

# STOR Market Information Report: TR 07

(Short-Term Operating Reserve)

## Introduction

This market report is produced after each tender round and is designed to give existing and potential STOR participants an overall view of the tendered utilisation and availability prices and National Grid's resultant forward contracted position; together with further details on the type, size and dynamics of the tendered plant. For further information regarding this product or how and when to tender please consult the tender and reports section of National Grids Balancing Services information website:

<http://www.nationalgrid.com/uk/Electricity/Balancing/services/reserveservices/STOR/>

Furthermore, information on the use of the STOR service can be seen at monthly resolution in the Monthly Balancing Services Statement found on National Grids Balancing Services information website:

<http://www.nationalgrid.com/uk/Electricity/Balancing/Summary/>

The report is divided into 2 main sections:

- Section 1 provides a summary of this tender round so providing market participants with tendered and accepted volumes and price information across seasons. The data is broken down between response time, flexible and committed providers plus a breakdown of the size of accepted units.
- Section 2 provides an overview of the total contracted position for each season of National Grid's Short Term Operating Reserve Requirement (STORR) through this and any previous tender rounds. This section allows the market participants to identify where there are opportunities to tender in future tender rounds.

This report details all tenders received in TR 7 and is for service provision commencing on the 1<sup>st</sup> April 2009. This is the seventh tender round since STOR began in April 2007. In this report year 3 refers to 2009/10 and year 4 refers to 2010/11.

A Summary of the Season dates has been attached as Appendix 2

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### Section 1.1 Submitted and Accepted Volumes

On 30<sup>th</sup> March National Grid Received 173 tenders from 29 different companies for year 3 and none for year 4. National Grid accepted all tenders.

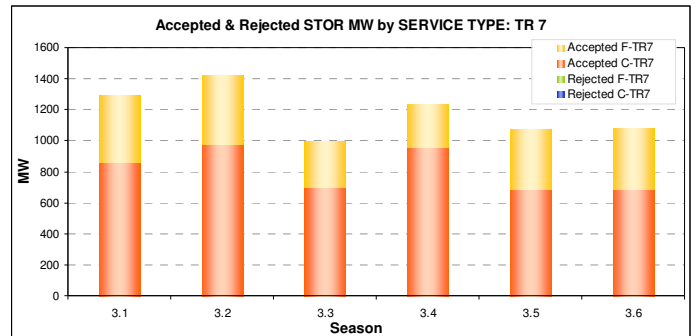
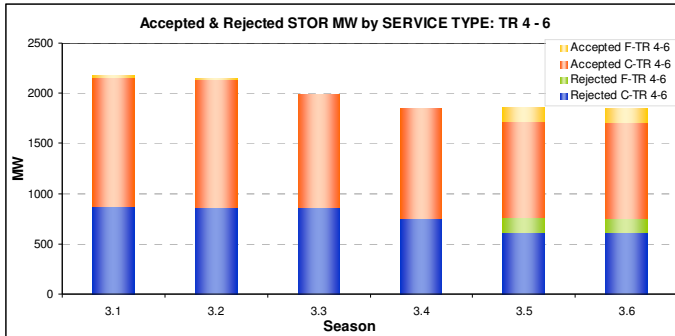
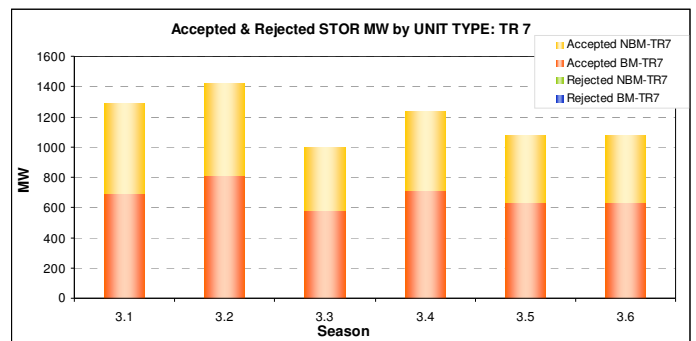
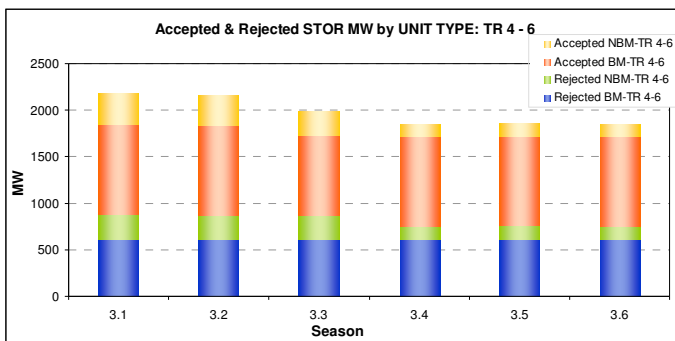
Table 1 below shows a high-level overview of the tenders received by National Grid for seasons 3.1 to 3.6. The numbers have been broken down by tender round and only show seasons which pertain to year 3.

