SHORT TERM OPERATING RESERVE

ANNUAL MARKET REPORT 2012/13

Summary:

This market report is an analysis of the sixth year of the Short Term Operating Reserve (STOR) service which runs between 1st April 2012 and 31st March 2013, and is designed to provide a high level overview for interested parties.

Data for this market report is broken down by service type and day type to provide a deeper understanding of the dynamics of STOR availability and utilisation over the year. To see information broken down by Balancing Mechanism (BM) and Non-Balancing Mechanism (NBM) providers should refer to the 2012/13 Procurement Guidelines Report using the following link:

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=24878

- In 2012/13 National Grid procured on average 3178.3 megawatts (MW), volume weighted by season hours, for the six seasons, at a cost of £66.1m in availability payments. This was made up on average (volume weighted by season hours) of 2420.6 MW for the Committed service and 757.7 MW for the Flexible service. The actual MW availability provided through STOR during the peak demand of each day between 1st April 2012 and 31st March 2013, averaged out at 2344 MW. This represents an increase of 7.9% over the average MW availability for peak of each day during the 2011/12 term.
- There were 404 successful STOR tenders in 2012/13, of which 241 units were Committed service providers and 163 units were Flexible service providers.
- The average availability price for both Committed and Flexible STOR was £7.38/MW/h and the average utilisation price was £202.27/MWh.
- National Grid utilised a total of 167.2 gigawatt hours (GWh) of STOR, yielding utilisation payments of £26.2m; and thus marks decreases of 3.5% and 19%, respectively, when compared with the total STOR utilisation for 2011/12 and its cost.
- The total expenditure for STOR during the 2012/13 term was £92.3m.

1. Introduction

Short Term Operating Reserve (STOR) is the successor to Standing Reserve (SR) and this report analyses the use of STOR from 1st April 2012 to 31st March 2013. As of the published date of this report, the STOR service is serving its seventh year. Please note that some of the figures and charts presented in this report may look similar, but they may be reporting different events. This report is under constant revision and any feedback on this report is welcome. Please send your feedback to commercial.operation@nationalgrid.com or contact your account manager.

The STOR service is broken down into two distinct parts: Committed and Flexible STOR. The Committed service providers (Both BMU and Non-BMU[1]) provide their service for all required windows in each season, whereas Flexible service providers (Non-BMU only) can opt out of providing the service as they wish[2]. When accepted, both services receive an availability payment (paid on a £/MW/h basis) for the window they make themselves available for. On instruction by National Grid, they receive a utilisation payment paid on a £/MWh basis. Flexible STOR is assessed, in line with assessment principles, on a weekly basis and can be rejected if there is sufficient reserve/margin available to the system operator for the windows in which a service provider offers availability.

A general description of the STOR service can be found via the National Grid website at the following link:

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=29274

The STOR year is broken down into six distinct seasons and is assessed via a tender round process. The dates of STOR seasons can be found in Appendix A of this document. The principles of assessing tenders for STOR service are found via the National Grid website at:

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=29290

The STOR End of Year Report for 2011/12 can be found via the following link:

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=11749

The STOR End of Year Report for 2010/11 can be found via the following link:

http://www.nationalgrid.com/NR/rdonlyres/AD980857-E490-4943-81D5-D08A84B6776B/50871/STOR_End_of_Year_Report_2010_11.pdf

The STOR End of Year Report for 2009/10 can be found via the following link:

http://www.nationalgrid.com/NR/rdonlyres/41B8C2BF-4A3B-471B-9FF8-6EBE9C51C9BF/44264/STOR_End_of_Year_Report2009_10.pdf

The STOR End of Year Report for 2008/09 can be found via the following link:

http://www.nationalgrid.com/NR/rdonlyres/DC24F8EF-FFC4-4681-B3F5-55B4E91ED61C/37024/STOREndofYearReport0809.pdf

The STOR End of Year Report for 2007/08 can be found via the following link:

http://www.nationalgrid.com/NR/rdonlyres/209E0BFA-17EB-4140-9CCF-3C92BE803191/27564/STOREndofYearReport0708_Final.pdf

[1] Non-BMU are generation or demand side participants (which may be individual or aggregated sites) which do not participate in the Balancing Mechanism

[2] At the week ahead stage

2. Tender Information for 2012/2013

The table below summarises all the tenders for 2012/13 by tender round, in terms of tendered MW, availability prices and utilisation prices. Generators and demand side participants (Non-BMU) competed in tendering for providing STOR service during 2012/13. The STOR service is of a twofold nature, which comprises of a Committed STOR service and a Flexible STOR service. Indexation has been not applied to the prices.

