

Firm Frequency Response Market Information for May-16

Monthly Report

Published Mar-16

Key points

This Market Information Report is relevant for tenders submitted in **Apr-16** for delivery in **May-16**.

Tenders from eligible service providers for Firm Frequency Response should be submitted by **Fri 01-Apr-2016** (1st business day) for all tenders.

National Grid will notify service providers of the outcome of the tender assessment, and preliminary nominations, by **Mon 18-Apr-2016** (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 service 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. More detail can be found in the assessment principles, the link can be found below.

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

Highlights

In Mar-16, we received 263 FFR tenders from 38 units. More details on the tenders accepted/rejected are available from the post-assessment tender report.

In order to reduce variations in tender submissions, our preference is to limit the term of forward contracts to a maximum of two years. In addition tenders should not start later than 2017.

A number of changes have been made to the report including the removal of the required static characteristics pending completion of further work. Additional commercial services have been added to our contracted static position to better reflect the FFR requirement, and the 12 month Primary daytime requirement has also been corrected.

Links

Assessment Principles and Post-Assessment Tender Reports

<http://www.nationalgrid.com/uk/Electricity/Balancing/services/frequencyresponse/ffr/>

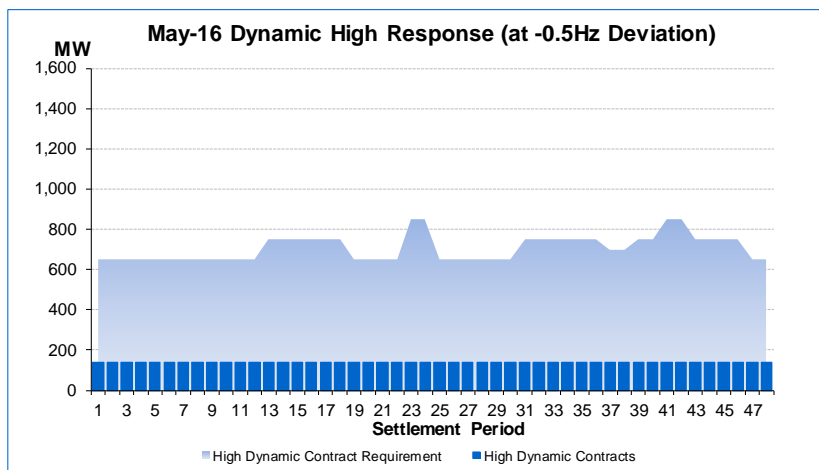
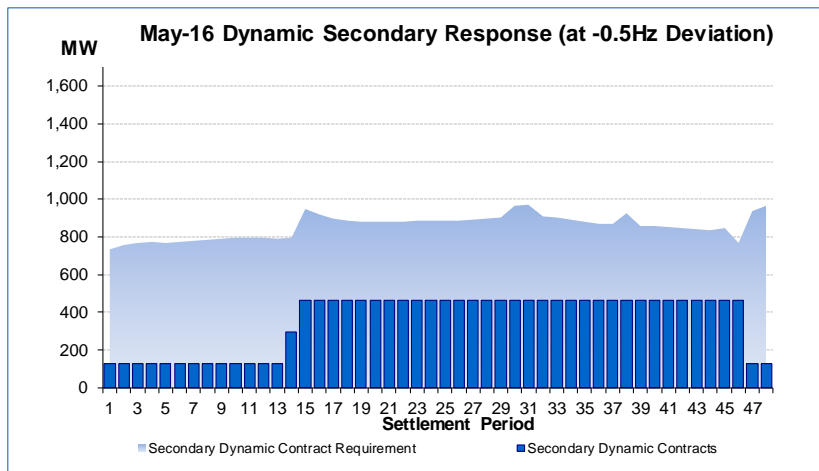
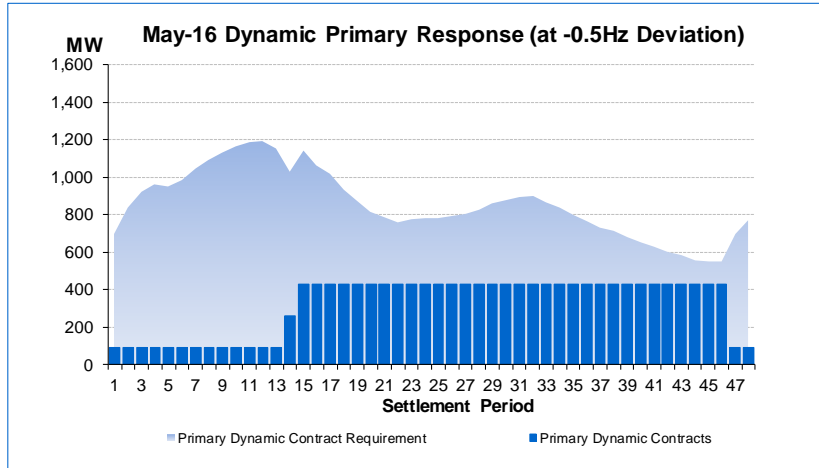
The Monthly Balancing Services Summary (MBSS) gives a monthly summary of the cost of services procured by service

