

## **EOWG 28<sup>th</sup> June 2006**

### **Current Flex Position & Complementary/Alternative Ways Forward**

#### **Background**

EOWG 28<sup>th</sup> June affords an opportunity to consider the separate paper that describes the rationale for a constrained long-term release of flexibility capacity consistent with that capability that might be considered to be inherently available within the system without any explicit investment specifically to support additional flexibility capacity. In the light of the determined 22 mcm of “flexibility capacity” availability National Grid has started the process of considering whether the application of some zonal principles might help mitigate some of the risks and unintended consequences arising from the currently proposed “pure” nodal product. The above is considered in EOWG paper (file: 060628\_NTS\_Flexibility\_zonal\_attributionv1.0).

It is recognised that there is a risk that the 22 mcm of flexibility capability availability might not be sufficient to satisfy all demands but that it would not necessarily be efficient to build additional capability given the risk of “misleading signals”.

Two potential approaches have emerged during extensive discussions with users of the system to address this risk:

- the development of “physically” and “financially” firm flexibility product releases
- short term access to flexibility via acceptance of OPNs with the introduction of potential rationing mechanisms close to gas flow if “constraints” are experienced.

#### **Issues associated with the simple “vanilla” flexibility product**

The EOWG paper referred to above indicates that the envisaged network for 2010 might have an inherent National linepack availability of around 22 mcm under a wide range of supply and demand scenarios.

Assuming a “single flexibility capacity” product, there may be a risk that DNs might either:

- have to book their aggregate maximum nodal requirements if they were relying on the NTS; and/or
- invest in their network to provide the difference between what they have secured “firm” from the NTS and what their total requirement is.

The introduction of some zonal principles into the longer term application and release processes may go some way to addressing the concerns although it is by no means certain that the aggregate requirements for flexibility capacity would be satisfied within the 22 mcm of flexibility that might be released in the longer term releases.

One approach might be to contemplate selling flexibility capacity greater than the aggregate physical availability. Given the nature of NTS’ obligations National Grid NTS considers that this is only credible if it could be sure that it had system management tools available to it to maintain the integrity of the total system.

National Grid NTS believe that in order for all transporters to satisfy their statutory obligations either NTS would have to demonstrate that it could accommodate simultaneous utilisation of all flexibility capacity holdings or that the DNs had other means of satisfying those requirements should such NTS service not be available. From an NTS perspective this would involve either the provision of the required infrastructure or by having an effective tool to ensure that when utilisation of flexibility beyond physical capability is contemplated, it can be managed. Without such management of offtake flow rate variations a failure to deliver gas on another part of the total system may occur.

Having regard to the requirements of all users, including DNs and DCs there is a risk that National Grid NTS might receive flexibility capacity requests beyond physical capability.

A simple commercial buyback tool will not provide the necessary guarantees that physical action will result and hence is not considered sufficient to warrant release beyond physical capability. Hence in a simple single (“vanilla”) product world, investment may be the only approach to ensure that the commercial sale can be guaranteed.

National Grid NTS has therefore concluded that it would be inappropriate to contemplate overselling beyond anticipated physical availability through a “vanilla firm” model.

### **A more sophisticated approach which seeks to address these concerns**

Predicated on the assumption that we are seeking to define common flexibility products that meet the needs of DNs and DCs, National Grid NTS continues to seek a product definition which:

- recognises the fact that coincident physical capability is likely to be below the aggregate of individual offtake specific requirements;
- ensures efficient investment decisions (and hence regulatory drivers are satisfied); and
- meet the requirements of all stakeholders, particularly in the context of NTS and DN obligations.

This has led National Grid NTS to the conclusion that National Grid NTS would need to sell two types of capacity; a “physically firm” level (effectively underpinned by physical assets) and a “financially firm” complement (that may be less firm in the context of increased levels of coincident flexibility utilisation and would be the subject of some form of guaranteed curtailment when necessary to maintain the physical integrity of the NTS).

### **Key product features**

The key characteristics of the products (as they might be released in the “longer term”) might be:

Attribute	“Physically firm”	“Financially firm”
Firmness	Very high probability availability – sufficient to provide close to 100% certainty	Potentially lower level of certainty <ul style="list-style-type: none"> <li>• DNs to factor potential uncertainty into their planning processes;</li> <li>• NTS to provide information to inform DN determination of requirements</li> <li>• Current levels of utilisation would imply very low levels of risk</li> </ul>
Commercial buy-back	<ul style="list-style-type: none"> <li>• no requirement to offer back</li> </ul>	<ul style="list-style-type: none"> <li>• users determine buy-back offer prices</li> <li>• non-discriminatory arrangements to use buy-back;</li> <li>• Risk/reward to NTS via incentives/liabilities regime</li> <li>• requirement to offer back when essential</li> <li>• “buy-back” prices capped;</li> <li>• liability arrangement where “market” doesn’t deliver buy-back but NTS must manage flows;</li> </ul>
Pricing	Constrained release could be conducted on an auction basis, incremental bookings priced at LRMC (high prices)	Auction release, reserve price may be linked to “buy-back” cap price
Investment requirements	Bookings needing to be supported by underlying infrastructure	NTS discretion as to whether “sales” need to be physically underpinned

The above could be used to define “generic products” that could apply at all NTS offtakes; NTS/DN offtakes, (simple) DC offtakes, interconnectors and storage connection points.

The differentiation would apply in the long term releases. It may be that similar concepts could be used in the shorter term releases.

This product structure affords a high degree of certainty (to “physical firm” capacity) but with the ability to ensure efficiencies (to all users and transporters) via the “financially firm” access. This may afford an opportunity to meet the needs of the respective parties.

National Grid NTS is talking to the DNs to establish whether this approach has any merit and would welcome views from both DNs and DCs as to whether this approach has any merit.

**Questions for EOWG consideration**

The “financially firm” product adds some complexity into the regime but may permit users to obtain flexibility well in advance of gas flow.

- Is a financially firm product for capacity release in excess of 22 mcm of potential use to DNs and DCs?
- What information would be necessary to support user assessment of the “financially firm” product?