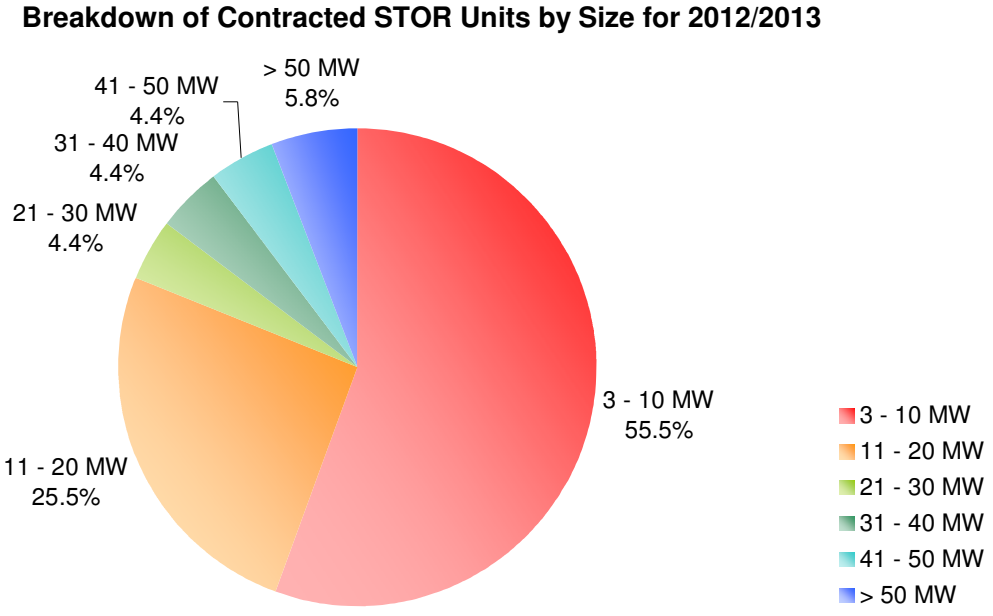
Table 1: STOR Tender data

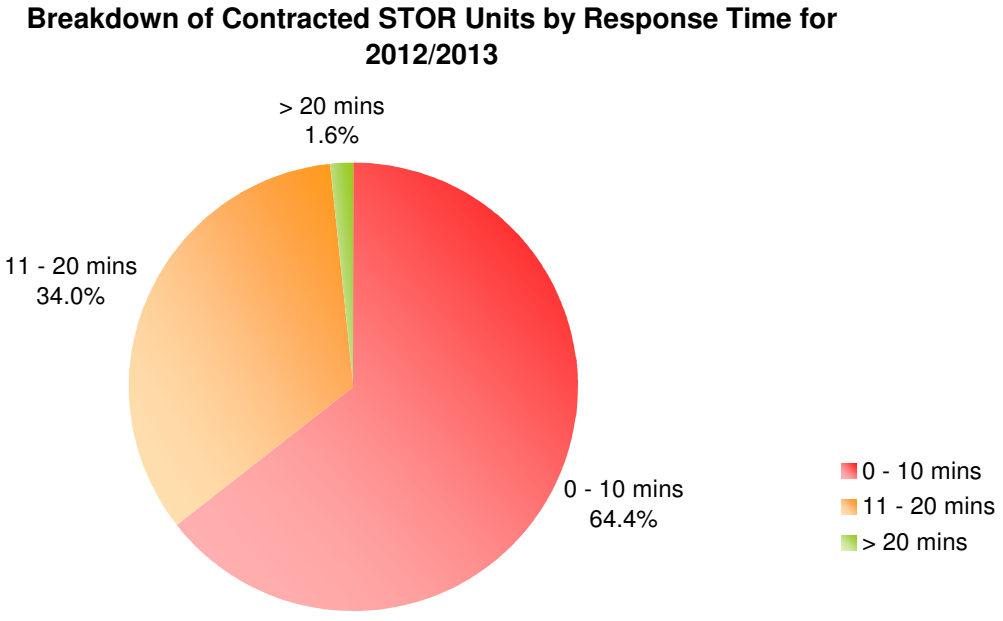
	Season	6.1		6.2		6.3		6.4		6.5		6.6	
	Type of Service	Committed	Flexible	Committed	Flexible	Committed	Flexible	Committed	Flexible	Committed	Flexible	Committed	Flexible
MW	Tender Round												
	TR10 Tendered	68	-	68	-	68	-	68	-	68	-	68	-
	TR10 Accepted	68	-	68	-	68	-	68	-	68	-	68	-
	TR11 Tendered	214	-	230	-	247	-	275	-	317	-	337	-
	TR11 Accepted	116	-	116	-	116	-	116	-	116	-	116	-
	TR12 Tendered	376	-	435	-	549	-	558	-	821	-	866	-
	TR12 Accepted	120	-	158	-	229	-	236	-	257	-	277	-
	TR13 Tendered	414	12	414	12	414	12	414	12	414	12	414	12
	TR13 Accepted	8	-	8	-	8	-	8	-	8	-	8	-
	TR14 Tendered	1194	309	1192	312	1194	314	1190	314	1144	353	1143	353
	TR14 Accepted	177	115	177	117	177	118	167	118	140	145	140	145
	TR15 Tendered	2113	198	2134	219	1986	192	2105	192	2061	166	2057	166
	TR15 Accepted	250	149	253	152	245	125	253	125	236	93	232	93
	TR16 Tendered	2496	461	2783	473	2267	327	2466	253	2146	451	2192	410
	TR16 Accepted	1514	328	1549	340	1181	234	1361	151	1026	340	1072	296
	TR17 Tendered	-	-	-	-	1361	353	1388	353	1084	246	1096	249
	TR17 Accepted	-	-	-	-	290	30	290	30	260	73	260	73
	TR18 Tendered	-	-	-	-	-	-	-	-	727	642	752	650
	TR18 Accepted	-	-	-	-	-	-	-	-	381	387	401	392
Accepted MW for season		2253	592	2329	609	2314	507	2499	424	2492	1038	2574	999
Total Accepted MW		2845		2938		2821		2923		3530		3573	
Availability Price (average £/MW/h)*	Tender Round												
	TR10 Tendered	7.00	-	7.00	-	7.15	-	7.15	-	7.45	-	7.45	-
	TR10 Accepted	7.00	-	7.00	-	7.15	-	7.15	-	7.45	-	7.45	-
	TR11 Tendered	14.25	-	14.16	-	14.28	-	14.40	-	14.51	-	14.54	-
	TR11 Accepted	11.00	-	11.00	-	11.00	-	11.00	-	11.00	-	11.00	-
	TR12 Tendered	12.15	-	12.12	-	12.05	-	12.06	-	12.03	-	12.03	-
	TR12 Accepted	11.47	-	11.50	-	11.50	-	11.50	-	11.50	-	11.50	-
	TR13 Tendered	11.03	9.00	11.03	9.00	11.03	9.00	11.03	9.00	11.03	9.00	11.03	9.00
	TR13 Accepted	7.00	-	7.00	-	7.00	-	7.00	-	7.00	-	7.00	-
	TR14 Tendered	9.51	8.09	9.51	8.08	9.51	8.08	9.52	8.08	9.56	8.09	9.56	8.09
	TR14 Accepted	7.98	7.69	7.98	7.69	7.98	7.68	7.97	7.68	8.00	7.71	8.00	7.71
	TR15 Tendered	8.52	8.09	8.52	8.09	8.52	8.17	8.53	8.17	8.53	8.25	8.54	8.25
	TR15 Accepted	7.69	7.90	7.70	7.88	7.71	7.96	7.70	7.96	7.70	7.90	7.71	7.90
	TR16 Tendered	6.80	7.21	6.88	7.25	7.20	7.46	7.23	7.46	7.25	7.30	7.25	7.35
	TR16 Accepted	6.70	7.18	6.75	7.23	7.34	7.44	7.37	7.41	7.34	7.23	7.32	7.29
	TR17 Tendered	-	-	-	-	5.66	6.69	5.68	6.70	6.11	6.60	6.12	6.53
	TR17 Accepted	-	-	-	-	5.56	4.75	5.56	4.75	5.46	5.99	5.46	5.98
	TR18 Tendered	-	-	-	-	-	-	-	-	4.46	4.15	4.45	4.03
	TR18 Accepted	-	-	-	-	-	-	-	-	4.01	2.83	4.00	2.74
*Average Accepted Availability Price per Season £/MW/h		7.41		7.49		7.74		7.74		6.96		6.91	
Utilisation Price (average £/MW/h)*	Tender Round												
	TR10 Tendered	350.00	-	350.00	-	350.00	-	350.00	-	360.00	-	360.00	-
	TR10 Accepted	350.00	-	350.00	-	350.00	-	350.00	-	360.00	-	360.00	-
	TR11 Tendered	212.29	-	215.43	-	216.05	-	217.33	-	219.10	-	220.04	-
	TR11 Accepted	224.14	-	224.14	-	224.14	-	224.14	-	224.14	-	224.14	-
	TR12 Tendered	217.34	-	215.87	-	214.61	-	214.41	-	216.30	-	216.72	-
	TR12 Accepted	205.39	-	205.36	-	206.32	-	206.39	-	206.25	-	206.16	-
	TR13 Tendered	227.83	240.00	227.83	240.00	227.83	240.00	227.83	240.00	227.83	240.00	227.83	240.00
	TR13 Accepted	200.00	-	200.00	-	200.00	-	200.00	-	200.00	-	200.00	-
	TR14 Tendered	233.94	187.56	233.95	187.83	233.94	188.02	233.95	188.02	235.82	188.84	235.83	188.84
	TR14 Accepted	202.32	198.83	202.32	199.13	202.32	199.27	200.66	199.27	200.00	200.17	200.00	200.17
	TR15 Tendered	227.51	178.04	228.02	182.08	230.39	180.97	228.96	181.28	229.49	180.08	229.44	180.06
	TR15 Accepted	212.43	168.03	211.42	168.49	212.04	164.93	212.36	164.93	216.18	151.65	215.55	151.65
	TR16 Tendered	209.31	202.11	209.94	199.83	217.87	193.41	215.08	201.45	222.65	196.51	221.97	198.51
	TR16 Accepted	193.57	196.76	192.81	194.07	203.72	189.94	200.42	198.26	204.96	191.09	204.34	192.01
	TR17 Tendered	-	-	-	-	193.62	166.34	193.63	165.44	205.45	161.49	205.11	161.90
	TR17 Accepted	-	-	-	-	207.00	149.00	207.00	149.00	221.08	148.88	221.08	148.25
	TR18 Tendered	-	-	-	-	-	-	-	-	192.47	144.06	191.91	143.14
	TR18 Accepted	-	-	-	-	-	-	-	-	216.21	127.40	213.90	126.64
*Average Accepted Utilisation Price per Season £/MWh		200.70		199.89		205.77		204.85		201.81		200.59	

*Average prices are weighted by MW and hours tendered

Figure 1 shows the breakdown of STOR providers by contracted parameters. Two charts are used, one chart illustrates the breakdown of STOR provision by unit size[3] and the other chart illustrates the breakdown of STOR provision by response time. **Unit size is not considered when assessing tenders, tender benefits are calculated on a per MW basis. However, unit size is a consideration when meeting our STOR volume requirement**. During the STOR year of 2012/2013, 14.6% of STOR units were capable of delivering more than 30 MW and 64.4% of contracted STOR units can deliver the contracted megawatts within ten minutes of instruction.

Figure 1: Break down of STOR provider parameters by Size and Response Time





[3] For aggregators using multiple sub sites for the provision of a single contract, the contract is used to denote the unit size

3. Availability and Utilisation

Figure 2 is a stacked chart of the average daily MW availability of Committed and Flexible STOR (averaged by all settlement periods during the daily STOR windows) across all the days of the 2012/13 STOR year, with the contracted STOR position for each season illustrated on the chart. National Grid had contracted an average of 3178 MW (volume weighted by season hours) of both Committed and Flexible STOR. The total amount of STOR MW capacity available to National Grid over the whole year was, on average, approximately 2374 MW per settlement period in any STOR window which turned out to be 75% of the average contracted capacity. The annual total availability payment was £66.1m.

The difference between the contracted volumes of STOR and the actual volumes of STOR is due to two main factors. Firstly the general variation in the level of availability from contracted units due to breakdown, outages and flexible operation. The second reason, particularly responsible for the large difference between seasons 1-4 and season 5 and 6, is due to a volume of Flexible units that were contracted early in the series of tender opportunities and were subsequently undercut. These “undercut” units, if they were available, were then rejected at the week ahead stage. For more information, Section 9 in this report covers the weekly Flexible STOR assessment during the 2012/13 STOR year.

Hereafter, the majority of the illustrated figures use the following key: WD: Working Day, NWD: Non Working Day, C: Committed STOR Service, F: Flexible STOR Service, OW: Optional Windows.