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Services-Reports/>

May-16 Dynamic Requirement

The figures on this page show the amount of **dynamic** contracted response capability available by Settlement Period, against the maximum contract volume requirement.

We are looking to procure response contracts to offset the remaining requirement as illustrated by the shaded area in the charts. Note that a proportion of this requirement can be filled by static.



The figures on this page show the contracted **static** response capability available by Settlement Period, against the maximum contract volume requirement. This includes FFR and other commercial contracts.

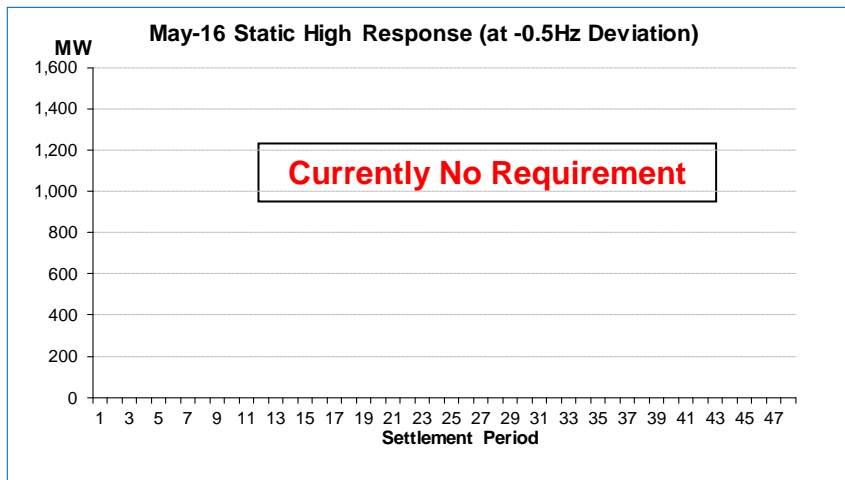
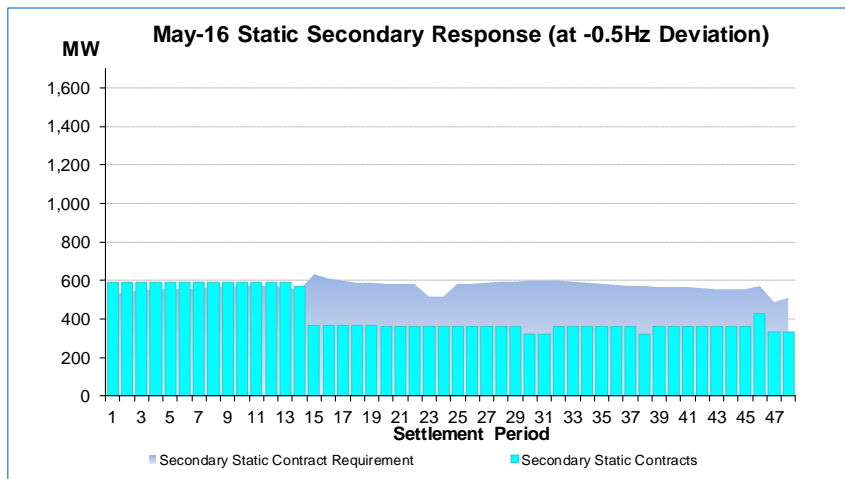
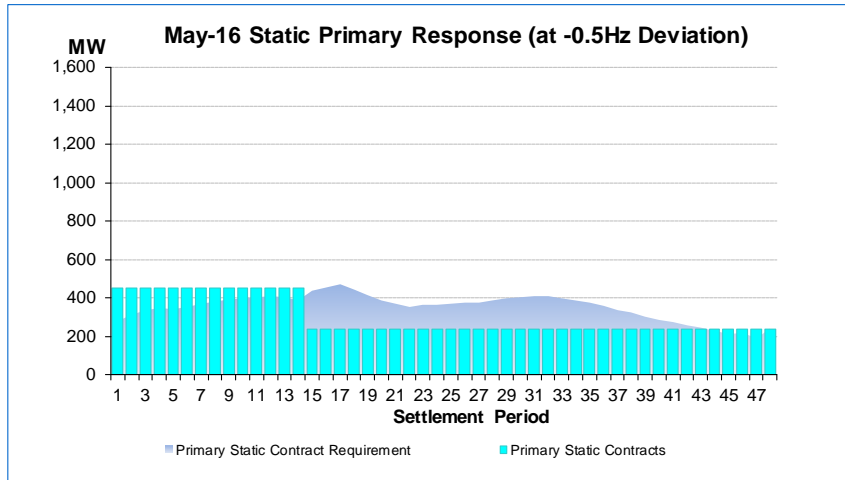
In order to control frequency pre-fault acceptably, a certain minimum amount of dynamic response is needed. The remainder of the response requirement can be met with either static or dynamic response.

