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STOR Market Information Report - TR39

11th October 2019

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Foreword

Welcome to the TR39 Market Information Report (MIR) which covers tenders for delivery to the end of STOR year 14, April 2021. As part of the recent update to the contract terms, we have published further details about tendering for STOR which we hope provides more understanding of the STOR market.

We are pleased to announce that non-BM STOR is now live on the new despatch system – ASDP. This means that submission data, instructions and metering will now be accessed via the new system in our control room. The next phase will allow relevant providers to move away from their existing SRD PC to their new web service. For any questions on migration, please contact Naeem.Shaukat@nationalgrid.com.

As set out in our <u>Forward Plan</u>, we have stated that we will reform and review our response and reserve products and an update on this will be provided in the coming weeks. This will set out our intentions in light of the introduction of Wider Access from this December and TERRE in 2020.

We have issued a STOR Outline Change Proposal (OCP) setting out various changes that we intend to make to the STOR contract terms. This is due to requirements in EU Codes, the introduction of the new non-BM despatch platform and general housekeeping, all with the aim of being implemented by 18th December 2019. Further details on the OCP can be found on the STOR page and the deadline for responses if 5pm on 1st November.

Included within the OCP document, is a proposed change to the treatment of utilisation price as required under Article 16.6 of the <u>Electricity Balancing Guidelines</u> (EBGL) which stipulates that the price of "balancing of energy bids" i.e. utilisation price, cannot be pre-agreed in a contract. <u>Ofgem have not granted</u> an exemption from this EBGL requirement. The utilisation price will need to be removed from all contracts regardless of when they were contracted. More details will be provided in due course.

Links

For further details on STOR please see our website here
Assessment principles can be found here
Our general description of STOR can be found here
The STOR tender round dates can be found here
Frequently asked questions document is found here



Steve Dugmore STOR service lead

STOR assessment analysis

Introduction

This market information report is produced after each tender round and is designed to give existing and potential STOR participants an overall view of the tenders received. It gives data on the tendered utilisation and availability prices, our forward contracted position and further details on the type and dynamics of the tendered units.

This report is under continuous review and development. If you have any comments or suggestions of information you would like to see in future issues, please contact your account manager.

Split of flexible and committed for accepted tenders

To make sure we meet our requirements for STOR in real time we look at historic availability profiles from committed and flexible providers to help determine the volume of STOR tenders to procure during the tender rounds. During the assessment, we apply de-rating percentages to the tendered megawatts (MW) to develop a clearer understanding of the actual volume that will be available in real time. The percentages used are: balancing mechanism committed (BM-C) 90%, non-balancing mechanism committed (NBM-C) 85%, non-balancing mechanism flexible (NBM-F) non-winter 25% and NBM-F winter 0%. These figures give the average outturn availability over the various seasons where the actual availability over the peak winter evenings has been significantly lower for flexible. When considering the capacity accepted and tendered it is important to think of it not in absolute volumes but in terms of the de-rated volume. Whilst there is currently no fixed limit for the amount of committed or flexible STOR we are willing to accept, committed units are key in meeting the requirement during periods of low non-committed availability and as such we value committed units particularly in the winter seasons. The two versions of the chart below demonstrate this concept.

Breakdown of Accepted Flexible and Committed MW per season

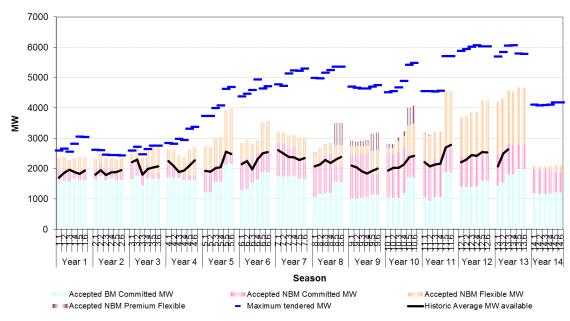


Figure 1 - Breakdown of accepted flexible and committed STOR (MW) per season

Figure 1 gives a breakdown of the accepted flexible and committed MW per season since the start of the STOR service. The blue line is the sum of the maximum tendered MW from unique units from all tender rounds for each season. The black line on the chart represents the outturn average availability for each season. Premium flexible tenders are included in the flexible category for the purpose of this chart.