Table1: Season summary table for Tender Rounds 4 to 7

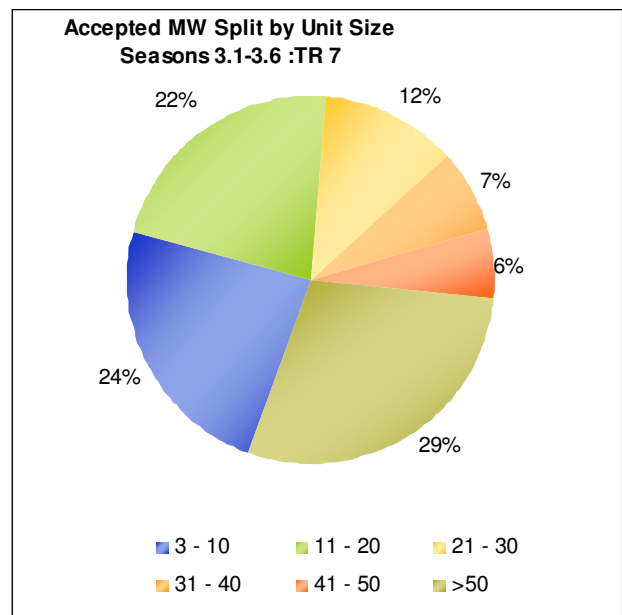
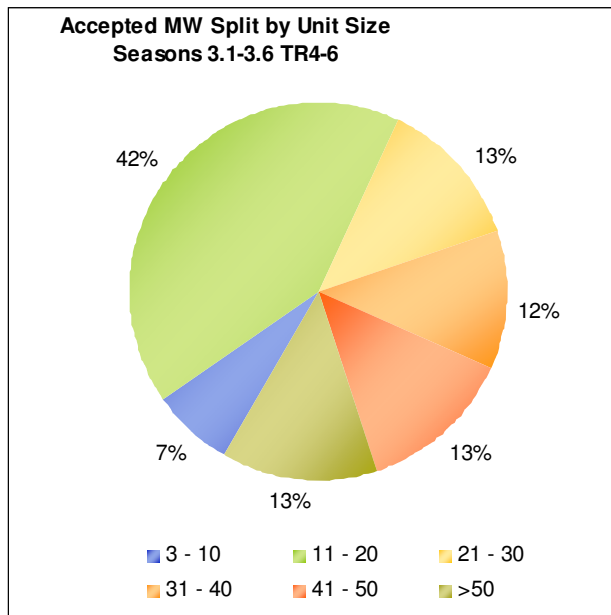
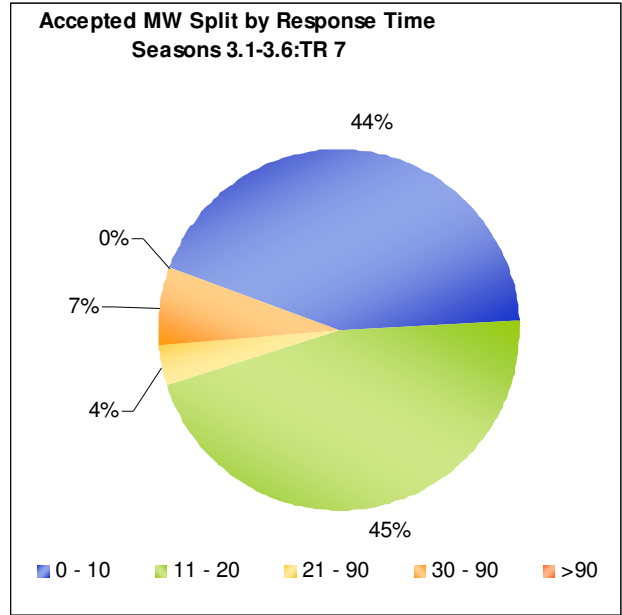
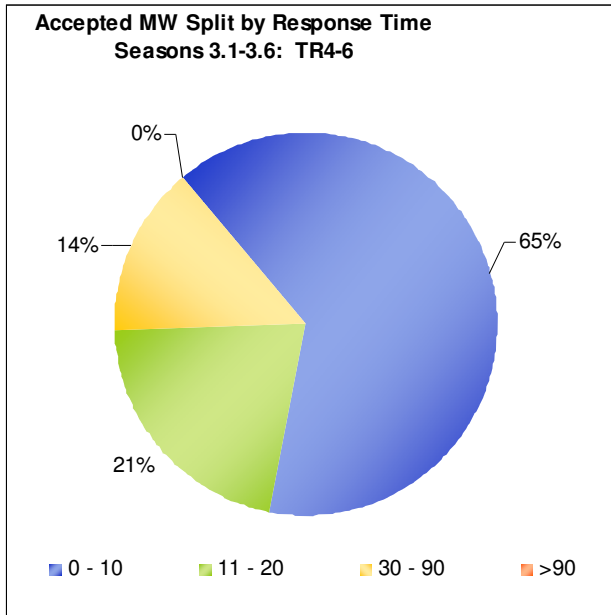
Season		3.1		3.2		3.3		3.4		3.5		3.6	
Flexible or Committed Service		F	C	F	C	F	C	F	C	F	C	F	C
TR4 Tendered MW		0	40	0	40	0	40	0	40	0	40	0	40
TR4 Accepted MW		0	0	0	0	0	0	0	0	0	0	0	0
TR5 Tendered MW		0	843	4	826	0	830	0	712	140	580	132	580
TR5 Accepted MW		0	0	0	0	0	0	0	0	0	0	0	0
TR6 Tendered MW		18	1283	18	1270	0	1127	0	1094	140	962	132	962
TR6 Accepted MW		18	1283	18	1270	0	1127	0	1094	140	962	132	962
TR7 Tendered MW		434	862	448	976	292	706	281	958	389	686	389	687
TR7 Accepted MW		434	862	448	976	292	706	281	958	389	686	389	687
sub Total Tendered MW		452	3028	470	3112	292	2703	281	2804	669	2268	653	2269
sub Total Accepted MW		452	2145	466	2246	292	1833	281	2052	529	1648	521	1649
Total Accepted MW		2597		2712		2125		2333		2177		2170	
Average Submitted Availability Price (£MWh)	TR4	-	10.00	-	10.00	-	10.00	-	10.00	-	10.00	-	10.00
	TR5	-	8.64	8.90	8.71	-	8.65	-	9.28	8.84	9.47	8.84	9.47