Figure 2: Average Daily Availability for STOR during Year 6

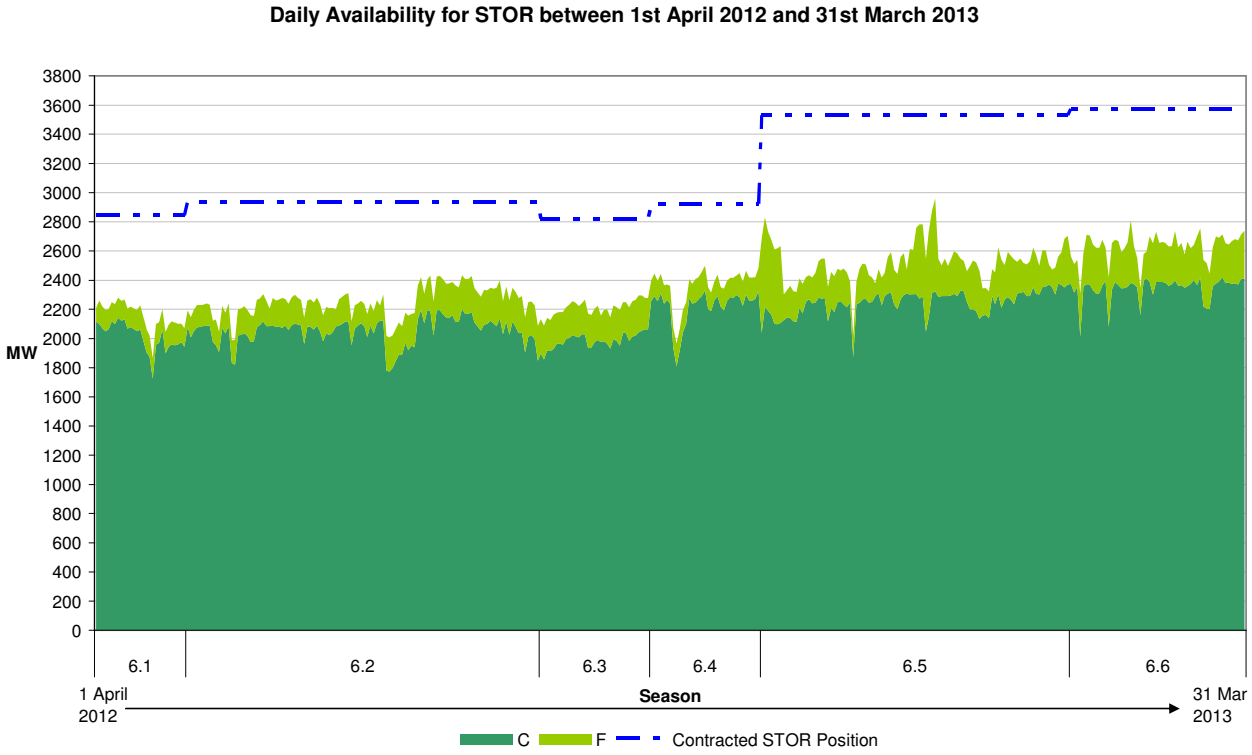


Figure 3 is a stacked timeline chart that shows when Committed and Flexible STOR was synchronised and the total MWh provided on that day during the 2012/13 STOR year. Every daily synchronised event is marked by a slim bar, of which there are multiple slim bars on the chart. Figure 3 shows the seasonality trend, where during Seasons 6.4 and 6.6, STOR was synchronised more frequently than during Seasons 6.1 to 6.3.

For the year, the average daily STOR utilisation was 670 MWh for the working days and 620 MWh for the non working days (the average daily utilisation is based only on days that STOR was used). The total STOR MWh utilised over the whole year was 167.2 GWh at a cost of £26.2m. The utilisation costs[4] include the optional window periods where the BM unit is paid the offer price for that particular settlement period in the BM and the Non-BM unit is paid the contracted premium price.

		Season					
		6.1	6.2	6.3	6.4	6.5	6.6
Number of days in season STOR was synchronised		21	51	22	33	87	53
Average MW Availability Out-turn per season	C	2011	2051	1982	2217	2245	2344
	F	143	196	227	145	276	280
Total STOR Availability Expenditure per season £m	C	3.8	18.1	5.7	6.1	17.6	10.3
	F	0.3	1.7	0.6	0.4	1.0	0.4
Total Utilised STOR per season GWh	C	11.0	10.3	6.1	24.0	28.0	18.5
	F	0.7	1.1	1.6	2.9	29.8	33.3
Total STOR Utilisation Expenditure per season £m	C	1.9	1.9	1.0	4.0	4.7	2.9
	F	0.1	0.2	0.3	0.5	4.1	4.6

[4] These costs differ from those in the Procurement Guidelines report as they include spend for BM Units both within window and optional windows and include some seasonal reconciliation.

Figure 3: Synchronised STOR Usage throughout STOR Year 6

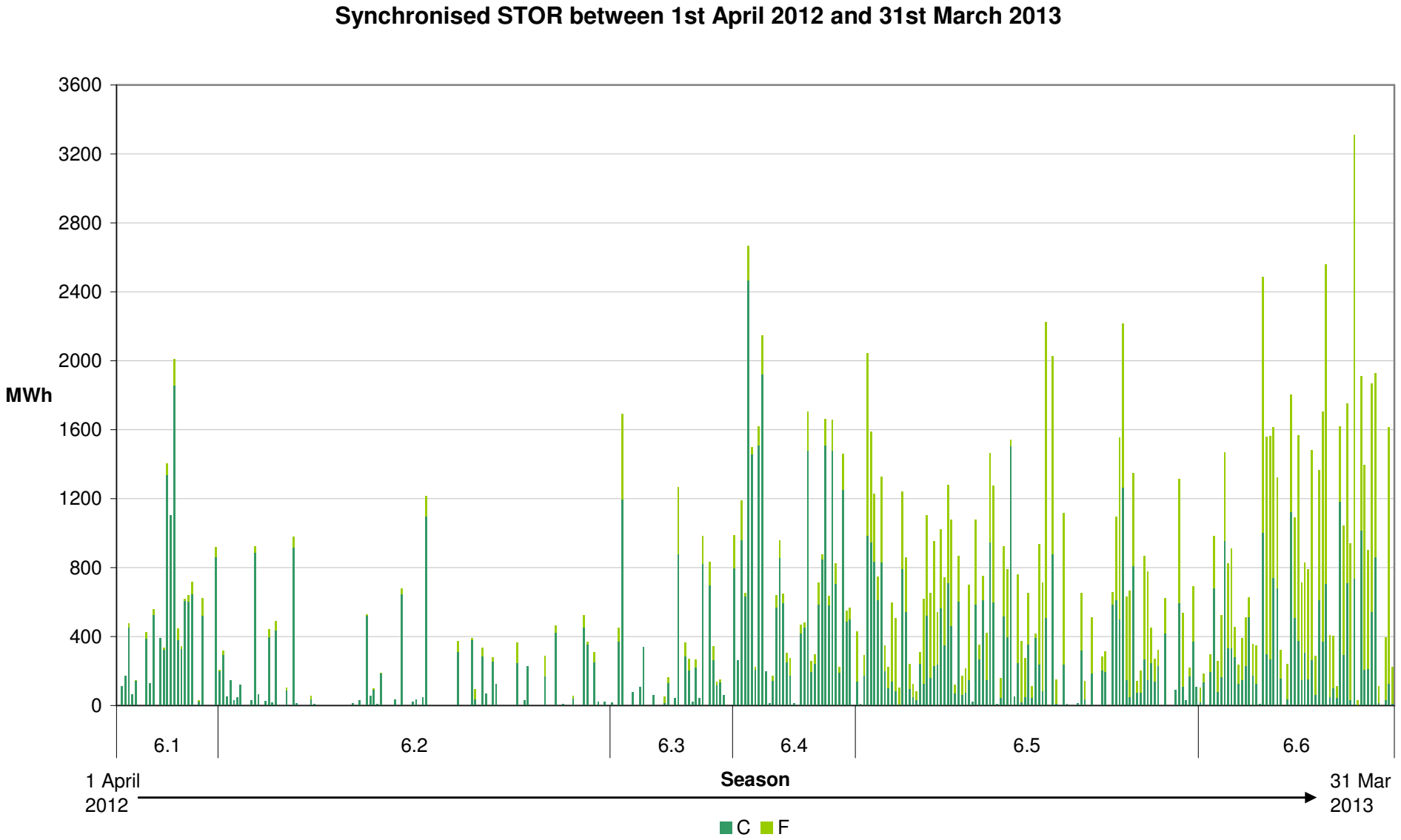
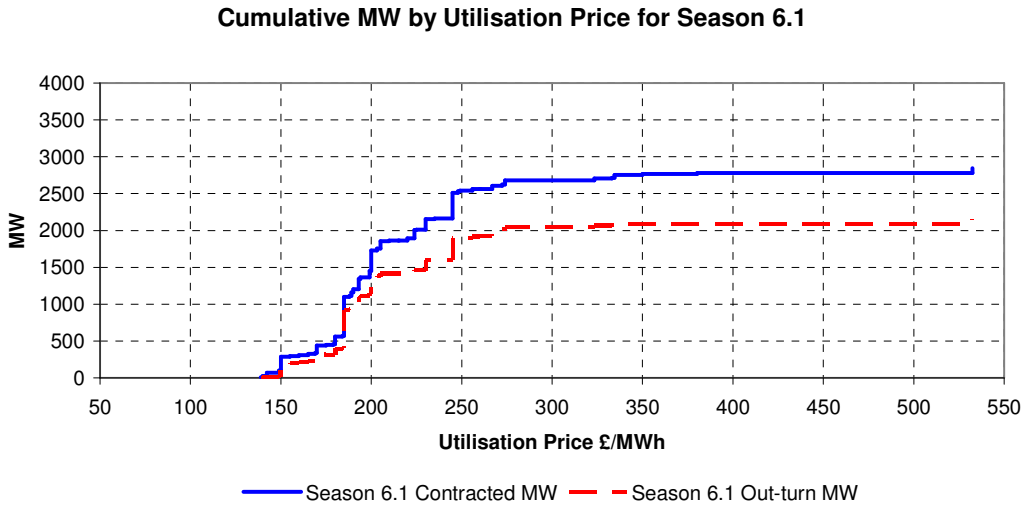
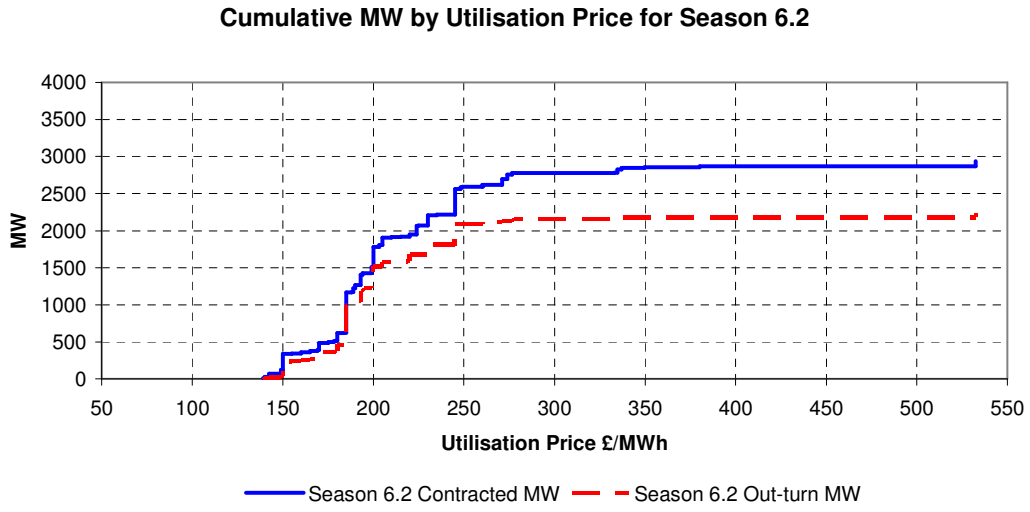
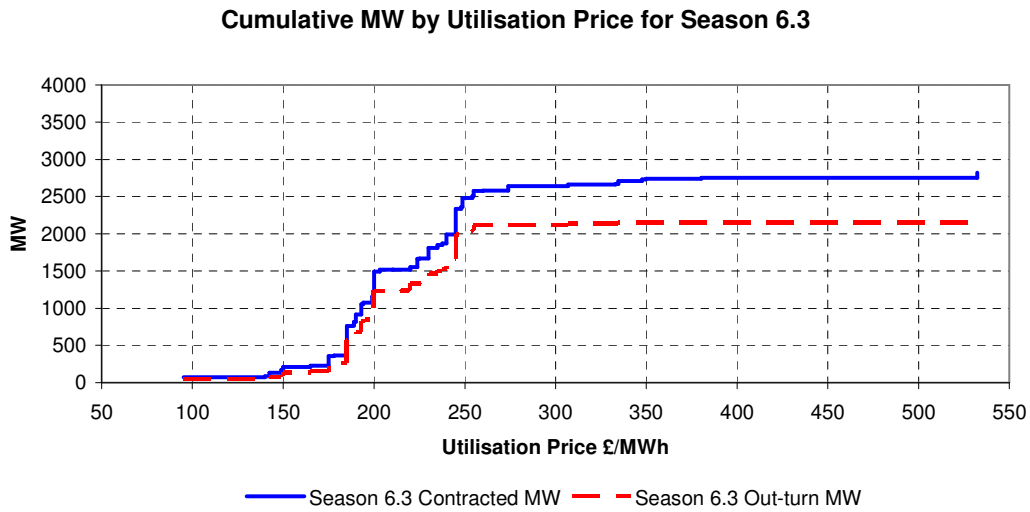