The remaining volume as illustrated by the shaded area is therefore open to both static and dynamic.

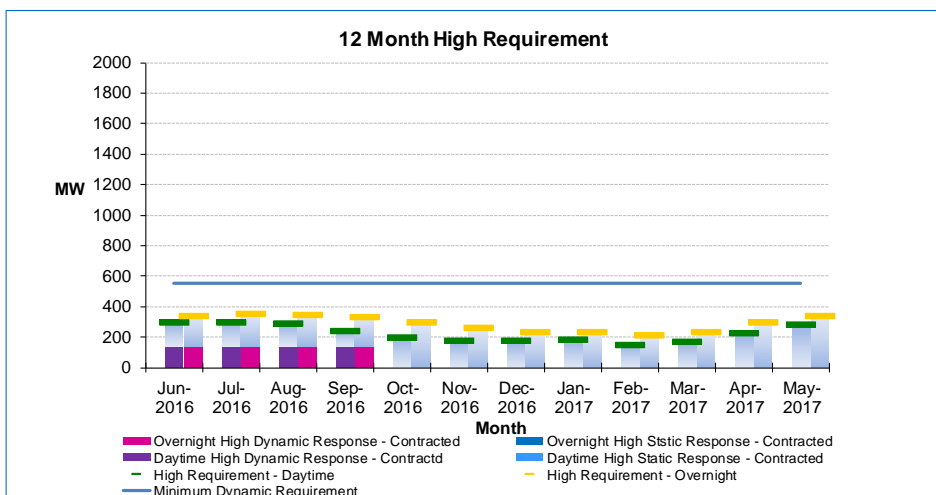
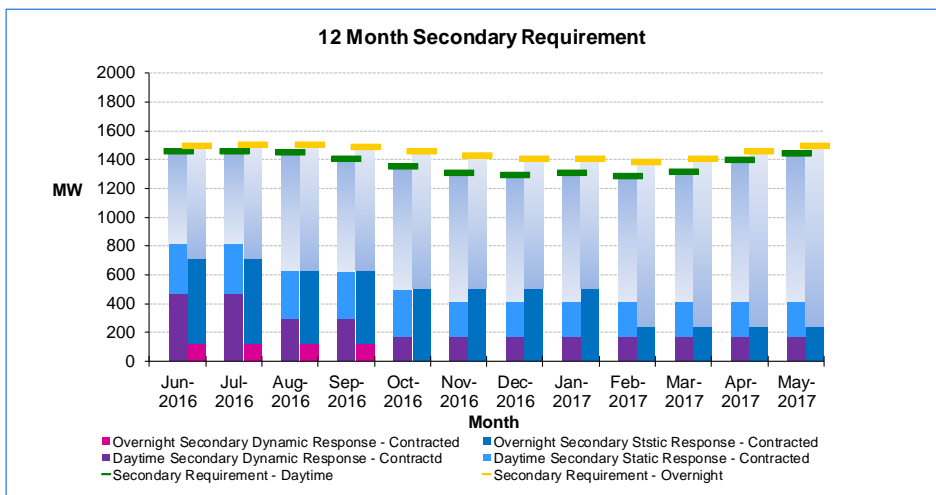
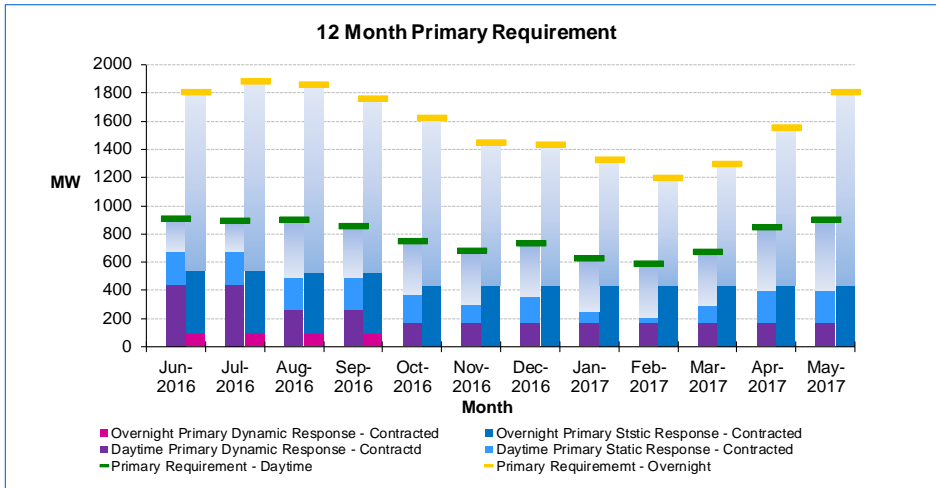
Key points

