Short Term Operating Reserve Tender

Tender Assessment Principles (Issue 2, December 2008)

This note sets out the principles that National Grid considers in assessing tenders for Short-Term Operating Reserve (STOR) tender, and constitutes the tender assessment principles published by National Grid for purposes of the short-term operating reserve tender rules and standard contract terms.

Background

National Grid procures its reserve requirement through a number of balancing services to enable it to manage the security and quality of supply. The requirement comprises a number of different elements which cater for different events or circumstances that occur on the system. The elements are essentially differentiated by a variety of response times (0-240 minutes) to deliver MW to the system in order to meet prevailing circumstances.

The product which preceded STOR (Standing Reserve) was designed to allow for sufficient short-notice providers to be available to secure the system following generation losses and unpredicted changes in demand events which require a response time of 20 minutes and less.

The same requirement for reserve that can respond at 20 minutes and less still exists and the desire is still to meet this requirement through STOR going forward.

STOR was developed recognising that other potential reserve providers who cannot meet the 20 minute response time criteria could still be of value in meeting our reserve requirement. Hence a key aspect of the definition of the STOR product was to extend the maximum response time to 240 minutes to allow new providers to participate. However lower value is placed on providers with longer response times. The remainder of this document describes how tenders will be assessed.

Main Economic Assessment

National Grid will look to secure a proportion of its reserve requirement via STOR tenders, in an economic and efficient manner. The accepted tenders will be selected such that the total costs of securing the reserve and operating the system are lower than without the selection of those tenders.

In assessing the benefit of acceptance of a STOR tender, the value and costs of that tender is considered.

The forecast cost of an accepted STOR tender will reflect:

- Expected availability fees = tendered availability price * MW * expected hours of availability.
    - Availability price as per tendered by tender, expected hours available as forecast by National Grid influenced by historic performance of provider.

- Utilisation payments of STOR = tendered utilisation price * forecast MWh of utilisation.
    - A greater MNZT / minimum utilisation period will increase the forecast MWh of utilisation, and hence make the tender less attractive.

- Additional costs associated with provider unreliability. Non-delivery of providers will result in actions taken on services with quicker response time and high prices.

- Fixed costs associated with installing software and communications to allow National Grid to despatch and monitor the service provider.

The costs of alternatives to accepting an STOR tender will compromise:

- Cost of securing reserve through:
    - Offers within the Balancing Mechanism (BM) on unsynchronised generation
    - BM Start-Up services
    - PGBTs
    - Forward trading
    - Market length (zero cost)
    - Market provided headroom (zero cost)

- Costs associated with energy balancing. Without a STOR provider, for instance an offer is accepted elsewhere, at greater cost with similar response time.

As part of forecast National Grid will assess the varying requirements to create reserve across each season and window, and further the varying level of utilisation of this reserve.

A level of plant is required with response times up to 20 minutes to secure the system as the result of events such as generation losses or volatile changes in demand, as it is necessary to restore frequency response. Under STOR, National Grid continues to value the ability of generation/demand side providers to react within these timescales.

Flexible Providers

Under STOR, flexible providers will submit indicative availability for each window and season when tendering. These availabilities will be used to determine which tenders are economic to accept, given the underlying volatility that is expected in the alternative cost of actions. The flexibility of providers results in week-ahead availability being submitted to National Grid and using these submitted availabilities, National Grid will assess whether to accept or reject availability at week-ahead. This assessment is subject to all the other assessment principles described in this document.

Longer-Term Tenders

When assessing longer term tenders, National Grid will forecast:

- The reserve requirement for the next 10 years. Qualitatively, this is expected to increase as the plant mix changes (as larger or more intermittent generators are built). National Grid intends to publish a document during Spring 2009 detailing the reserve requirement into the future.

- The cost of securing reserve for the next 10 years.

- The risks in the two forecasts above.

These forecasts will feed into the main economic assessment, which is used to determine if we accept the tender.

Should a tender opt to index the availability or utilisation payments, the assessment process will consider the risk that the indexation puts on National Grid. In practice this means that a tender with fixed prices is more attractive to National Grid than one with indexation.

Further Assessment Principles

In addition National Grid will take into account other factors in the appraisal of compliant tenders. The order in which these factors are listed is not an indication of the relative importance of each to the others:

- Any health or safety issues relevant to tendered units or sites
- The past performance and reliability of the tenderer and/or tendered unit or sites(s) in delivering energy via the STOR product
- The interaction of any other balancing service provided by the tenderer to National Grid from the unit or site(s) in question
- The speed, flexibility and reliability of interface arrangements between National Grid and the provider
- The financial position of the tenderer and its holding company (if any)
- The location of the unit or site(s). Specifically, the extent of planned outages and limitations on the transmission or distribution system of any host public distribution system operator affecting unit or sites(s).
- The impact of agreed special conditions by the tenderer and National Grid.
- Any other factors that, in National Grid's reasonable opinion, are relevant in appraising the viability of any STOR tender submitted.