

# Firm Fast Reserve - Assessment Principles

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## 1. Introduction

This document sets out the principles that NGENSO (National Grid Electricity System Operator) uses when assessing tenders for firm fast reserve.

NGESO's objective is to operate the system economically and consequently, the assessment reflects that view. The accepted tender will be selected such that it enables us to meet our fast reserve requirement without being excessively high.

## 2. Assessment Methodology

The assessment methodology described in this document is in line with the standard contract terms.

In deciding whether to accept or reject a tender for Firm Fast Reserve service, NGENSO calculates the **VWAP** (Volume Weighted Availability Price) for each tender. This **VWAP** is then weighted by factors which will add or reduce the value of tenders to produce the **AAP** (Adjusted Availability Price).

### 2.1 VWAP

The **VWAP** is a combination of two components. It considers the EFA blocks the tender covers and month(s) the tender covers.

$$VWAP (\text{£ per MWh}) = \frac{\text{Tendered Availability Fee (\text{£ per hour})}}{\text{Tendered Delivery (MW)}}$$

### 2.2 Adjusted Availability Price

There are many things that will add or reduce the value of tenders and these include:

- Location i.e. are the tendered units behind a constraint that is expected to be active
- Minimum Non-Zero Time (MNZT)
- Any overholding caused by the acceptance of the unit
- Restrictions on daily maximum energy utilisation

The submitted tenders will be stacked in order of lowest to highest **AAP** with tenders accepted up to our required volume.

$$AAP = VWAP \times Cf \times MNZTf \times DMEf$$

Where:

*AAP* = Adjusted Availability Price

*VWAP* = Volume Weighted Availability Price

*Cf* = Constraint factor

*MNZTf* = Minimum Non Zero Time factor

*DMEf* = Daily Maximum Energy factor

NGESO is licensed to manage the system in an economic and efficient manner and the cost of the contracts will be compared to ensure we procure fast reserve in line with market prices. If the total costs of the contracts required to obtain our full requirement is deemed excessively high, NGESO may reject tenders with **AAP** prices that show significant deviation from the average accepted tender price. Providers are expected to be price reflective in line with the market.

### 3. Other assessment criteria

Other assessment criteria that can be used as part of the assessment, include: Performance, Ramp Rates and minimum zero time (MZT).

#### 3.1 Performance

The performance 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 might not be considered for firm fast reserve until it can be proved that the unit will be reliable.

#### 3.2 Response and Ramp Rates

Faster speed of response to instructions is valued by NGESO. The firm fast reserve service is required to respond to system events, and therefore all providers must meet the minimum technical requirements. Additional capability beyond the minimum technical requirements, will be used to differentiate between tenders that are otherwise assessed to have an equal **AAP**.

#### 3.3 Minimum Zero Time

The MZT may be used to determine reductions in forecast utilisation. If the MZT following an instruction is particularly long, this may reduce how often the unit can be used. This variable is currently intended to be used to differentiate between tenders that are otherwise assessed to have an equal **AAP**.

#### 3.4 Interactions between contracts

If in the same tender round, there are several 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.

It is this interaction between tenders and the requirement that is described as overholding in this document.