Firm Frequency Response Market Information for December-15

Monthly Report   **Published October 2015**

This Market Information Report is relevant for **tenders submitted in November for delivery in December.**

Tenders from eligible service providers for firm frequency response should be submitted by **Monday 2nd of November 2015** (1st business day) for all tenders.

National Grid will notify service providers of the outcome of the tender assessment by **Tuesday 17th of November 2015** (12th business day).

For successful tenders, National Grid will notify nominated windows, following assessment by **Tuesday 17th of November 2015** (12th business day).

Introduction

Firm Frequency Response (FFR) is a service through which balancing mechanism (BM) and non-BM participants commit to providing a given measure of response for a fee. National Grid procures the services through a monthly tender process ahead of BM timescales.

Submitted prices are compared to the costs of alternatives to deliver the equivalent level of frequency response. Mandatory response costs include the forecast response holding costs, the forecast bid and offer positioning costs and the forecast cost of creating headroom to provide response. You can find more information about how these costs are considered during tender assessments via the link below.

This report provides information to current and potential providers about the volume of, and time periods over which, response is required.

Highlights

In October 2015, we received 48 FFR tenders for delivery to start from November onwards. 11 tenders were from BM units and 37 were from non-BM units. More details on the tenders accepted/rejected are available from the post-assessment tender report.

Both the FFR Assessment Principles and Post-Assessment Tender Report are available at:
http://www.nationalgrid.com/uk/Electricity/Balancing/services/frequencyresponse/ffr/

For a monthly summary of the cost of services procured please follow the below link to the Monthly Balancing Services Summary (MBSS), which breaks costs down by service.
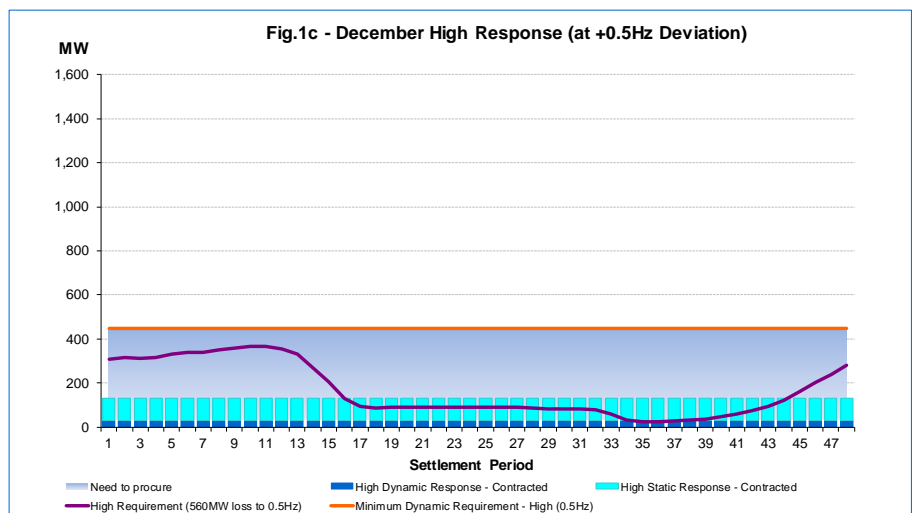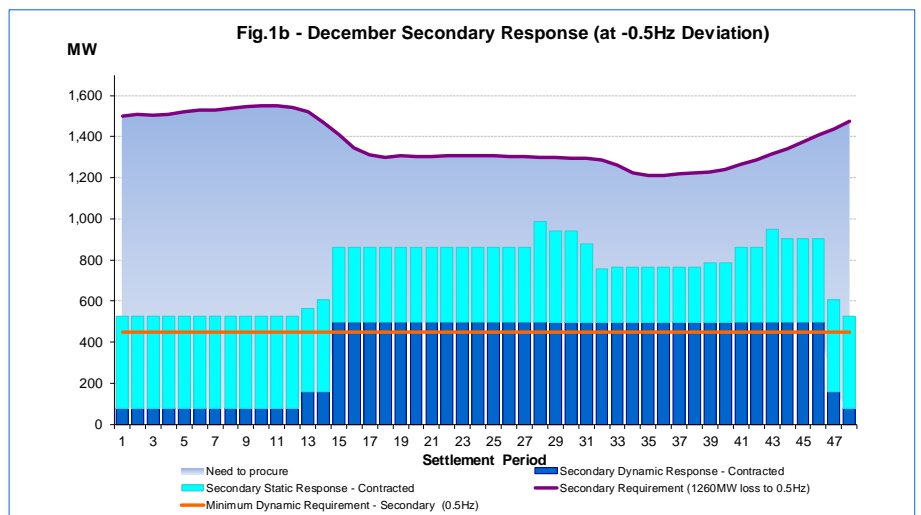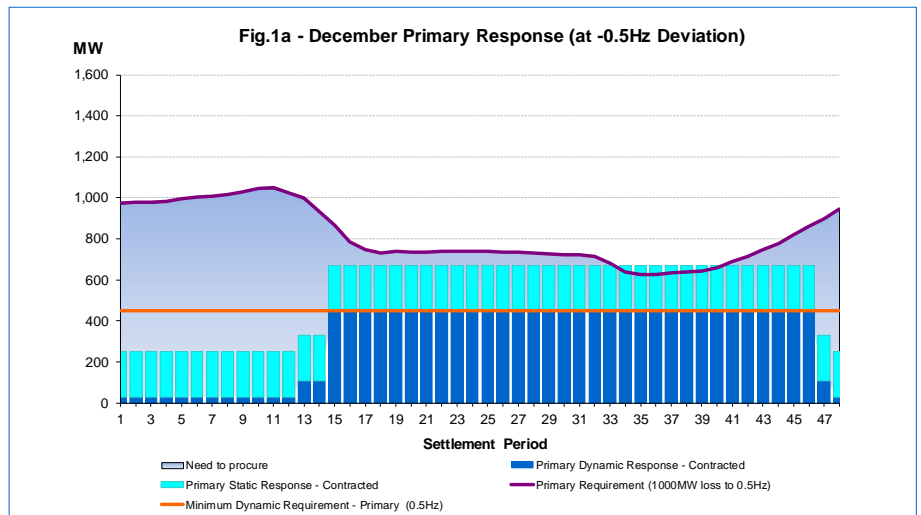
http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Services-Reports/

