point was at the relevant supply level and a supply/demand balance achieved via supply substitution.**

Q3.

Network analysis models require supply and demand to be in balance. SSE understands that the current model adjusts supply points to balance supply & demand based on 1 in 20 demand levels. This results in supply points not being at their base case levels within the charging model and therefore the results of the analysis may not be cost reflective.

As a result SSE supports option 2, and believes that entry capacity prices should be determined from the TYS base case scenario. SSE understands that specific analysis is then undertaken at each entry point such that each point is at the relevant supply level and supply & demand balance is achieved by supply substitution.

Q4. Views are invited as to whether the relevant supply level referred to in Q3, used to determine Baseline Entry Capacity prices, should be either;

- a) Option 2a: the Base Case supply (capped at the baseline/obligated capacity level) at each NTS Entry Point (this will therefore be equal to or less than the obligated NTS SO Baseline Entry Capacity level as defined by National Grid's NTS Licence), or;**
- b) Option 2b: the obligated NTS SO Baseline Entry Capacity level, as defined by National Grid's NTS Licence, at each NTS Entry Point.**

Q4.

SSE supports model 2 b and acknowledges that although this will not directly include spare capacity it should produce improved cost reflectivity and stability. In addition, flow forecasts will include declining terminal supply levels such that the reduction in prices will become larger as the flow decreases below the baselines used in option 2 a. This will provide an incentive to use capacity that is available on the network and avoid stranded assets.

The method described to take account of spare capacity in model 2 a would appear to be too user subjective and may create issues with repeatability and transparency. SSE would therefore not be supportive of option 2a.

Q5. Incremental Entry Capacity prices are determined either;

- (a) Option 1: the prevailing methodology, or;**
- (b) Option 2: using the TYS Base Case scenario, from a series of Entry Point specific analyses with the relevant NTS Entry Point adjusted to the obligated capacity plus step increment level and a supply/demand balance achieved via supply substitution.**

Q5.

To ensure consistency of approach between Exit and Entry and to ensure the use of the most cost reflective and stable model, SSE support option 2. This ensures incremental capacity as agreed in the Base case scenario is used and the network optimised via supply substitution to ensure peak 1 in 20 demand is met.

Q6. Entry and Exit LRMCs be calculated from either;

- (a) Option 1: route costs disaggregated into Entry and Exit costs using the Excel Solver such that in aggregate 50% of route costs are targeted at NTS Entry Points and 50% of costs at NTS Exit Points (the average positive values of the entry LRMCs equals the average positive values of the exit LRMCs), or;**
- (b) Option 2: 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, or;**
- (c) the prevailing methodology.**

Q6.

The Transportation model includes backhaul, does not include spare capacity and uses a reference node to ascertain the marginal costs of using a pipeline. We believe this Transport model is more cost reflective, stable, transparent and repeatable than the Transcost model. It is the understanding of SSE that only the Transportation model has a tariff model based on the reference node. Therefore, SSE supports option 2 such that the LRMCs are altered to give a 50:50 split between Entry and Exit.

Q7. LRMCs are converted into prices using the annuitisation factor set out in National Grid's NTS Transportation Licence.

Q7.

SSE supports converting LRMCS into prices by using the annuitisation factor set out in NG NTS Transportation Licence.

Q8. The raw Exit Prices are adjusted such that the positive values can be used to set prices to recover allowed revenue and that the negative prices are removed as part of the adjustment step.

Q8.

SSE would like NGG to investigate the following alternative mechanisms for recovering allowed revenue and make available the results as they that may prove to be more cost reflective:

- 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.
- Scaling LRMCs to recover allowed revenue through charges, rather than adjusting.

Q9. No year-on-year capping of NTS Exit Capacity prices is included in the methodology.

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 support a similar cap being applied to Gas Transmission charges to help maintain cost stability.

Q10. The combined Transport and Tariff model used by National Grid NTS to determine NTS Capacity Prices, be made publicly available.

Q10.

SSE support making the combined Transportation and tariff model available to all Users.

Q11. The Incremental Entry Capacity price determination methodology is included within the Gas Transmission Transportation Charging Methodology.

Q11.

SSE support including the Incremental Entry capacity price determination methodology within the Gas Transmission Transportation Charging Methodology.

Q12. This proposal is implemented for price determination in relation to all exit capacity from 1st April 2007 to 30th September 2010

Q12.

SSE support using this consultation document to derive prices during the Transition period.

Q13. This proposal (NTS GCM 01) is implemented for price determination in relation to all entry capacity auctioned from 1st April 2007.

Q13.

SSE support using this consultation document to derive prices for entry capacity auctions during the Transition period.

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

Yours sincerely

Jeff Chandler
Energy Strategy
Scottish & Southern Energy