The response requirement for secondary is the largest of the 3 static requirements.

There is currently no requirement for high static response.



12-Month Total Requirement



The following charts show the requirement 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 assumed for primary and secondary is 550MW day and 700MW night. The minimum dynamic for High is assumed at 550MW.

Key points

The response requirement is greater during the summer than winter.

The response requirement is greater overnight than during the daytime

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 is greater than the requirement throughout the year. A static response service would not be beneficial in meeting the requirement.

Contract Requirement Volume Tables

The following tables give the approximate remaining response MW required.

May-16 requirement:

Settlement Period	Dynamic Amount required (MW)		
	Primary	Secondary	High
1	608	606	510
2	745	627	510
3	832	639	510
4	870	643	510
5	862	642	510
6	895	647	510
7	954	653	510
8	1002	659	510
9	1043	663	510
10	1075	667	510
11	1099	669	510
12	1102	668	510
13	1065	662	610
14	766	501	610
15	710	482	610
16	632	451	610
17	588	431	610
18	504	416	610
19	442	413	510
20	387	414	510
21	355	411	510
22	328	410	510
23	345	415	710
24	351	416	710
25	353	417	510
26	364	418	510
27	372	422	510
28	397	428	510
29	428	434	510
30	445	498	510
31	465	502	610
32	469	441	610
33	434	433	610
34	405	423	610
35	367	412	610
36	331	403	610
37	301	400	560
38	281	457	560
39	249	391	610
40	222	388	610
41	200	385	710
42	173	380	710
43	152	376	610
44	125	370	610
45	118	376	610
46	118	298	610
47	608	808	510
48	679	839	510

Settlement Period	Static Amount required (MW)		
	Primary	Secondary	High
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	194	271	0
16	214	250	0
17	228	236	0
18	202	226	0
19	169	224	0
20	145	224	0
21	128	223	0
22	111	222	0
23	120	157	0
24	124	158	0
25	124	226	0
26	131	227	0
27	132	230	0
28	142	234	0
29	155	238	0
30	162	282	0
31	168	284	0
32	168	243	0
33	154	238	0
34	146	231	0
35	132	223	0
36	114	217	0
37	95	215	0
38	81	254	0
39	61	209	0
40	43	207	0
41	28	205	0
42	12	201	0
43	1	198	0
44	0	194	0
45	0	199	0
46	0	146	0
47	0	159	0
48	0	180	0

12 month requirement

Daytime	Amount required (MW)		
	Primary	Secondary	High
Jun-2016	235	632	410
Jul-2016	219	634	410
Aug-2016	412	818	410
Sep-2016	369	779	410
Oct-2016	380	850	550
Nov-2016	380	889	550
Dec-2016	380	879	550
Jan-2017	380	888	550
Feb-2017	380	865	550
Mar-2017	380	899	550
Apr-2017	453	980	550
May-2017	500	1026	550

Overnight	Amount required (MW)		
	Primary	Secondary	High
Jun-2016	1263	776	410
Jul-2016	1339	783	410
Aug-2016	1330	871	410
Sep-2016	1229	856	410
Oct-2016	1183	953	550
Nov-2016	1011	920	550
Dec-2016	997	899	550
Jan-2017	891	898	550
Feb-2017	756	1138	550
Mar-2017	854	1157	550
Apr-2017	1119	1208	550
May-2017	1365	1248	550

If you have any queries, suggestions or feedback on the content or format of the new report please contact your account manager or

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