

Assessment Principles - Firm Fast Reserve

National Grid Electricity Transmission



Section 1

Assessment Principles

1.1 Introduction

This document sets out the principles that National Grid take into account when assessing tenders for Firm Fast Reserve.

1.2 Assessment Methodology

National Grid's objective is to operate the system economically and consequently, the assessment reflects that view. The accepted tender will be selected such that the total costs of securing and operating the system are lower than without selecting the unit.

In deciding whether to accept or reject a tender for Firm Fast Reserve service, National Grid calculates the forecasted cost of the tender, and assesses it against the alternative cost of delivering the equivalent service. The difference between **forecasted cost** and **alternative cost** is defined as the **cost benefit** of the tender.

The **forecasted cost** of the tender mainly consists of four components (wherever applicable):

- **Availability Payment = Tendered availability fee x Total hours tendered (as specified by the tenderer)**
- **Positional Payment = Tendered positional fee x Forecast total hours that the tendered unit would be called off to provide Firm Fast Reserve by National Grid**
- **Window Payment = Tendered window initiation fee x Forecast total number of windows nominated by National Grid**

- $\text{Utilisation Payment} = \text{Tendered utilisation fee} \times \text{Forecast utilisation volume}$

The total forecast cost of the tender is weighed up against the sum of a variety of potential benefits (**alternative cost**) that it may produce such as:

- $\text{Cost of operating alternative Fast Reserve service} \times \text{Total hours that the tendered unit is forecast to displace}$
- $\text{Cost of operating alternative reserve margin service} \times \text{Total hours that the tendered unit is forecast to displace}$
- $\text{Avoided utilisation price from Balancing Mechanism for Fast Reserve} \times \text{Utilisation volume the tendered unit is forecast to displace}$

The **cost benefit** of the tender will be subjected to a percentage cut off point (which varies in scope depending on a number of factors, such as the duration of the tender, for instance), which assists National Grid to manage the risk and uncertainties in contracting future services.

1.2 Other Assessment Considerations

Performance – The performance (such as response time) and reliability (such as expected MW delivery against actual MW delivery) of a tendered unit play a supplementary role in the tender assessment. If there are instances of gross underperformance or/and gross unreliability, the unit may not be considered for Firm Fast Reserve.

Restrictions – Any utilisation restrictions imposed by the tenderer would be taken into account during an assessment and any impact felt on the service by utilisation restrictions will be fed into the assessment, accordingly.

Constraints – If applicable, location based constraint devaluation will be applied to the assessment, although its impact will be duly mitigated if there is a benefit of contracted Fast Reserve being able to avoid constraint bids taken by NGET.

Interactions – If in the same tender round, there are a number of tenders from different providers, there may be interactions between the different tenders, and between the new tenders and existing providers. The interactions could affect the utilisation volume of existing and new providers, the value of reserve and alternative energy cost of marginal units in real time.

Scenario – To account for risk and uncertainties in the future system operating conditions, analysis will also be conducted for various scenarios such as alternative reserve cost, utilisation volume, alternative utilisation price, different system constraints and so on, to ascertain that the conclusion derived from the assessment is as robust as possible.

Section 2

Further Information

2.1 Further Information

Further information regarding Fast Reserve can be found on the National Grid website:

<http://www.nationalgrid.com/uk/Electricity/Balancing/services/reserveservices/fastreserve/>

Should you have any further queries over the service then please contact Steve Miller steve.k.miller@nationalgrid.com