

**INTERIM REPORT ON THE DEVELOPMENT OF AN  
EXIT CAPACITY SUBSTITUTION AND REVISION  
METHODOLOGY**

August 2010

## 1. Introduction

National Grid Gas plc (“National Grid”) in its role as holder of the Gas Transportation Licence in respect of the NTS (the “Licence”) is obliged, in accordance with Special Condition C8E paragraph 4, to prepare an exit capacity substitution methodology statement and an exit capacity revision methodology statement which shall be applied for the purposes of fulfilling National Grid’s obligation in respect of exit capacity release (C8E paragraph 3(c)).

National Grid is also required to submit to the Authority, for approval, the statements referred to above.

On 23<sup>rd</sup> February 2009 the Authority Directed that National Grid should submit its proposed methodology statements no later than 4<sup>th</sup> January 2011. In its letter explaining the Authority’s reasons for agreeing to a delay to the implementation of the exit capacity substitution and revision obligations, Ofgem required National Grid to submit two interim reports, no later than 30<sup>th</sup> April and 31<sup>st</sup> August 2010, on the progress towards preparation of the exit capacity substitution and revision methodologies, together with an assessment of our ability to ensure that implementation can be achieved to the revised timetable.

National Grid submitted its first interim report on 30<sup>th</sup> April 2010<sup>1</sup> and has prepared this report to fulfil the requirement set out above. It provides an update on progress since the first interim report and comments on the likely achievement of National Grid’s obligations to the revised timetable. Updated comments are provided on potential IT systems implications and other possible issues.

## 2. Timeline

To aid development of the exit capacity substitution and revision methodologies, and following previous work throughout 2007 to 2009 to develop an entry capacity methodology, National Grid arranged a series of workshops. At the Transmission and Distribution workstream meetings, held on 3<sup>rd</sup> December and 26<sup>th</sup> November 2009 respectively, National Grid presented a draft timeline (attached as appendix 1) for the development of a methodology that allowed comprehensive industry input whilst meeting the 4<sup>th</sup> January 2011 deadline.

The timeline provides two consultation stages. The formal consultation was scheduled for November 2010, over three months after the informal consultation closes. This was intended to provide sufficient time for responses to the informal consultation to be adequately considered and to allow for contingencies. As was envisaged in the first interim report National Grid was unable to commence the informal consultation until 30<sup>th</sup> June 2010. This consultation closed on 6<sup>th</sup> August 2010. The informal consultation document and draft methodology statement can be found on National Grid’s website at:

<http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/>

In addition to the informal and formal consultations on the proposed methodology, the timeline also shows when related developments (if necessary) could be progressed; e.g. UNC modification proposal, charging proposals. Excluded from the timeline is any Licence changes which it is expected would, if required, be initiated by Ofgem. It is our view, that unless there is a significant shift in thinking, there will be

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<sup>1</sup> A copy can be found on National Grid’s website at  
<http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/>

no requirement for modifications to the UNC (but see section 6 below) or the Transportation Charging Methodology.

National Grid has now hosted four workshops and will shortly be hosting a fifth. Due to the later dates for the informal consultation, workshop 5 will now be held on 7<sup>th</sup> September 2010. At this workshop National Grid intends to present the informal consultation findings.

### **3. Workshops**

Although National Grid is obliged to consult interested parties on its proposed exit capacity substitution and revision methodologies, there is no obligation to consult on its development. However, National Grid believes that a more efficient and acceptable solution can be achieved through industry engagement and proposed the series of workshops identified in appendix 1. These workshops fall outside of the existing UNC governance processes and are arranged and chaired by National Grid.

Presentation material and minutes for the first four workshops are available from National Grid's website at:

<http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/>

A brief summary of the first three workshops was provided in the first interim report.

At the fourth workshop on 25<sup>th</sup> May 2010 National Grid provided an assessment of the potential impact of exit capacity substitution and revision.

Firstly National Grid presented an analysis of the DN baseline re-jig undertaken in 2009. This showed that, within the constraints of the re-jig process, baseline capacity was reduced at 29 exit points to create additional baseline capacity at 33 exit points. In total 432 GWh/day of capacity was moved at an exchange rate of 1:1, i.e. 432 GWh/Day of incremental capacity was avoided.

National Grid then presented the result of network analysis for two theoretical new power station loads; in the South East where capacity is constrained, and in the North East where there is adequate network capability.

The North East example demonstrated that the new load would be accepted without the need for investment and hence substitution would not need to be considered. The load would be satisfied through existing capability and a revenue driver would not be sought.