	TR6	6.08	8.70	6.15	8.71	-	8.79	-	9.05	8.75	9.18	8.50	9.18
	TR7	6.60	7.98	6.69	8.14	7.10	8.44	7.05	8.69	8.48	8.56	8.56	8.55
Average Accepted Availability Price (£MWh)	TR4	-	-	-	-	-	-	-	-	-	-	-	-
	TR5	-	-	-	-	-	-	-	-	-	-	-	-
	TR6	6.08	8.70	6.15	8.71	-	8.79	-	9.05	8.75	9.18	8.50	9.18
	TR7	6.60	7.98	6.69	8.14	7.10	8.44	7.05	8.69	8.48	8.56	8.56	8.55
Average Submitted Utilisation Price (£MWh)	TR4	-	325.00	-	325.00	-	325.00	-	325.00	-	325.00	-	325.00
	TR5	-	384.49	430.00	386.39	-	386.60	-	411.46	258.57	446.22	258.71	446.22
	TR6	325.00	317.93	325.00	318.52	-	329.63	-	329.57	268.43	338.99	268.48	338.99
	TR7	235.34	274.00	249.57	269.37	234.68	283.11	224.87	283.75	273.55	285.56	269.74	285.28
Average Accepted Utilisation Price (£MWh)	TR4	-	-	-	-	-	-	-	-	-	-	-	-
	TR5	-	-	-	-	-	-	-	-	-	-	-	-
	TR6	325.00	317.93	325.00	318.52	-	329.63	-	329.57	268.43	338.99	268.48	338.99
	TR7	235.34	274.00	249.57	269.37	234.68	283.11	224.87	283.75	273.55	285.56	269.74	285.28

\* Average Prices are Weighted by Volume and Availability Time

The diagrams to below show an overview of accepted and rejected tenders for seasons 3.1 to 3.6 from all tenders.



