

# Firm Frequency Response (FFR)

## Market Information for Tenders for DECEMBER 2009

National Grid wishes to highlight to participants its requirement for Firm Frequency Response. Participants are invited to note the inclusion of Figures 7 and 8 for this purpose, as well as the enhancement to the Price breakdown table on page 7.

### Total Frequency Response Requirements

Our indicative daily Total Requirement for Frequency Response for the above month is shown by Settlement Period for weekdays, in Figure 1 and for Saturdays, Sundays and Bank Holidays, in Figure 2. The graphs show the requirement to a maximum frequency deviation of 0.5Hz for Primary for a 1000MW loss and 0.5Hz for Secondary for a 1320MW loss and 0.5Hz for High Response for an 840MW demand loss.

*Indicative Total Response Requirement - Weekday*

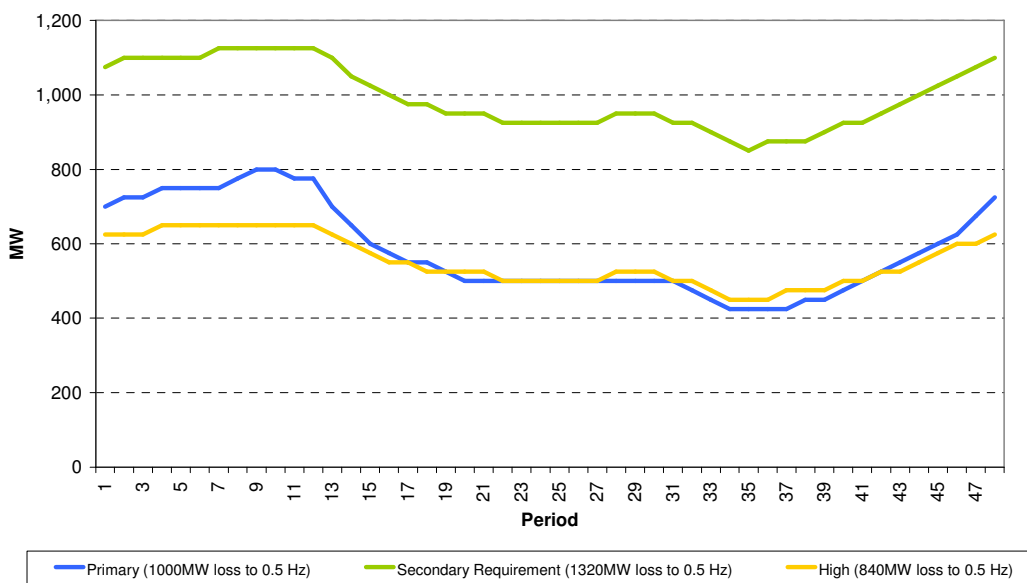


Figure 1

*Indicative Total Response Requirement - Weekend*

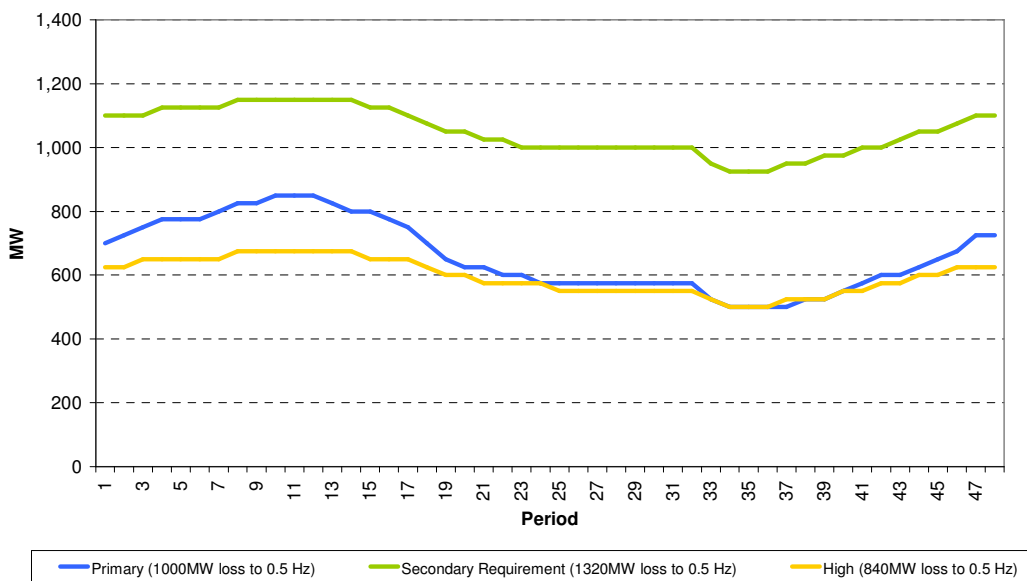


Figure 2

**Minimum Dynamic Response Requirement**

The indicative minimum required levels for Dynamic response are shown for Weekdays, Figure 3, and Saturdays, Sundays and Bank Holidays, Figure 4. The levels are shown for delivery at 0.5 Hz deviation, although 0.2 Hz is the largest frequency deviation within normal operational range. The total amount of response delivered by Dynamic providers contributes to meeting the Total Response Requirement, Figures 1 and 2, above.