The South East example demonstrated the importance of reliable entry flows to create exit capacity. With a high Isle of Grain gas flow there would be no need for investment or substitution for a new load up to approximately 300 GWh/day. This is due to the high flows in the extreme South East relieving constraints to the North of the new load.

If low flows, which National Grid believes is more realistic, are assumed then the new load exacerbates the constraint. For a theoretical load of 50GWh/day approximately £100m of investment would be needed. Analysis showed that this could be avoided in full by substituting from downstream exit points (Tatsfield). The analysis resulted in a capacity exchange rate of 0.649:1. If only upstream exit points were to be considered then there would be insufficient unsold baseline capacity available for substitution. Hence partial substitution could occur, from Luxborough Lane and

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Horndon/Barking, at an exchange rate of 1.546:1 with 3.7 GWh/day of residual investment required.

Finally, National Grid described how exit capacity revision would work. It is envisaged that capacity revision would use the substitution process. The key difference being that notional exit points, created when reliable entry flows have been established, would be used as the primary donor point.

#### **4. Informal Consultation**

Following the series of workshops National Grid consulted on the issues raised and produced a draft methodology statement. This draft primarily reflected National Grid's current thoughts, but also indicated how the methodology would be drafted if National Grid were to adopt alternative proposals. The consultation documents can be found on National Grid's website via the link in section 3.

In the consultation document National Grid described the various issues, and sought views on possible options. Where appropriate, justification for alternative approaches was requested.

The consultation, conducted over the period 30th June to 6th August 2010 received nine responses. These responses have been placed on National Grid's website. Analysis of the responses will be presented at workshop 5 together with National Grid's likely approach. Although some reference to responses is made in this document, a comprehensive review has not been included.

#### **5. IT Impacts**

Prior to the first interim report National Grid undertook a preliminary assessment of the IT impacts of the potential exit capacity substitution and revision proposals. This assessment involved discussions with the teams that manage the exit capacity application process and those working on the implementation of systems for exit reform. It considered whether existing system functionality, and that planned for 2010/2011 release, is sufficient to accommodate the possible proposals. The assessment has not involved discussions with, or studies by, Xoserve.

Due to the relatively simple nature of likely proposals for the methodologies, National Grid did not foresee IT issues being an impediment to the implementation of exit capacity substitution and revision provided that implementation is along the lines of the proposals previously outlined. This view has not changed, but will continue to be reviewed throughout the process.

National Grid identified potential issues with regard to the management of capacity requests under an ARCA or Adhoc application in the determination of available capacity pending assessment and approval of any substitution proposals. Further investigations into these potential issues have been undertaken. Although it may be efficient in the longer term for some systems work to be undertaken to totally automate the process, we still believe that existing functionality can be used to facilitate the introduction of exit capacity substitution.

As systems testing of exit reform changes progresses further issues may be identified for which IT development may be required. National Grid is monitoring testing activities for any such issues. No further issues have been identified since the first interim report was made. In the event that further issues are identified that may

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require systems changes National Grid will then discuss requirements with Xoserve to identify costs and implementation lead-times.

At workshops and in response to the informal consultation it has been suggested that National Grid should consider substitution of sold capacity, particularly where a User Commitment exists. This is discussed further below. However, a change of this nature is likely to have significant IT impacts in order to facilitate necessary processes, e.g. a surrender window. As National Grid considers such changes to be outside the scope of exit capacity substitution, further IT investigation has not been undertaken with regard to this issue.

## 6. Other Issues

### **Licence Changes.**

Ofgem raised at workshop 1 the possibility of a Licence change, as was undertaken for entry substitution, to clarify the scope for the Authority to veto exit capacity substitution and revision proposals. Participants have been reassured by statements from Ofgem that the Authority has sufficient powers to veto proposals even where these proposals are consistent with the approved methodology. This issue was also raised through the informal consultation. There was no demand for further clarification through the Licence. A firm decision on such Licence changes lies with Ofgem.

As with entry capacity substitution, additional Licence changes may be required: to facilitate the implementation of exit capacity substitution and revision, i.e. to ensure that the Licence allows sufficient time for Ofgem to undertake an Impact Assessment between National Grid's submission of the methodology statements and the Authority's approval/veto. These changes should, if deemed necessary, be developed by Ofgem and will not be progressed by National Grid.