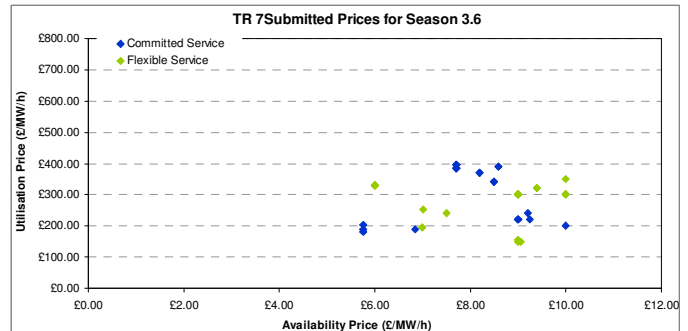
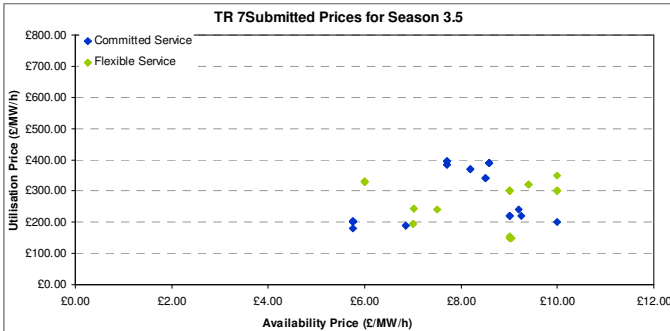
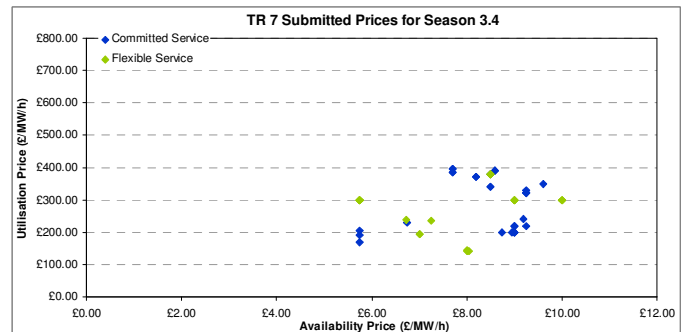
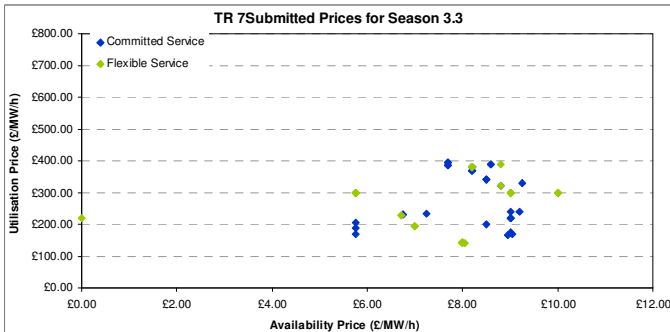
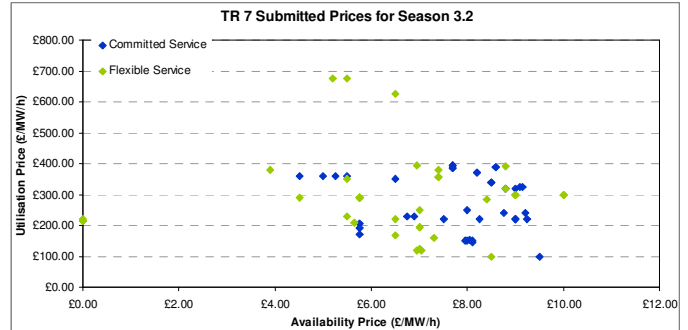
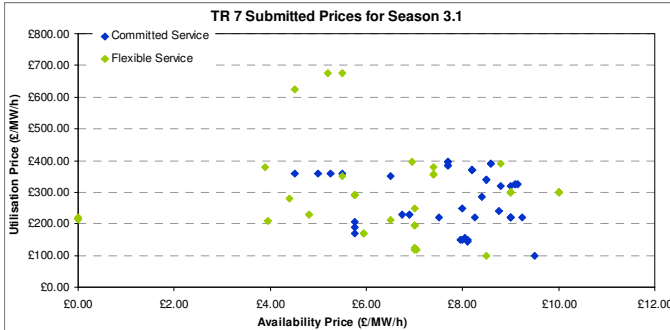
The following diagrams give an overview of the STOR parameters for accepted contracts for seasons 3.1 to 3.6.