FFR Market Information
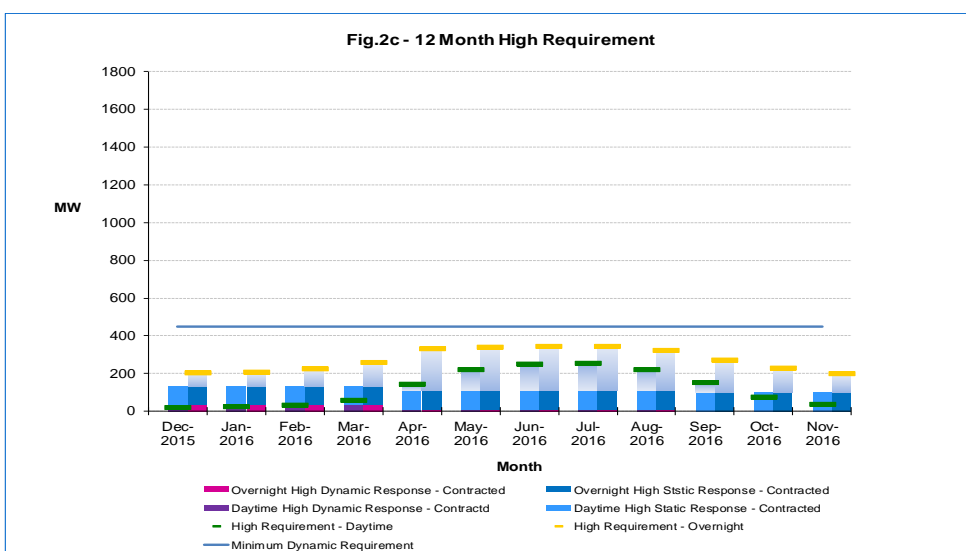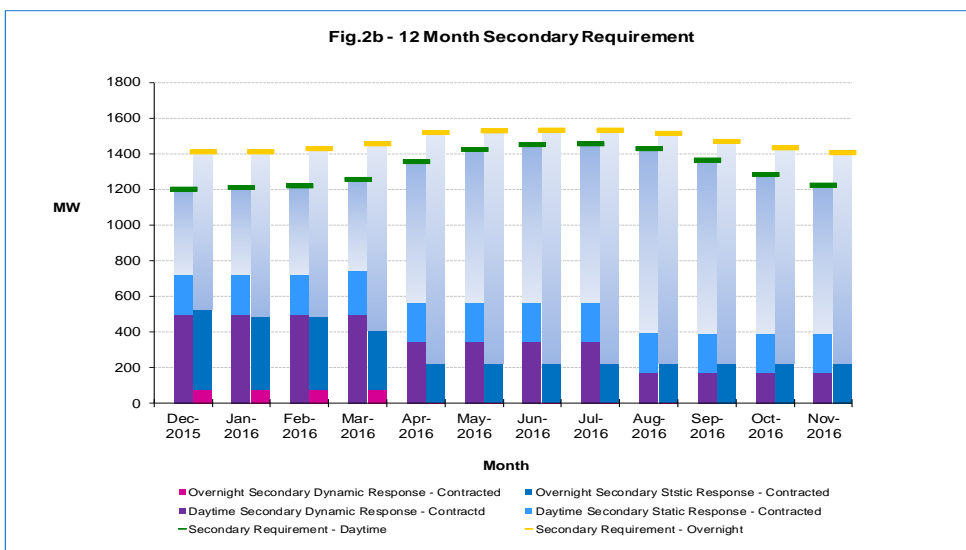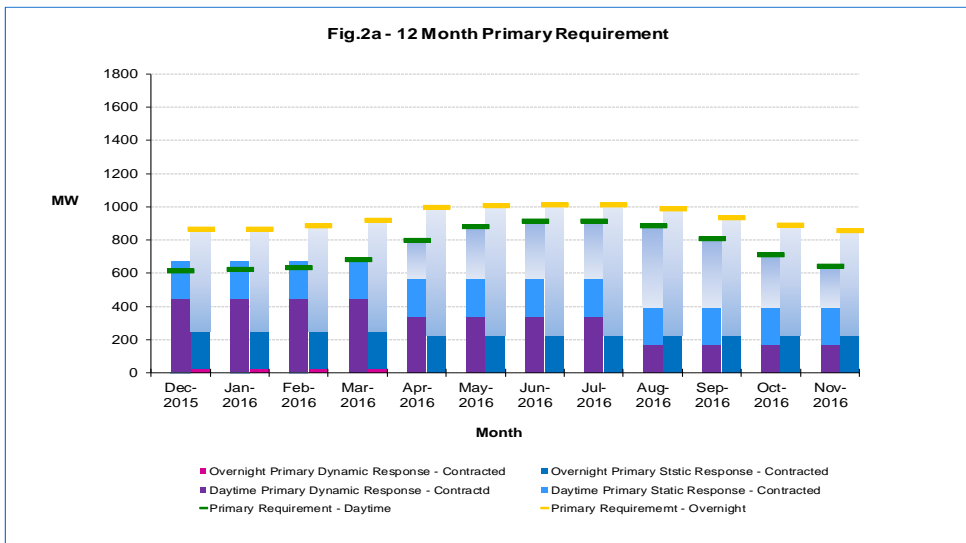
December-15 Requirement

