

## **Reactive Power Market Tender Development** **Initial Proposals**

### **Background**

Obligatory Reactive Power is a mandatory service for which the requirement sits within the Grid Code (CC6.3.2). The obligatory service is payable on utilisation only and attracts a default price which is calculated monthly by reference to wholesale electricity prices and RPI. The historical Reactive Default price has been fairly volatile due to the reference to wholesale electricity prices. This can be seen from the graph in Appendix 2.

The Reactive Power Market<sup>1</sup> offers providers the ability to seek firm income via a capability price and/or fixed utilisation price for the provision of their Reactive Power service. The Reactive Power Market also provides a mechanism for the provision of non-mandatory reactive power (Enhanced Reactive Power Service).

The reactive power service is required by National Grid to maintain system voltage within statutory limits on a zonal basis. National Grid presently spends around £50m per annum on Reactive Power, of which circa £40m is attributed to the default payment mechanism and £10m to market contracts.

### **Purpose of the review**

The key driver behind this review is the decreasing number of participants in recent market tenders (see Appendix 1 for Tender data). National Grid is concerned over this trend due to the potential value a Market Tender process can offer in terms of:

- Hedging the risk of the volatility in the Default Payment Rate
- Providing a vehicle for a provider to attract more reactive utilisation by reducing their utilisation price in return for a capability fee
- Attracting additional reactive provision over and above the mandatory requirements

This document seeks views from the industry on some initial National Grid proposals for the review and development of the Reactive Power Market Tender process. The objective of the review is to look at the current reactive market arrangements with a view to improving the process to better meet both National Grid's and providers' requirements.

### **Scope of Review and Initial Proposals**

There have been several issues identified with the reactive power service to date that are felt to be leading to reduced participation in the service. This section summarises the areas that are within the scope of the review and sets out some initial considerations for development of the Market Tender service in an attempt to increase flexibility for providers.

#### **Tender Round Timescales and Contract Length**

The current bi-annual frequency of tenders and minimum contract length of 12 months have been previously cited by providers as barriers to participation in the service. Tender timescales can also preclude National Grid's ability to use the

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<sup>1</sup> Reactive Power tender process is set out in Schedule 3 of the CUSC

service for managing particular voltage constraints that arise outside of tender timescales. To date, such requirements have been addressed via bilateral contracts which are later published in the reactive market report but which could be viewed as undermining the CUSC tender process.

National Grid therefore proposes that the current bi-annual tender process remains but that there can be additional ad-hoc tenders should a specific voltage requirement arise. This should serve to increase transparency for providers and competition for provision for National Grid with regard to ad-hoc system requirements. It is also proposed that the minimum market contract length be shortened to 6 months.

#### Assessment Timescales and Principles

The current prescribed CUSC assessment period means that a market agreement is not offered until 10 weeks after a tender has been submitted and providers have indicated that this is too long. In order to reduce the assessment period it is proposed that the CUSC assessment criteria be simplified which may also benefit transparency to the market (particularly with regard to the subjective assessment element).

A further proposal which would serve to decrease tender timescales is the introduction of framework agreements which could potentially detail reactive attachment and MVAR breakpoint data. The ensuing reduction in assessment time means that tendered prices are less exposed to fluctuations in the default price. Subsequently, the option for Providers to withdraw from a market contract in the event that it is accepted by National Grid is no longer required and the contract becomes binding upon acceptance.

#### Market Contract Unit Substitution

For instances where tenders are submitted for multiple units at a single station but where not all units are accepted by National Grid for a market contract, it is proposed to introduce a unit substitution option for the duration of the market contract. This means that, where there are identical units at a station (in terms of reactive provision), providers can ensure even wear and tear across those units. It also benefits National Grid in that service provision is optimised for the duration of the market contract.

#### Tender Documentation and Market Information

Tender documentation and market information is currently very comprehensive and fairly complex. Rationalisation of this documentation is likely to increase participation and give more concise market signals to potential providers. A key method of provision of enhanced reactive power is Synchronous Compensation and yet due to the complexity of the Enhanced Reactive Power Market Tender service all such service provision is via bilateral agreements. It is therefore proposed that these documents be reviewed in line with any developments during this review.