### Section 1.2 Prices

Scatter plots of availability and utilisation prices for tenders for each season for TR 7 are shown. Note that under STOR, providers may have significantly different response times.

Year 3 Submitted Tender Prices – Scatter Plots of availability & utilisation prices for TR 7



## Section 2 Total Contracted Position

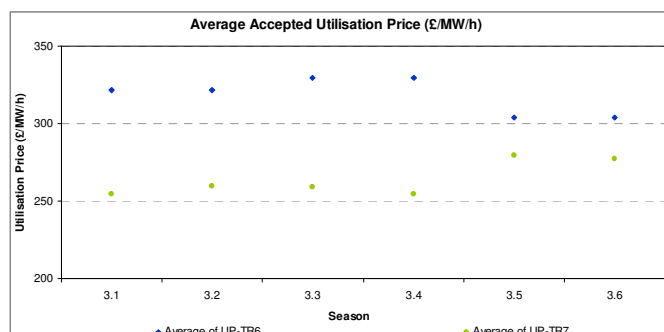
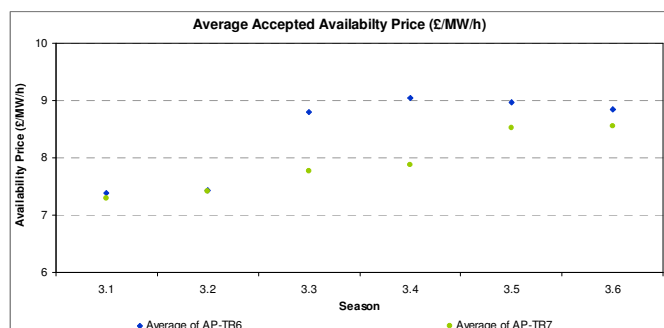
This section gives a summary of the all STOR contracted by National Grid. The volumes have been aggregated by previous tender rounds. As no contracts were accepted for TR 4 or 5 only TR6 and 7 are shown.

Table 2: Summary of total contracted position as a result of Tender Round 7

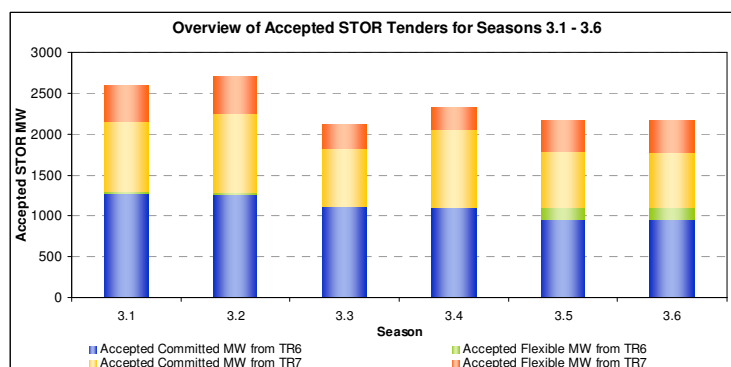
Dates		1st April 2009 - 31st March 2010					
Season		3-1	3-2	3-3	3-4	3-5	3-6
TR6		1301	1288	1127	1094	1102	1094
TR7		1296	1424	998	1239	1075	1076
Average Accepted Availability Price*	TR 6	7.39	7.43	8.79	9.05	8.96	8.84
	TR 7	7.29	7.41	7.77	7.87	8.52	8.55
Average Accepted Utilisation Price*	TR 6	321.47	321.76	329.63	329.57	303.71	303.74
	TR 7	254.67	259.47	258.90	254.31	279.56	277.51
Total Accepted MW		2597	2712	2125	2333	2177	2170
Overall Average Accepted Availability		£7.34	£7.42	£8.11	£8.26	£8.74	£8.70
Overall Average Utilisation Availability		£288.07	£290.62	£282.48	£279.40	£291.63	£290.62