Figure 4 shows the cumulative plots of the contracted MW utilisation price stack (blue line) and the available out-turn of the contracted MW utilisation price stack (dashed red line) for each season in Year 6. The MW are stacked in ascending order according to the utilisation price of the unit. Where necessary, the utilisation prices reflect the actual indexed prices. Season 6.5 had 642 MW of contracted STOR with utilisation prices of £150/MWh or less, where the available out-turn of contracted STOR, for utilisation prices of £150/MWh or less, came to 293 MW.

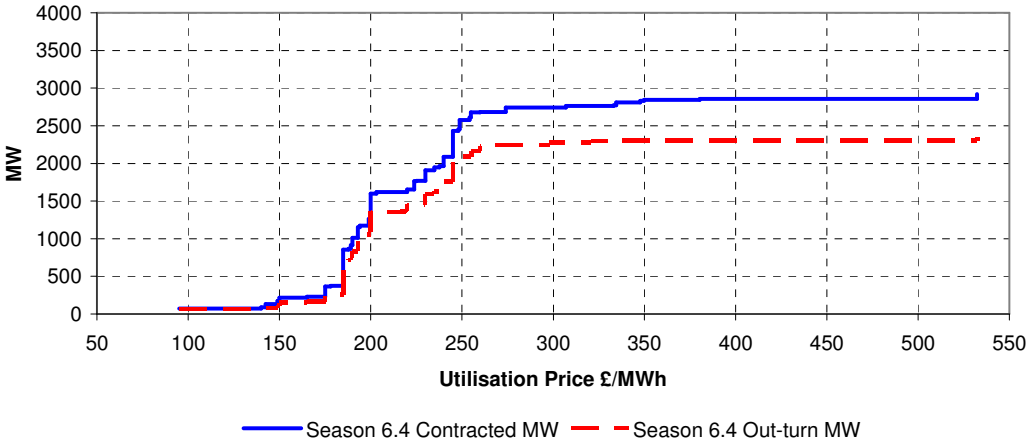
Figure 4: Contracted & Out turn MW Stack based on Utilisation Price



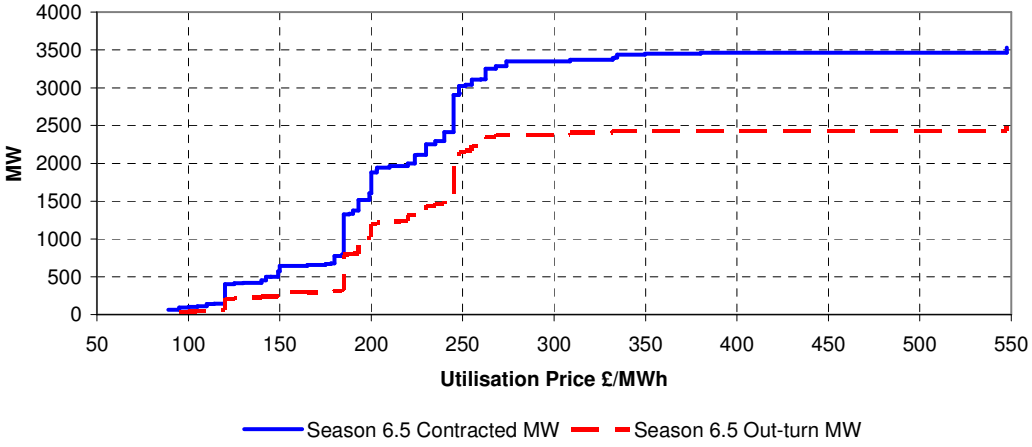




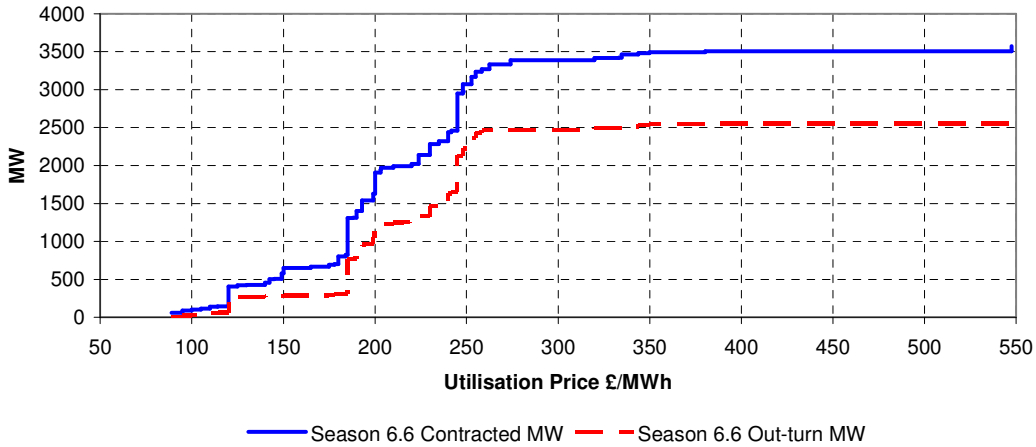
Cumulative MW by Utilisation Price for Season 6.4