Breakdown of Accepted Flexible and Committed De-rated MW per season

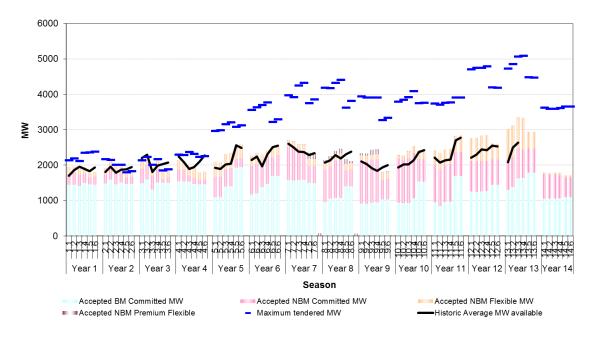


Figure 2 - Breakdown of accepted flexible and committed de-rated STOR (MW) per season

Figure 2 applies the above de-rating factors to the data in figure 1. This gives a much closer match to the actual outturn available MW of STOR.

Tenders received and assessment results

In TR39, we received 229 tenders of which 1567 MW were for year 13 winter and 3402 MW for year 14.

	Total te	nders for T	R39 (MW)				ly contracted ity (MW)	
Season number	ВМ-С	NBM-C	NBM-F	Total	De- rated total	Total	De-rated total	
13.5	430	3	1136	1569	390	3259	2205	
13.6	430	3	1113	1546	390	3253	2200	
14.1	1349	544	14	1907	1677	1579	1307	
14.2	1325	522	14	1861	1636	1565	1304	
14.3	1325	522	14	1861	1636	1568	1307	
14.4	1330	522	14	1866	1641	1580	1284	
14.5	1365	522	14	1901	1672	1607	1218	
14.6	1365	522	14	1901	1672	1606	1217	

Table 1 summarises the tenders received, and the total contracted and de-rated tenders. A full breakdown of contracted and tendered data is in the Excel file.

	Tenders	accepted for	or TR39 (M\	N)		Remaining requirement (MW)
Season number	BM-C	NBM-C	NBM-F	Total	De- rated total	Total
13.5	300	0	1122	1422	270	0
13.6	300	0	1113	1413	270	0
14.1	275	219	14	508	434	600
14.2	270	216	14	500	427	600
14.3	270	216	14	500	427	600
14.4	275	216	14	505	431	600
14.5	280	216	14	510	436	700
14.6	280	216	14	510	436	700

Table 2 summarises the accepted units and the approximate requirement remaining for the next tender rounds.

Successful tenders

Year 13 (2019-20)

During this tender round, we were looking to fulfil our 13.5 and 13.6 requirement. We accepted 270 MW of de-rated STOR in TR39.

Year 14 (2020-21)

This was the third tender opportunity for year 14. We accepted only the most economic tenders. We have a modest remaining requirement which we will fill this over the coming tender rounds.

Expectations for future tender rounds

Our requirements that we will procure in future tender rounds:

- 600 MW for seasons 14.1 to 14.4 (summer) and 700 MW for seasons 14.5 and 14.6 (winter).
 We intend to procure only the most economic tenders.
- 2300 MW for each season in year 15.