\*Average Prices are Weighted by Volume and Availability Time

The following graphs show the average accepted availability and utilisation prices for this and previous tender rounds. The last graph is a pictorial representation of how the accepted volumes are broken down by committed and flexible services.



The committed service applies to all providers who wish to make themselves available for all required windows nominated by National Grid. Both BM and NBM providers can tender for this service. The flexible service however allows providers to make themselves available for particular windows. This availability is assessed on a week-ahead basis and providers are notified if their service is required or not. The flexible service only applies to NBM providers. Both Services attract an availability payment and a utilisation payment on an instruction by National Grid; both are paid on a £/MW/h basis



## Appendix 1: Terminology and Definitions

Term	Definition
SR	Standing Reserve ( the predecessor to STOR)
STOR	Short-Term Operational Reserve
STORR	Short-Term Operational Reserve Requirement
Unit	As described within a STOR framework agreement as constituting a STOR site
Tendered / Accepted MW	The maximum availability in the specified period
Year 3	Equivalent to Financial Year 2009/10 commencing on 1st April 2009
Year4	Equivalent to Financial Year 2010/11 commencing on 1st April 2010
Average Availability / Utilisation Price	The average price weighted by Volume and Availability for the specified period
TR	Tender Round

## Appendix 2: Season Reference

The following tables summarise the seasons for the current year (Year 3) and next year (Year 3). For Tender dates etc see the National Grid websites as mentioned on page 1 of this report.

Year 3: 2009/10						
Season	Dates	Window	WD		NWD	
			Start Time	End Time	Start Time	End Time
1	05:00 1st April 2009 to 05:00 27th April 2009	I	07:00	13:30	10:00	14:00
		II	19:00	22:00	19:30	22:00
2	05:00 27th April 2009 to 05:00 17th August 2009	I	07:30	14:00	09:30	13:30
		II	16:00	18:00	19:30	22:30
		III	19:30	22:30		
3	05:00 17th August 2009 to 05:00 21st September 2009	I	07:30	14:00	10:30	13:30
		II	16:00	21:30	19:00	22:00
4	05:00 21st September 2009 to 05:00 26th October 2009	I	07:00	13:30	10:30	13:30
		II	16:30	21:00	17:30	21:00
5	05:00 26th October 2009 to 05:00 1st February 2010	I	07:00	13:30	10:30	13:30
		II	16:00	21:00	16:00	20:30
6	05:00 1st February 2010 to 05:00 1st April 2010	I	07:00	13:30	10:30	13:30
		II	16:30	21:00	16:30	21:00

Year 4: 2010/11						
Season	Dates	Window	WD		NWD	
			Start Time	End Time	Start Time	End Time
1	05:00 Thursday 1st Apr 2010 - 05:00 Monday 26th Apr 2010	I	07:00	13:30	10:00	14:00
		II	19:00	22:00	19:30	22:00
2	05:00 Monday 26th Apr 2010 - 05:00 Monday 16th Aug 2010	I	07:30	14:00	09:30	13:30
		II	16:00	18:00	19:30	22:30
		III	19:30	22:30		
3	05:00 Monday 16th Aug 2010 - 05:00 Monday 20th Sep 2010	I	07:30	14:00	10:30	13:30
		II	16:00	21:30	19:00	22:00
4	05:00 Monday 20th Sep 2010 - 05:00 Monday 1st Nov 2010	I	07:00	13:30	10:30	13:30
		II	16:30	21:00	17:30	21:00
5	05:00 Monday 1st Nov 2010 - 05:00 Monday 31st Jan 2011	I	07:00	13:30	10:30	13:30
		II	16:00	21:00	16:00	20:30
6	05:00 Monday 31st Jan 2011 - 05:00 Friday 1st Apr 2011	I	07:00	13:30	10:30	13:30
		II	16:30	21:00	16:30	21:00