Any such change will require Ofgem to manage the Licence change to align with the anticipated date of submission for approval, by the Authority, of National Grid's proposed methodology statement. This is because National Grid anticipates completing its industry consultation early in December. The Licence requires submission of proposals within 14 days of consultation closing, i.e. mid December, and not 4<sup>th</sup> January 2011, which is the latest submission date stated in the Authority's direction of 23<sup>rd</sup> February 2009. This issue could be managed, for example, by a direction, under Licence Special Condition C8E paragraphs 4 (b) and (c) subparagraphs (iv) (cc), allowing National Grid to complete its consultation as intended but to delay formal submission until 4<sup>th</sup> January 2011.

As part of exit capacity revision, National Grid has identified the creation of "notional exit point". These points will be used as a process step between the identification of additional exit capability created by incremental entry capacity and the allocation of this capability as baseline at an actual exit point.

Exit capacity revision requires the revision of NTS exit baseline exit flat capacity. Only NTS Exit Points, not notional points, have baselines. Hence it might be argued that these notional points need to be created in the Licence. This question was raised in the informal consultation with two respondents agreeing with National Grid view that because notional exit points are a step towards baseline revision, such a change is not required. Ofgem may have a different view on this issue.

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### **UNC Modification Proposals**

The exit capacity substitution and revision methodologies, in the form currently envisaged, do not alter exit capacity application and allocation processes. Hence, National Grid believes that implementation will not require modifications to UNC.

Development of the methodologies has, however, identified an issue in respect of capacity available for release in the October to December period. After exit capacity allocations are made at the end of September National Grid will investigate substitution opportunities. Hence, unsold capacity may be identified for substitution to meet a need for incremental capacity elsewhere. It is possible that, during the period following allocations and before approval/rejection by the Authority of National Grid's substitution proposals (likely to be in December), a User submits an ad-hoc capacity application, thus placing simultaneous demands on the same quantity of capacity.

Feedback from the informal consultation was in favour of National Grid withholding this capacity from release until after the Authority's decision. In addition, some, but not all, respondents thought that this refinement of the capacity release rules should be specified in UNC. On further review, National Grid believes that a change to capacity allocation and availability rules in the UNC is not required, but that additional clarification would be beneficial. National Grid is not intending to raise a UNC modification proposal at this time but will be incorporating changes to the ExCR methodology statement. Notwithstanding this, National Grid may, in future, raise a UNC modification proposal, but implementation would not be essential to the implementation of exit capacity substitution.

### **Charges**

Consistent with current proposals, National Grid does not envisage any new, or modified, charges being required to implement exit capacity substitution and revision.

### **European Issues**

As discussed in workshops and elsewhere, work is progressing at a European level to develop regulations that ensure the free flow of energy across state boundaries. Due to the nature of connected operations, any possible impacts of substitution are likely to be of greater concern at Moffat interconnector. However, the new regulations could have implications for the exit capacity substitution methodology at both Moffat and Bacton.

Concern has been raised at workshops that exit capacity substitution could damage downstream (of Moffat) operators' ability to meet their statutory obligations and that consideration should be given to treating this exit point differently.

National Grid's position is that all exit points should be treated equally unless a robust case is put forward. National Grid believes that excluding interconnectors from substitution in advance of any clarity on European regulations could be seen as undue discrimination. This issue was raised in the informal consultation. Some support was received for excluding interconnectors from substitution but others opposed any differential treatment for different categories of offtake.

## **7. Assessment of ability to achieve dates**

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Whilst workshop participants have expressed doubts about the scale of benefits that the exit capacity substitution and revision obligations will deliver they have supported the development of a pragmatic, proportionate, solution. However, concerns have been raised around the increased uncertainty created by a tightening of the system which would reduce flexibility and the ability of the NTS to meet shippers' and operators' needs. These concerns have been repeated in the informal consultation responses.

Based upon responses to the informal consultation, it is unclear whether National Grid will obtain full support for each aspect of its potential proposals in their entirety when the formal consultation is undertaken in the autumn of 2010. However, options have been explored, all issues openly debated, and feedback has been acted upon.

Notwithstanding that further work is required to finalise exit capacity substitution and revision methodologies that meet the requirements of the Licence whilst providing mitigation against the legitimate risks identified by workshop participants, National Grid believes that it will be able to submit a proposed entry capacity substitution and revision methodology statement to the Authority for approval by 4<sup>th</sup> January 2011.

**Appendix 1 – Draft Timeline for Development and Implementation of Exit Capacity Substitution and Revision Methodologies.**