### **Next Steps & Initial Questions**

To initiate industry engagement and debate on the proposed Reactive Market Tender developments, National Grid is holding a BSSG meeting in December 2008 where the proposals set out in this document will be discussed. The BSSG has been identified as the most suitable forum for the reactive power review due to the service being prescribed within the CUSC. Further information on the service can be found at <http://www.nationalgrid.com/uk/Electricity/Balancing/services/ReactivePower/>

In order to stimulate debate, BSSG participants are encouraged to consider the following questions prior to the meeting:

- What amendments should be made to the market process to better meet National Grid's requirements e.g. frequency of tenders, contract length, pricing structure etc?
- Should the market process remain within the CUSC or should the market arrangements be more commercial/ bilateral?

### **Timetable for Review**

The anticipated timetable for the review of the Reactive Power Market Tender process is as follows:

- November/ December 2008 – Present National Grid proposals to the BSSG and engage industry participants for comments and feedback
- December 08 - January 09 – National Grid to consider and respond to industry comments
- January – March 2009 – Fully develop proposals
- April 2009 – Propose any necessary amendments to CUSC via industry forums\* (if required)

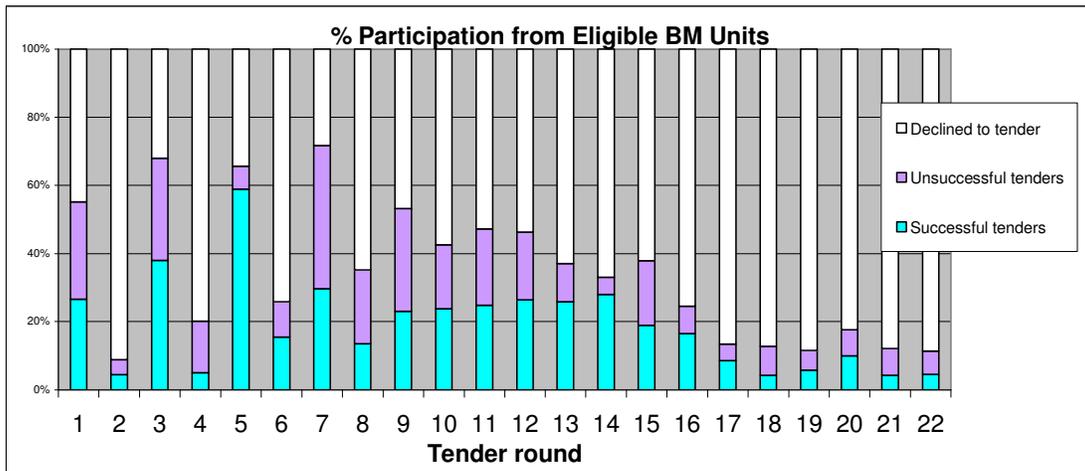
\*Timescales for subsequent implementation will be dependent upon subsequent industry comment and Ofgem determination.

If you wish to discuss any aspect of this document or the review, please contact Katharine Clench ([katharine.clench@uk.ngrid.com](mailto:katharine.clench@uk.ngrid.com) or 01926 656036).

**APPENDIX 1- Market Tender Information**

For both the two latest tender rounds (Rounds 21 and 22), 20 tenders<sup>2</sup> were received of which only 4 and 3 respectively proceeded to market contract. For the preceding 6 tender rounds, fewer than 20% of eligible units have submitted tenders whereas the first 16 tender rounds observed tenders from an average of 42% of eligible units. Figure 1 below shows participation figures for each tender round. While there is a drop-off trend from the implication of CAP45 in Tender Round 13, it can be seen that there was also a participation drop-off before its implementation.

Figure 1 – Historical Tender Round Participation



<sup>2</sup> Tenders received on a BMU basis for a minimum contracted period of 12 months

**Appendix 2 – Historic Reactive Default Price**

Figure 2 – Historic Default Prices since 2004