Cumulative MW by Utilisation Price for Season 6.5



Cumulative MW by Utilisation Price for Season 6.6



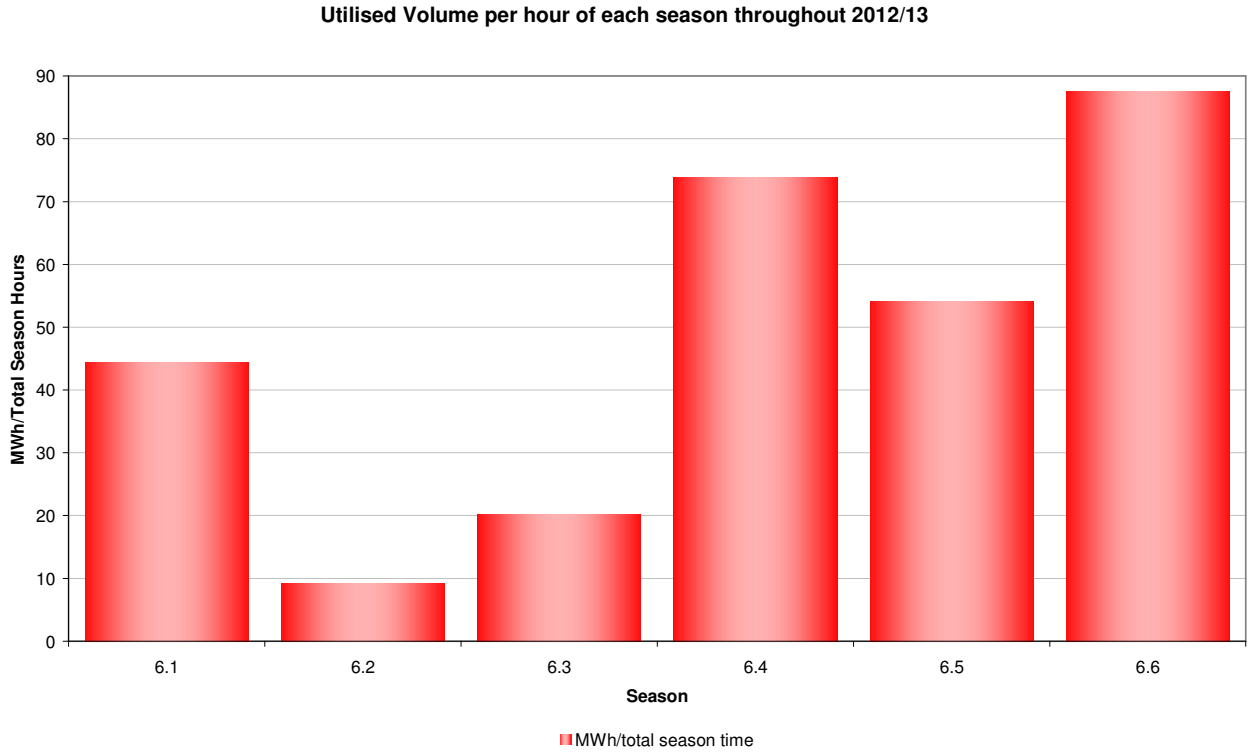
		Season					
		6.1	6.2	6.3	6.4	6.5	6.6
Amount of STOR MW with utilisation price of £150/MWh or less	Contracted	287	336	210	214	642	651
	Out-turn	196	236	138	150	293	292

4. Utilisation by Season and Price

Figure 5 illustrates the volume of MWh for each hour per season. This figure is intended to provide a direct season by season comparison MWh volume (as the total number of hours in each season varies) by taking the MWh volume for a season and dividing it with the total number of hours in that season. Season 6.6 provided the greatest MWh per hour, giving a volume of 87.5 MWh per hour.

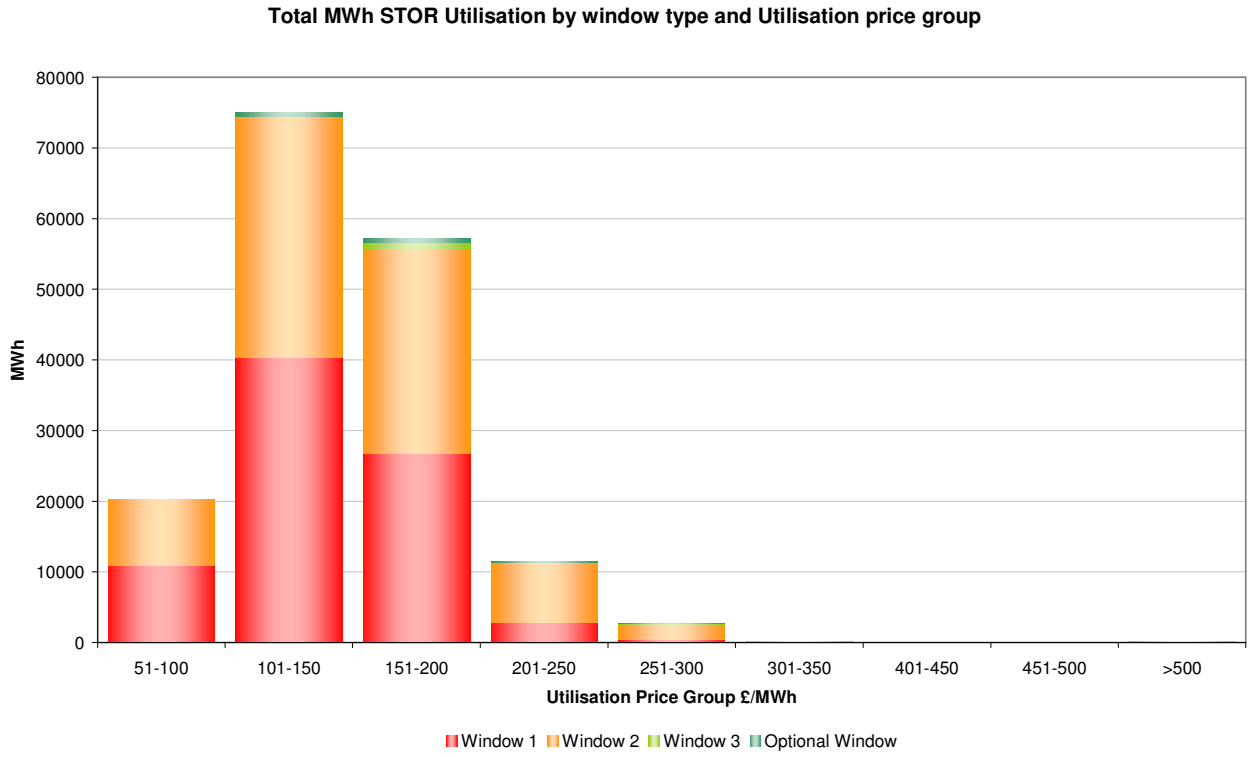
Figure 6 shows the total MWh of STOR utilisation by utilisation price, during 2012/13. The total MWh is illustrated by the volume of utilisation for each type of window. The tables provided with the charts depict the seasonal capacity of MWs provided for each utilisation price category, where indexation has been taken into account where appropriate, and the number of units that provided the MW capacity for a season. For instance, it is shown from the table that during Season 6.4, there were 59 units providing a capacity of 1381 MW that had their contracted utilisation price in the range £151/MWh and £200/MWh.

Figure 5: Total MWh utilised per hour of each season in the 2012/13 term



Season	Total Utilised MWh (does not include OW)	Total hours in Season	Total Utilised MWh / Total hours in Season
6.1	11425	257.5	44.4
6.2	11022	1202.5	9.2
6.3	7755	384	20.2
6.4	26805	362.5	73.9
6.5	57277	1059	54.1
6.6	51458	588	87.5

Figure 6: Total MWh STOR Utilisation by Utilisation price



2012-2013		Total Utilisation MWh (includes OW)
Utilisation price group £/MWh	51-100	20283
	101-150	75023
	151-200	57236
	201-250	11526
	251-300	2775
	301-350	121
	401-450	0.05
	451-500	14
	>500	206

