

Demand Side Services Brief

In order to further increase Demand side participation in the provision of Balancing Services, National Grid piloted a new commercial Balancing Service called Demand Turndown. Demand Turndown is the provision of active power (MW) by large Demand users or aggregators of smaller Demand sites and/or smaller Generation, and can be used to meet its contingency reserve requirements. There were two trials of the service in Summer 2004 (5th April to 30th July) and Winter 2004/05 (29th November – 31st March), with the service structure of the latter trial being modified to encourage greater participation in the service.

Existing Balancing Services (e.g. Standing Reserve) feature short response call-off period and this precludes less flexible parties from the provision of Balancing Services. National Grid addressed this issue by structuring the Demand Turndown pilot scheme to allow providers freedom to choose any duration of standby period as well as call-off period in order to deliver a minimum of 100MW across fixed service periods over the morning peak demand. The primary aims of the Summer Demand Turndown trial were to increase liquidity of Demand side providers and ascertain the viability of the scheme and with that in mind, National Grid relaxed the 100MW minimum criteria and agreed to make availability payments as well as utilisation payments. However, the Summer Demand Turndown trial experienced lower than anticipated participation; two aggregators (Gaz de France and Npower) participated in the Summer trial offering an average daily availability for the two service periods of 66MW (0930 – 1130 hrs) and 48MW (1130 – 1330 hrs) respectively. Demand Turndown was instructed 8 times (7 Utilisations; 1 Standby). Feedback from providers for the lack of participation include

- supply contract negotiations which coincided with the Demand Turndown trial period
- new providers were hesitant to participate and may have adopted a 'wait and see' approach
- operational drivers outweighed the gains of providing Demand Turndown
- lack of awareness of the service
- limited choice of aggregators
- rigid service periods

In light of the feedback received from the Summer Demand Turndown trial National Grid decided to extend the Demand Turndown trial into winter 2004/05 with modifications to the structure of the service to address learning points/issues from Summer trial. Other merits of conducting a Winter Demand Turndown trial were to :

- conduct a broader assessment of the value of Demand Side
- encourage participation by providers that may have adopted a 'wait and see' approach
- offer another opportunity for providers who did not participate in the Summer trial as a result of negotiating supply contracts.
- new demand side players may decide to participate

The Winter Demand Turndown trial was launched with longer contracting and notice periods prior to the commencement of the trial to raise greater awareness and to encourage as many providers as possible to participate. A greater degree of flexibility was added to the winter service structure by removing the rigidity of two fixed windows (the winter trial had a single fixed two hour service period, 0900-1100hrs) and adding a new feature called Demand Management. Demand Management is a highly flexible derivative of Demand Turndown and was offered for all settlement periods outside the fixed service period during the Winter Demand Turndown trial. In Demand Management, service providers have complete pricing freedom to set prices that would be commensurate with operational gains and provide a minimum of 25MW across any consecutive settlement periods of their choosing. Providers in the winter trial therefore had the option of participating in Demand Turndown (100MW min requirement between 0900-1100hrs with utilisation and availability fee) and/or Demand Management (min 25MW tranche across a minimum of any two consecutive Settlement Periods; utilisation fee only).

Once again participation in the Winter Demand Turndown trial was lower than initially indicated with providers explaining that organising resources across the festive season was difficult and that the limited use of the service by National Grid did not encourage participation in the trial. Demand Turndown was available on 27 days or 32% of the trial duration and Demand Management was available on 55 days or 64% of the trial duration. Npower was the only aggregator to provide Demand Turndown with an average declared volume of 139MW over the 27days. GdF offered an average Demand Management volume of 26MW for the 55 days. Two Demand Turndown instructions were issued (1xStandby; 1xUtilisation) in the course of the Winter trial.

Following the expiry of the Winter trial, National Grid continues to offer Demand Management as a standalone service to any interested party that meets the minimum criteria. To date there has been no participation in the service.