1		1		1			1		
	Units	Units	MW	MW		Units	Units	MW	MW
SCOTLAND	tendered	Accepted	tendered	Accepted	SOUTH	tendered	Accepted	tendered	Accepted
13.1	-	-	-	-	13.1	-	-	-	-
13.2	-	-	-	-	13.2	-	-	-	-
13.3	-	-	-	-	13.3	-	-	-	-
13.4	-	-	-	-	13.4	-	-	-	-
13.5	-	-	-	-	13.5	71	67	628	528
13.6	-	-	-	-	13.6	71	67	628	528
14.1	-	-	-	-	14.1	26	6	752	257
14.2	-	-	-	-	14.2	25	6	728	252
14.3	-	-	-	-	14.3	25	6	728	252
14.4	-	-	-	-	14.4	25	6	733	257
14.5	-	-	-	-	14.5	26	6	735	262
14.6	-	-	-	-	14.6	26	6	735	262
	Units	Units	MW	MW		Units	Units	MW	MW
NORTH	tendered	Accepted	tendered	Accepted	MULTIPLE	tendered	Accepted	tendered	Accepted
13.1	-	-	-	-	13.1	-	-	-	-
13.2	-	-	-	-	13.2	-	-	-	-
13.3	-	-	-	-	13.3	-	-	-	-
13.4	-	-	-	-	13.4	-	-	-	-
13.5	84	82	865	835	13.5	9	9	59	59
13.6	82	80	856	826	13.6	9	9	59	59
14.1	13	3	960	56	14.1	14	14	195	195
14.2	12	3	941	56	14.2	13	13	192	192
14.3	12	3	941	56	14.3	13	13	192	192
14.4	12	3	941	56	14.4	13	13	192	192
14.5	13	3	974	56	14.5	13	13	192	192
14.6	13	3	974	56	14.6	13	13	192	192

Figure 3 - the number of units and the total MW tendered and accepted for each season and each location

Prices

Figures 4 to 8 below show scatter plots of availability and utilisation price for each tender and for each season. The data is broken down into:

- response time groups of less than 20 mins or greater than 20 mins;
- flexible or committed service;
- and, accepted or rejected tenders.

These charts also show the accepted and rejected tenders from previous tender rounds. To keep this report short only seasons 2, 4 and 6 are displayed. The complete dataset for all seasons is available in the Excel file.