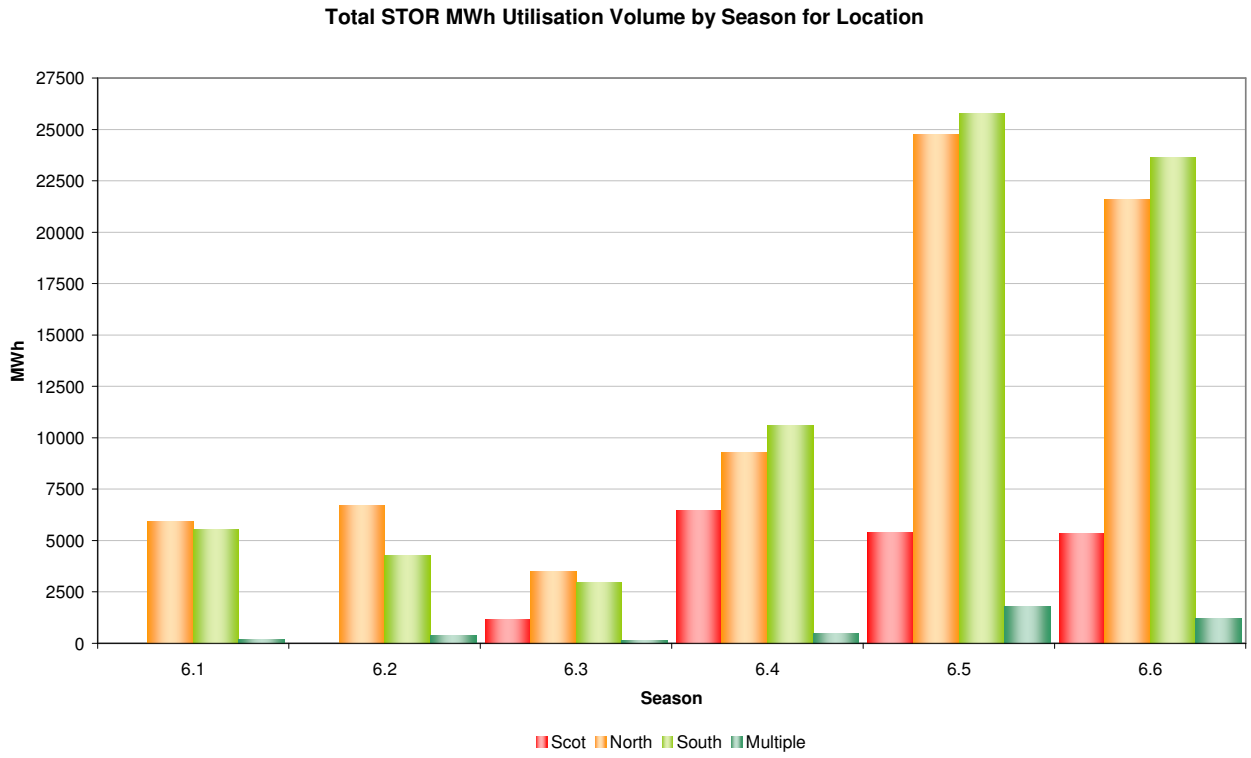
2012-2013		Season											
		6.1		6.2		6.3		6.4		6.5		6.6	
		Units	MW	Units	MW	Units	MW	Units	MW	Units	MW	Units	MW
Utilisation price group £/MWh	51 - 100	-	-	-	-	2	72	2	72	6	103	6	103
	101 - 150	19	287	22	336	15	138	15	142	39	539	40	548
	151 - 200	69	1442	69	1444	58	1282	59	1381	43	1237	44	1255
	201 - 250	52	812	53	816	52	988	49	980	57	1142	58	1161
	251 - 300	10	141	12	181	12	159	13	165	21	325	20	322
	301 - 350	8	83	8	81	9	102	9	103	9	104	9	104
	351 - 400	1	12	1	12	1	12	1	12	1	12	1	12
	>500	4	68	4	68	4	68	4	68	4	68	4	68

5. Utilisation by Location

There are occasions, where as a result of congestion on the transmission system, National Grid may utilise a particular STOR unit considering its geographic location in addition to submitted prices. Figure 7 shows the total STOR utilised MWh by season from a geographical location. The table provided shows the number of STOR units by location, the sum total of the MW capacity provided by all of these units for STOR in each season, the total STOR utilisation hours per season by location, and the total STOR utilised MWh by season from a geographical location.

During 2012/2013, STOR was synchronised for an average of 149 hours per season in Scotland, an average of 599 hours per season in the North region, an average of 648 hours per season in the South region, and an average of 160 hours per season for units that have multiple sites. At the end of this section there is a map indicating the regional boundaries.

Figure 7: Total STOR MWh by Season from a geographical location



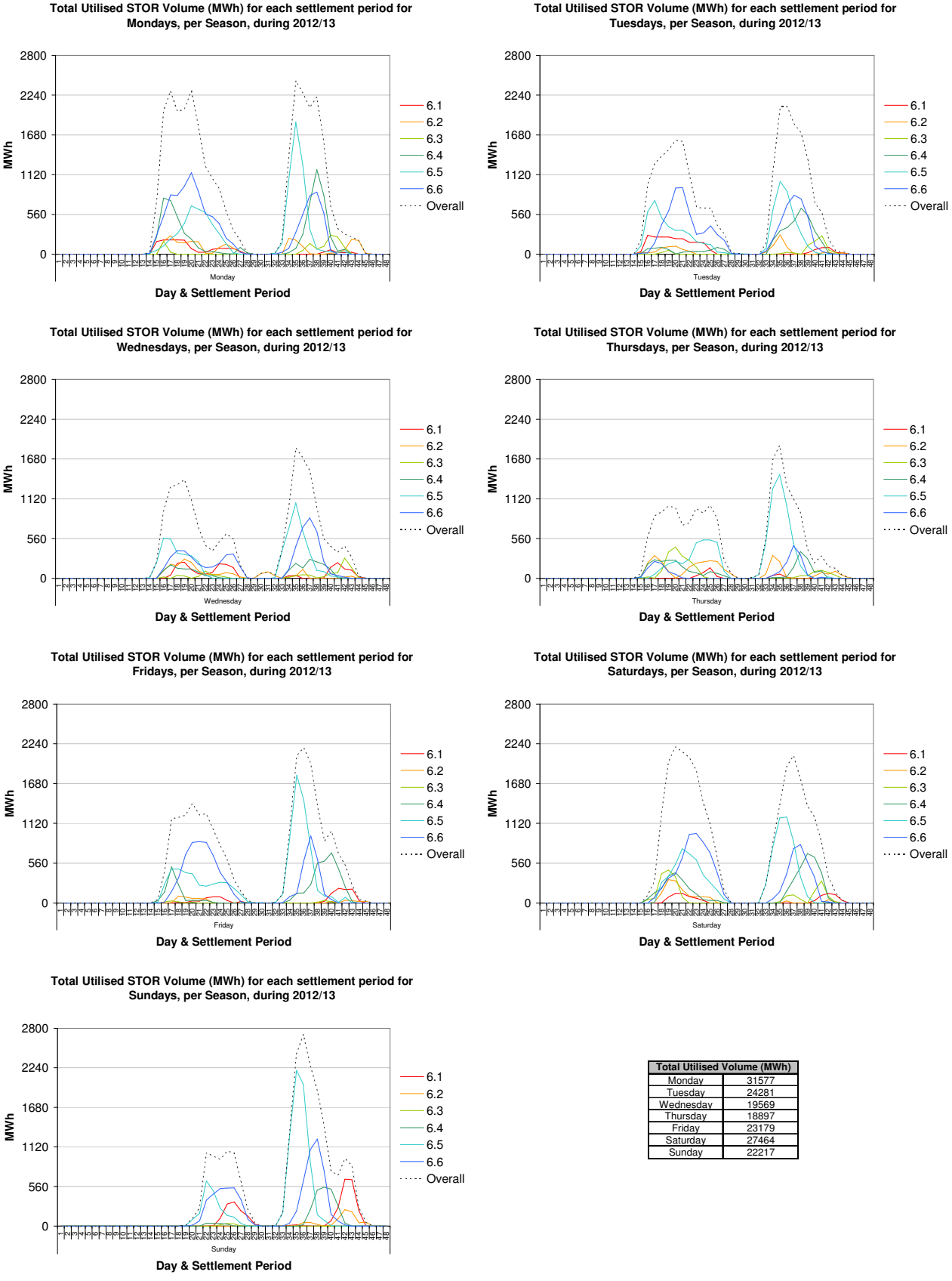
Unit Location	Season											
	6.1				6.2				6.3			
	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh
Scotland	-	-	-	-	-	-	-	-	2	72	33	1160
North	49	1269	330	5958	52	1345	352	6733	44	1163	144	3479
South	61	1227	227	5539	64	1244	215	4277	66	1354	176	2985
Multiple	53	349	27	183	53	349	77	388	41	232	30	141

Unit Location	Season											
	6.4				6.5				6.6			
	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh	No. of units	Total MW	Total Sync. Hours	Total Sync. MWh
Scotland	2	72	181	6475	5	93	169	5415	5	93	214	5340
North	46	1267	403	9293	59	1551	1234	24765	60	1573	1130	21595
South	64	1356	530	10582	77	1622	1525	25771	76	1623	1215	23637
Multiple	40	228	124	491	39	264	422	1777	41	284	278	1199

6. Utilisation by Day for 2012/2013

The following figure depicts the total STOR utilisation for each day of the week, for each season, from 1st April 2012 to 31st March 2013.