*Indicative Minimum Dynamic Response Requirement - Weekday*

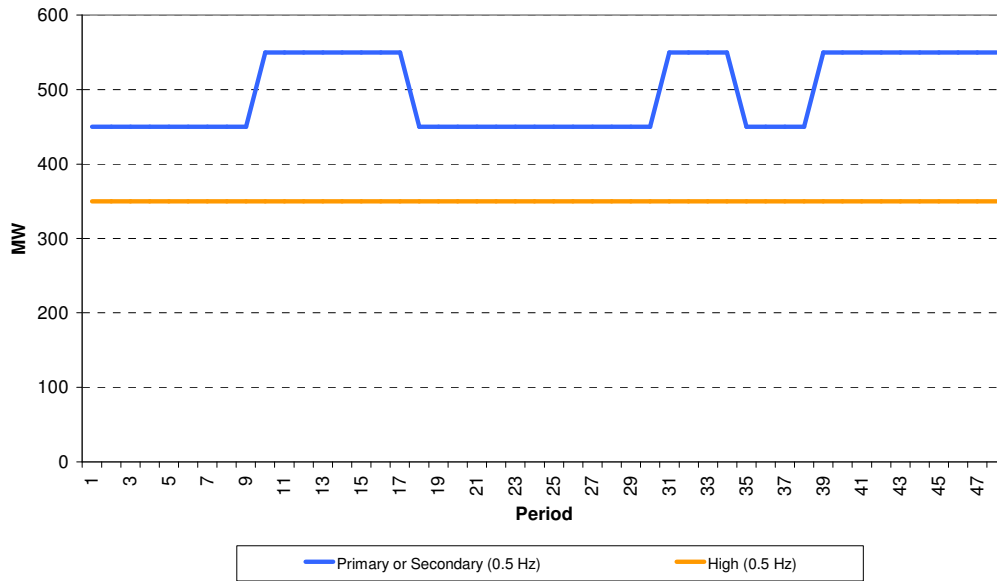


Figure 3

*Indicative Minimum Dynamic Response Requirement - Weekend*

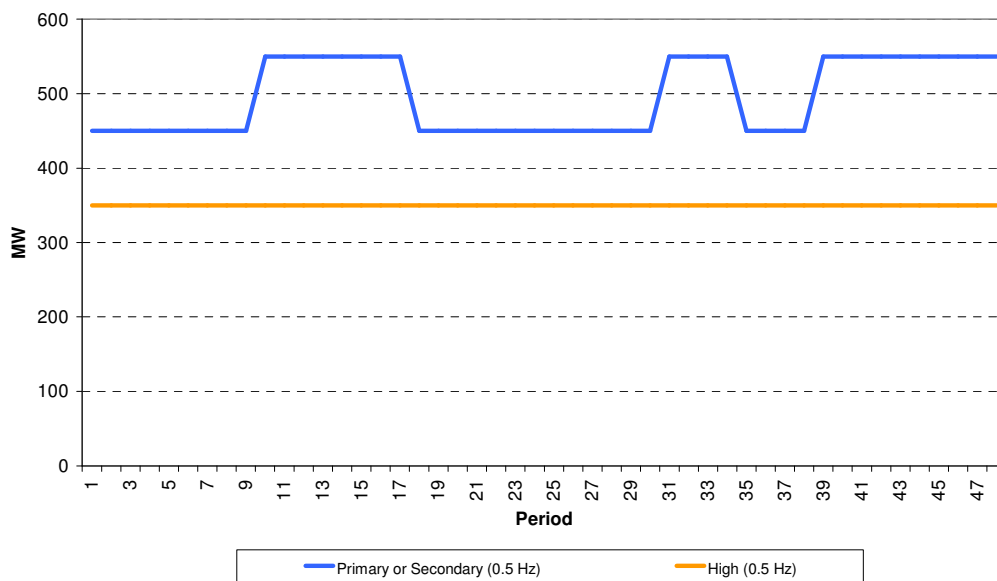


Figure 4