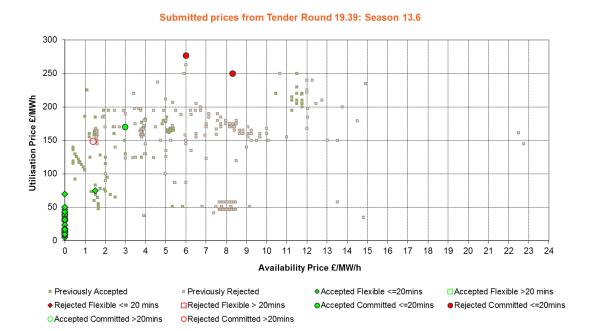


Figure 4 - Availability and utilisation price plots season 13.6

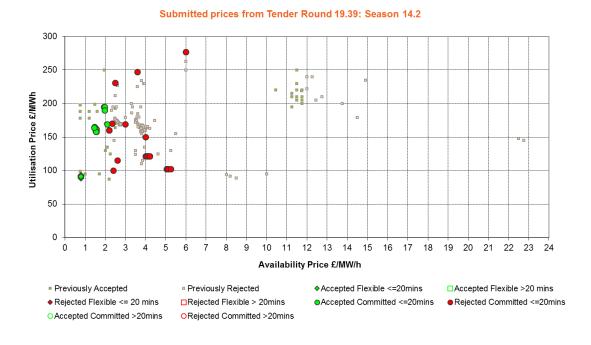


Figure 5 - availability and utilisation price plots season 14.2

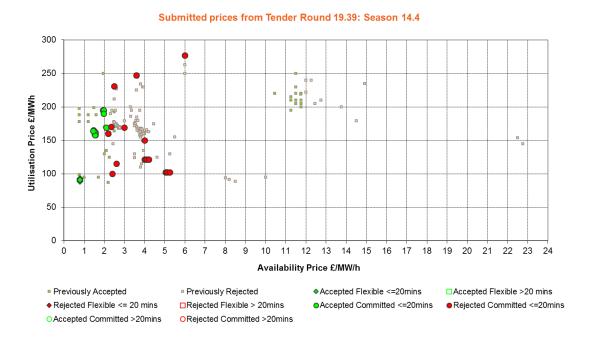


Figure 6 - availability and utilisation price plots season 14.4

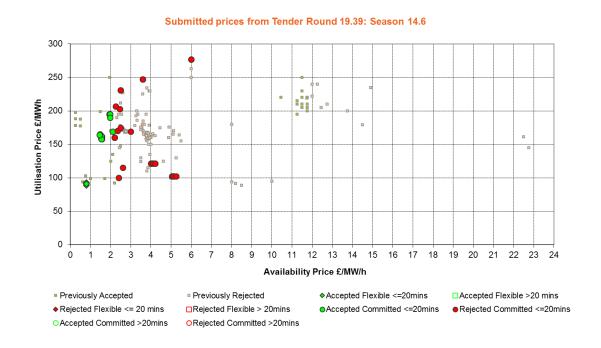


Figure 7 - availability and utilisation price plots season 14.6

Table 3 summarises the highest accepted availability price for committed and flexible units. The table also presents the highest and lowest utilisation price accepted for each season as a guide. This information can be seen on the scatter plots above. We have included the highest availability price accepted that is not from an "all or nothing" tender. This is to help distinguish between "all or

nothing" prices that were accepted due to their benefits in other seasons from those accepted for their benefit in the current season.

Table 3 Summary of accepted prices

Season number	Highest availability price accepted (£/MW/h)	Highest availability price accepted, not all or Nothing (£/MW/h)	Highest utilisation price accepted (£/MWh)	Lowest utilisation price accepted (£/MWh)
13.5	£2.98	£1.50	£170.00	£4.97
13.6	£2.98	£1.50	£170.00	£4.97
14.1	£2.10	£1.00	£207.87	£88.91
14.2	£2.10	£0.80	£195.00	£88.91
14.3	£2.10	£0.80	£195.00	£88.91
14.4	£2.10	£0.80	£195.00	£88.91
14.5	£2.10	£0.80	£195.00	£88.91
14.6	£2.10	£0.80	£195.00	£88.91

Total contracted position

Figure 8 and table 4 below show the breakdown of accepted volumes from all previous tender rounds across the seasons of Years 13 and 14 without de-rating.

Overview of Accepted STOR Tenders for Seasons 13.1 - 14.6

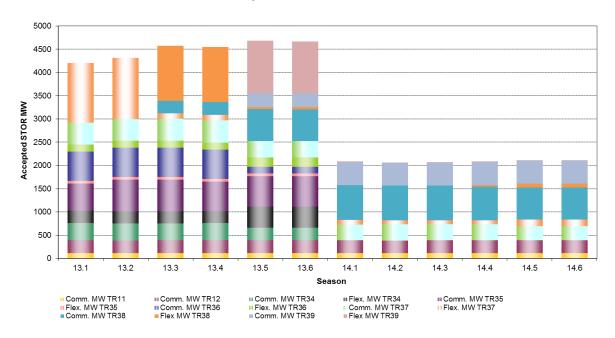


Figure 8 Year 13 and 14 summaries by tender round

Table 4 Year 13 and 14 summaries by tender round

	Season	13	3.1	13	13.2		13.3		13.4		13.5		3.6
	Service Type	С	F	С	F	С	F	С	F	С	F	С	F
	TR11	116		116		116		116		116		116	
	TR12	273		271		272		273		274		274	
	TR34	368	272	366	261	366	261	368	261	271	456	271	456
Accepted MW	TR35	578	62	677	62	677	62	632	62	652	61	652	61
Accepted www	TR36	629	148	629	148	629	148	629	148	140	203	140	203
	TR37	475	1287	469	1319	471	120	482	120	352		351	
	TR38					270	1186	270	1186	690	44	685	44
	TR39									300	1122	300	1113
	Total	2439	1769	2528	1790	2801	1777	2770	1777	2795	1886	2789	1877

	Season	on 14.1		14.2		14.3		14.4		14.5		14.6	
	Service Type	С	F	C	F	С	F	С	F	С	F	С	F
Accepted MW	TR11	116		116		116		116		116		116	
	TR12	273		271		272		273		274		274	
	TR37	342	95	345	84	345	84	345	84	300	150	300	150
	TR38	753		749		751		723	39	687	80	686	80
	TR39	494	14	486	14	486	14	491	14	496	14	496	14
	Total	1978	109	1967	98	1970	98	1948	137	1873	244	1872	244

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