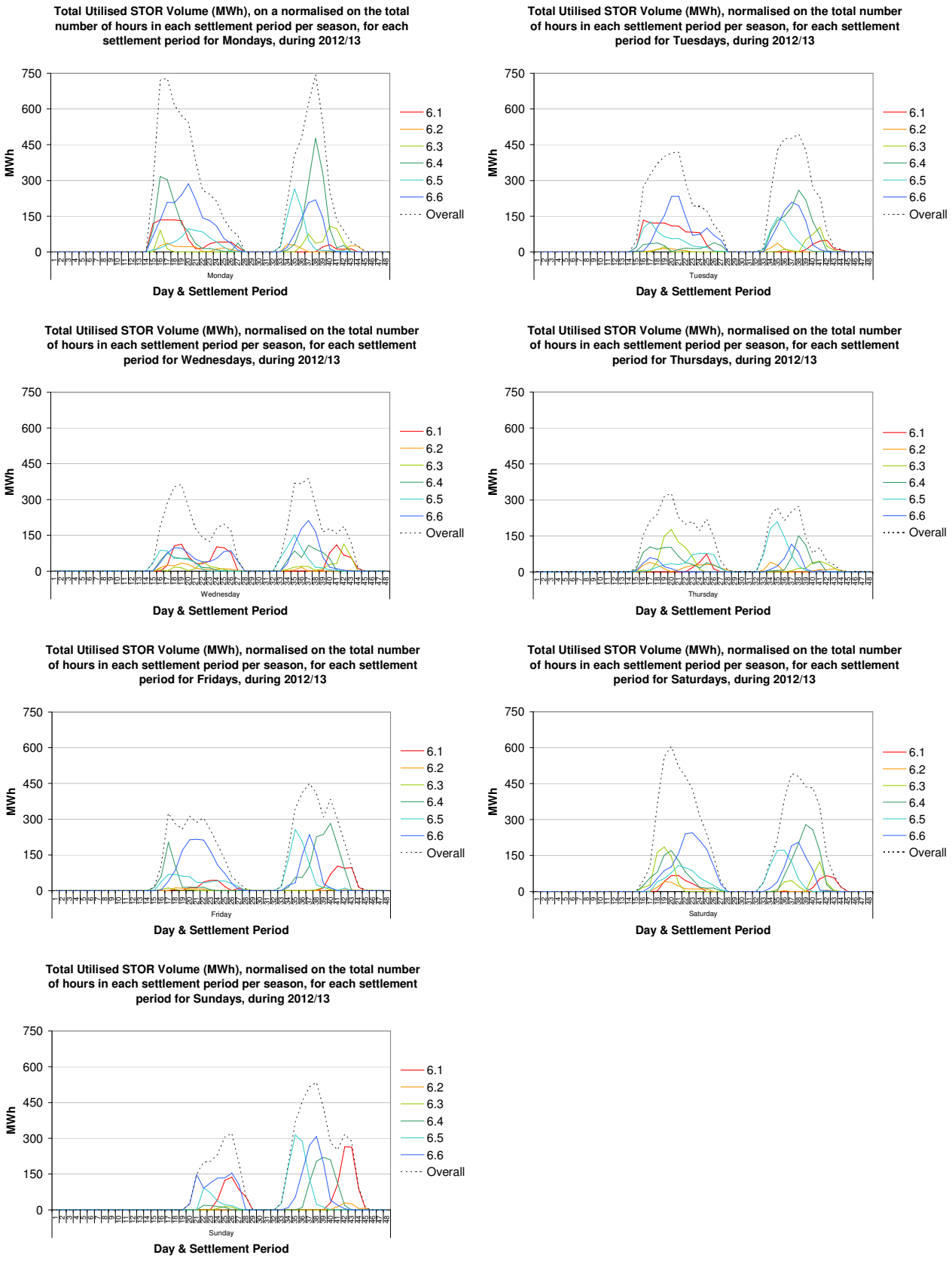
Figure 8: Total Utilised STOR for each day of the week for 2012/2013



Total Utilised Volume (MWh)	
Monday	31577
Tuesday	24281
Wednesday	19569
Thursday	18897
Friday	23179
Saturday	27464
Sunday	22217

To provide a direct season by season comparison of the total synchronised STOR volumes, Figure 9 represents a normalisation of Figure 8, where the total STOR utilisation for each day of the week has been normalised in terms of the total hours that each settlement period had for each week day of the week for each of the STOR seasons from 1st April 2012 to 31st March 2013.

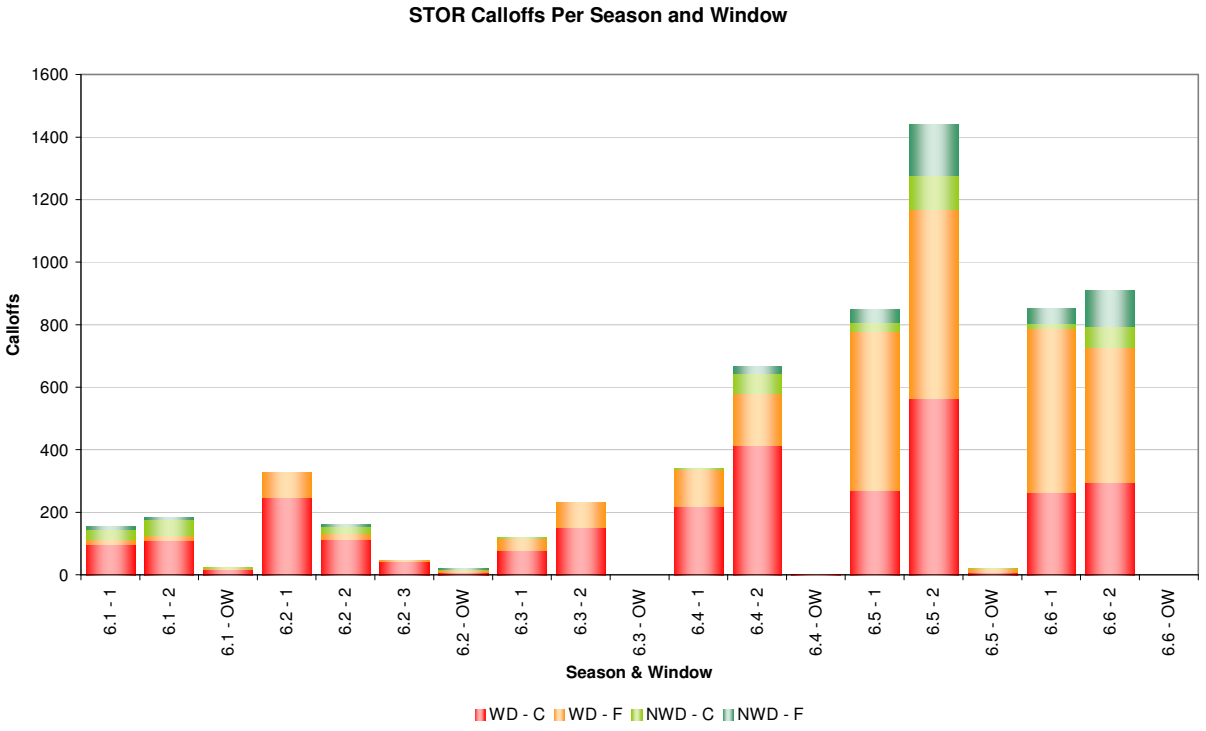
Figure 9: Total Utilised STOR, on a normalised basis, for each day of the week for 2012/2013



7. Calloffs

Figure 10 shows the number of calloffs[5] by season and by window. There was an average of 1060 calloffs per season for the year. There was an average duration of approximately 85 minutes per calloff for the year.

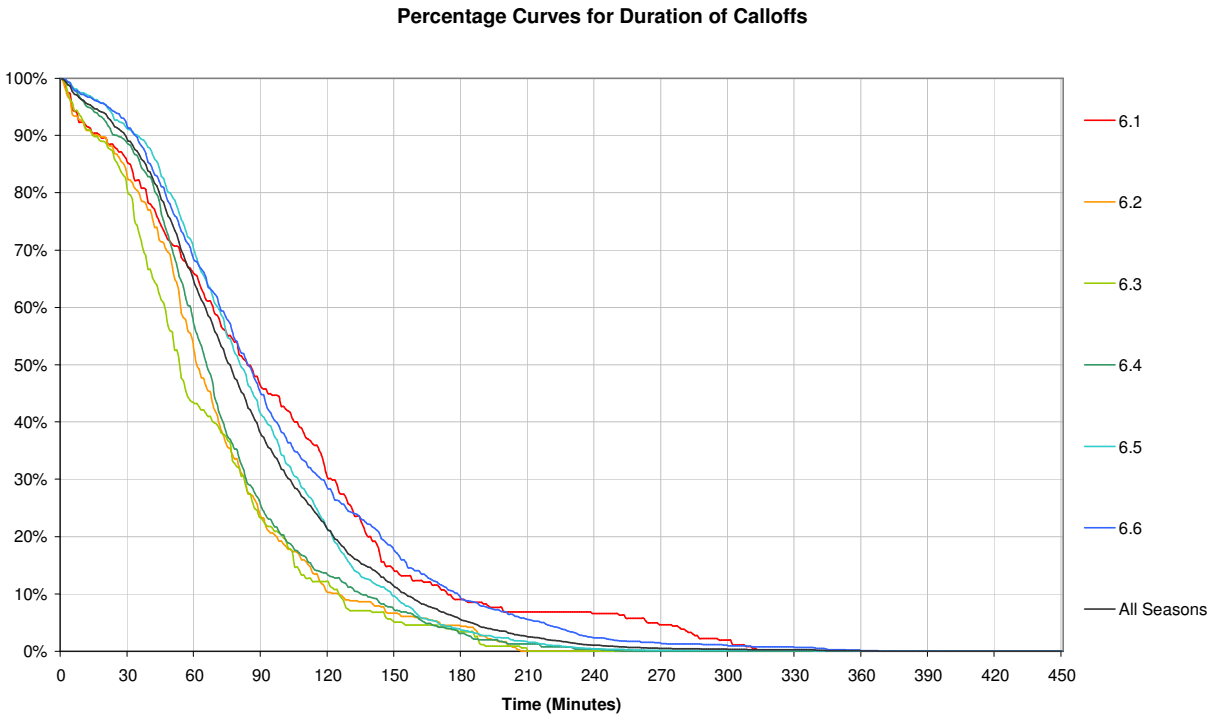
Figure 10: Number of STOR calloffs per season and window



[5] A calloff is when National Grid instructs a STOR provider to deliver the contracted STOR MW (generation or demand reduction)

In applying the duration of calloffs data across all types of providers for 2012/13, a duration profile is produced which illustrates the period of utilisation per instruction. Figure 11 shows that across all seasons 89% of instructions lasted at least thirty minutes, and 64% of instructions lasted at least sixty minutes.