The figures on this page show the amount of existing contracted response capability available by Settlement Period, against the minimum dynamic requirement and the total overall requirement.

The remaining requirement is the grey/blue shaded area. NGET will look to fill this requirement via contracts ahead of time or in real-time via the mandatory market.

Key points

- The response requirement for each type is greater overnight.

- Greater preference is given to secondary response. More secondary response is required than primary or high response

- For both primary and secondary response the total requirement is greater than the minimum dynamic requirement. This means a Static service could help meet the total requirement.

- For high response the minimum dynamic requirement is greater than the requirement. This means a Static service would not help meet the requirement.

Fig.1a - December Primary Response (at -0.5Hz Deviation)

Legend: Need to procure; Primary Dynamic Response - Contracted; Primary Static Response - Contracted; Primary Requirement (1000MW loss to 0.5Hz); Minimum Dynamic Requirement - Primary (0.5Hz)

Fig.1b - December Secondary Response (at -0.5Hz Deviation)

Legend: Need to procure; Secondary Dynamic Response - Contracted; Secondary Static Response - Contracted; Secondary Requirement (1260MW loss to 0.5Hz); Minimum Dynamic Requirement - Secondary (0.5Hz)

Fig.1c - December High Response (at +0.5Hz Deviation)

Legend: Need to procure; High Dynamic Response - Contracted; High Static Response - Contracted; High Requirement (560MW loss to 0.5Hz); Minimum Dynamic Requirement - High (0.5Hz)

FFR Market Information

12-Month Requirement

Fig.2a - 12 Month Primary Requirement

Fig.2b - 12 Month Secondary Requirement

Fig.2c - 12 Month High Requirement

The following charts contain similar information to the monthly requirements above but we have extended it over the next 12 months. The charts provide an estimate of the response requirements by day/night and include information on existing contracts. The grey/blue shaded area is the approximate response that will need to be procured. The minimum dynamic requirement for primary, secondary and high response over the 12 month period is 450MW.

Key points

- The response requirement is greater during the summer than winter.

- The response requirement is greater overnight than during the daytime

- The secondary response requirement is greater than primary or high requirements throughout the year

- The primary and secondary response requirements are greater than the minimum dynamic throughout the year. A static response service could therefore be beneficial in meeting the total requirement.

- For High frequency response, the minimum dynamic response (450MW) is greater than the requirement throughout the year. A static response service would not be beneficial in meeting the requirement.

Requirement Tables

The following tables state the predicted amount, in MW, of response we need to procure in the future.

November requirement:

Settlement Period	Amount required (MW)		
	Primary	Secondary	High
1	722	974	177
2	730	981	185
3	726	978	181
4	732	983	187
5	746	994	199
6	754	1,001	208
7	756	1,003	210
8	766	1,011	219
9	778	1,020	229
10	797	1,026	236
11	797	1,026	236
12	773	1,017	225
13	667	957	201
14	603	863	140
15	196	552	76
16	115	485	0
17	75	451	0
18	61	439	0
19	69	446	0
20	66	444	0
21	66	444	0
22	68	445	0
23	67	445	0
24	70	447	0
25	69	446	0
26	66	444	0
27	66	444	0
28	59	314	0
29	57	354	0
30	53	351	0
31	52	414	0
32	45	532	0
33	11	493	0
34	0	456	0
35	0	447	0
36	0	447	0
37	0	452	0
38	0	457	0
39	0	440	0
40	0	456	0
41	17	401	0
42	42	421	0
43	77	366	0
44	108	436	0
45	149	470	31
46	191	504	71
47	568	833	106
48	693	951	149

12 month requirement

	Amount required (MW)		
Daytime	Primary	Secondary	High
Dec-2015	0	477	0
Jan-2016	0	485	0
Feb-2016	0	495	0
Mar-2016	6	513	0
Apr-2016	229	787	32
May-2016	310	854	109
Jun-2016	344	882	141
Jul-2016	347	885	145
Aug-2016	484	1027	112
Sep-2016	411	967	48
Oct-2016	312	885	0
Nov-2016	244	829	0

	Amount required (MW)		
Overnight	Primary	Secondary	High
Dec-2015	611	882	71
Jan-2016	612	925	72
Feb-2016	632	941	91
Mar-2016	667	1048	124
Apr-2016	766	1290	220
May-2016	778	1300	231
Jun-2016	782	1303	235
Jul-2016	783	1304	236
Aug-2016	758	1284	212
Sep-2016	707	1242	169
Oct-2016	664	1206	128
Nov-2016	629	1177	94

If you have any queries, suggestions or feedback on the content or format of the new report please contact your account manager or steven.lam@nationalgrid.com