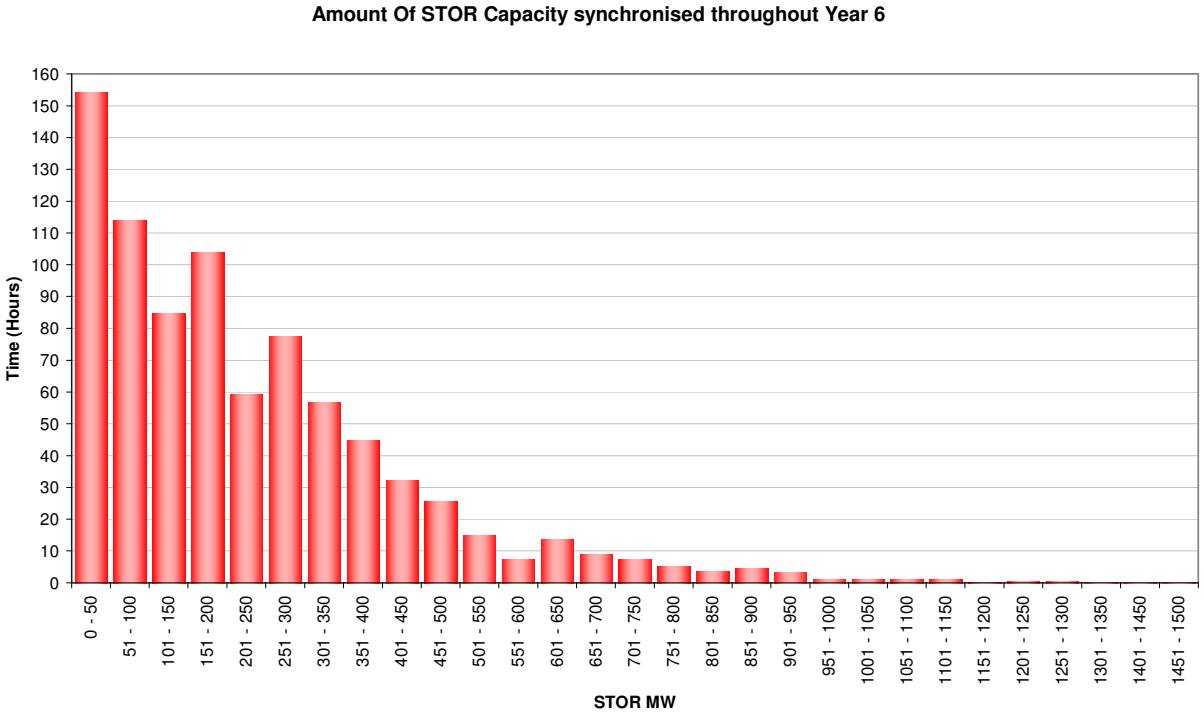
Figure 11: Duration Curves showing the percentage of duration time for calloffs



8. Running Time of Total Utilised STOR Capacity

Figure 12 illustrates the total length of time that a quantity of STOR capacity was synchronised during Year 6. For example, STOR capacity of the size 251-300 MW was in use for a total of approximately 78 hours and 1001-1050 MW of STOR capacity was in use for approximately 1 hour during Year 6.

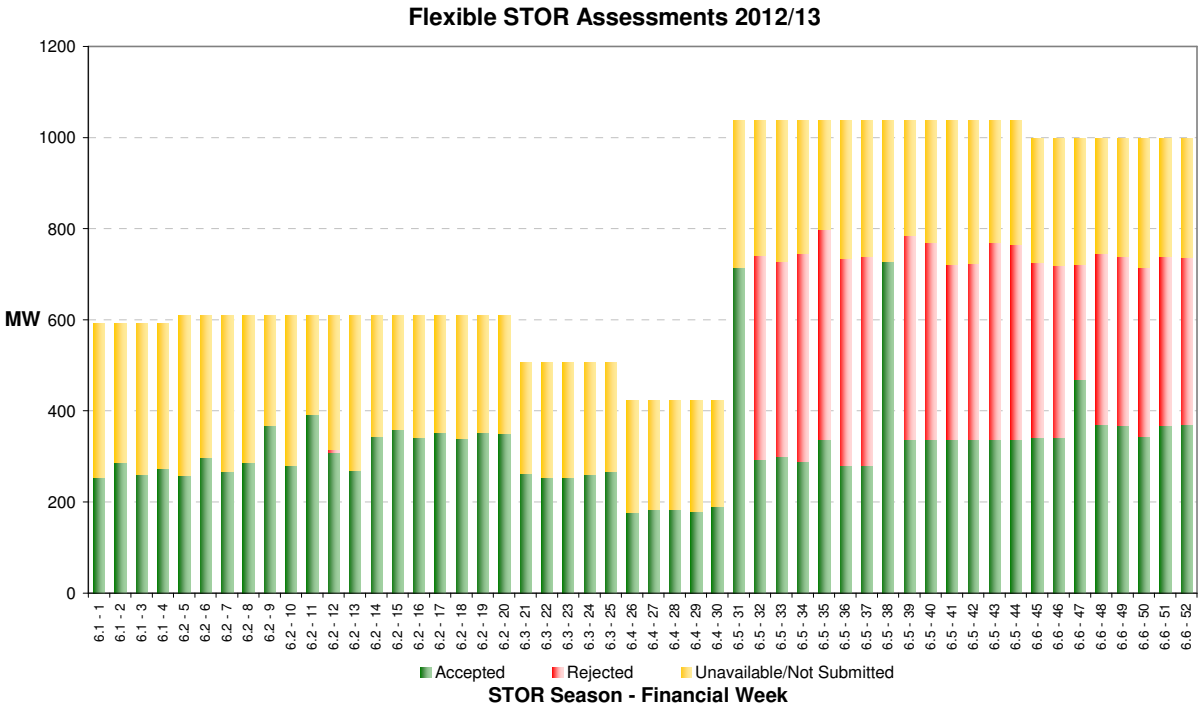
Figure 12: Amount of STOR capacity synchronised during Year 6



9. Flexible STOR Assessments

The Flexible STOR service is assessed on a weekly basis as flexible STOR providers submit their availability for the week ahead. The assessments are based on forecast system margin and forecast costs associated with alternative sources at the week-ahead stage, together with the availability window submitted by the service provider and any additional issues such as locational congestion which may be prevalent in the forthcoming week[6]. Figure 13 illustrates the amount of MW accepted each week, the amount of MW rejected each week, and the amount of MW that was unavailable for STOR each week.

Figure 13: Weekly Flexible STOR Assessments



[6] For more details please refer to the Assessment Principles document

Appendix A

STOR windows for Year 6 (2012/13)

Seasons 2012/13								
Season	Dates	WD		NWD		Hours/Day Type		Total
		Start Time	End Time	Start Time	End Time	WD	NWD	
1	05:00 on Sunday 1st Apr 2012 - 05:00 on Monday 30th Apr 2012	07:00	13:30	10:00	14:00	218.5	39	257.5
		19:00	22:00	19:30	22:00			
2	05:00 on Monday 30th Apr 2012 - 05:00 on Monday 20th Aug 2012	07:30	14:00	09:30	13:30	1069.5	133	1202.5
		16:00	18:00	19:30	22:30			
		19:30	22:30					
3	05:00 on Monday 20th Aug 2012 - 05:00 on Monday 24th Sep 2012	07:30	14:00	10:30	13:30	348	36	384
		16:00	21:30	19:00	22:00			
4	05:00 on Monday 24th Sep 2012 - 05:00 on Monday 29th Oct 2012	07:00	13:30	10:30	13:30	330	32.5	362.5
		16:30	21:00	17:30	21:00			
5	05:00 on Monday 29th Oct 2012 - 05:00 on Monday 4th Feb 2013	07:00	13:30	10:30	13:30	931.5	127.5	1059
		16:00	21:00	16:00	20:30			
6	05:00 on Monday 4th Feb 2013 - 05:00 on Monday 1st Apr 2013	07:00	13:30	10:30	13:30	528	60	588
		16:30	21:00	16:30	21:00			
						3425.5	428	3853.5

Season	WD	NWD
1	23	6
2	93	19
3	29	6
4	30	5
5	81	17
6	48	8

Total Hours	3853.5