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Dear Industry Colleagues,

Tender Results for Scotland Reactive Tender

Following the Scotland enhanced reactive tender which closed for submission on the 18th February 2019, the below is information the tenders received and results following assessment.

We would like to thank those who participated in the tender round. The summary of the tenders received is as follows:

- 10 tenders from Scottish Power Renewables for 10 different wind farm units
- 3 tenders from DRAX for Cruachan units
- 4 tenders from SSE representing 9 wind farm BMUs
- 3 tenders from Statkraft for 3 different wind farms
- 12 tenders from A'Cruach for 1 wind farm
- 2 tender from Fred Olsen for 2 wind farm
- 2 tenders from Fallago Rig for 1 wind farm

Details of the tender submissions can be found in Appendix 1.

Tender Results

In total 36 tenders were received. In total 11 tenders were accepted, the tenders along with accepted and rejected tenders can be found in the appendix to this letter.

Assessment:

As outlined in the original RFI the tender assessment process is as follows, further details are included in the RFI:

1. Conversion into a standard volume

    The tenders had a varying reactive power capability. To correctly assess all providers who have a varying reactive capability for the Availability Fee, this has been distilled into a price per MVArh.

$$Reactive\ Availability\ Price\ (£/MVArh) = \frac{Availability\ Fee\ (£/hr)}{Reactive\ Range\ (MVAr)}$$

2. Effectiveness assessment

    Providers in different locations, connected at different voltage levels have a different impact on the transmission system voltage, therefore an effectiveness score needs to be established through technical assessment.

This is then used to determine an 'Effective Utilisation Price'. The effective utilisation price is calculated using a forecast payment rate and the provider's effectiveness score. This therefore means providers which are less effective, will have a higher effective utilisation fee.

For example if provider A is 100% effective and provider B 50% effective, provider B will appear twice as expensive. This is because to have the same impact on the system, twice as much reactive power must be utilised.

$$Effective\ Utilisation\ Price\ (£/MVArh) = \frac{Forecast\ ORPS\ Rate\ (£/MVArh)}{Effectiveness\ Score\ (\%)}$$

3. Cost assessment

   The effective utilisation and reactive availability prices are combined to determine the most cost effective machine per MVAr. Each tender is stacked in descending order of its combined effective utilisation and adjusted availability price. A tender must be beneficial against forecasted alternative BM cost for the reactive volume.

4. Comparison against requirements

   All tenders are compared against the requirements. Tenders which meet requirements, and result in no over holding are considered for acceptance.

Following technical assessment the effectiveness score of each tender received are detailed below. The effectiveness of the units may differ to that published in the original document, the original documentation was an indicative effectiveness. Once the system studies were completed on an individual unit basis this may have resulted in a change in effectiveness due to conditions/configuration of the system.

Tendered Unit	Effectiveness (%)
ACHRW-1	55
Andershaw Wind Farm	13
ARCHW-1	40
Baillie Wind Farm	25
Berry Burn Wind Farm	24
BETHW-1	20
BTUIW-2	64
Clyde	13
CRUA - 1	58
CRUA - 3	57
CRUA -1	58
CRYRW-2	15
DNLWW-1	27

DRSLW-1	51
EWHLW-1	1
FALGW-1 A	15
FALGW-1 B	15
Griffin	35
HRSTW-1	11
KLGLW-1	38
MKHLW-1	65
STLGW	44
T_BHLAW-1	1
WHILW-1	39
WISTW-2	56

Learnings

The effectiveness was published alongside the tender documentation to give an indication ahead of tender submission, we do recognise that for a small number of providers the actual effectiveness differs significantly from the indicative effectivness. This is the first time the effectiveness has been published ahead of tender submssion, we would value providers feedback on the usefulness of the information for future reactive tenders. If provided as part of future tenders, this process will be reviewed again to ensure any learnings from this are captured.

If you wish to submit any feedback on the effectiveness, process, contract etc. please contact Emily Campion.

Further Information

For further information and a more detailed explanation of the procurement process for the above or similar requirements, please contact Emily Campion.

Yours sincerely,
Emily Campion

Appendix 1. Tenders Received and Results

Tendered Unit	Start of Tender	End of Tender	Lead at 0% of Active Power Output	Lag at 0% of Active Power Output	Availability Fee (£/hr)	Effectiveness Score	Results
ACHRW-1	01/04/2019	30/04/2019	3	5	14.00	55	Accept
ACHRW-1	01/05/2019	31/05/2019	3	5	14.00	55	Accept
ACHRW-1	01/06/2019	30/06/2019	3	5	14.00	55	Accept
ACHRW-1	01/01/2020	31/01/2020	3	5	20.00	55	Reject
ACHRW-1	01/02/2020	29/02/2020	3	5	20.00	55	Reject
ACHRW-1	01/03/2020	31/03/2020	3	5	20.00	55	Reject
ACHRW-1	01/07/2019	31/07/2019	3	5	21.00	55	Reject
ACHRW-1	01/08/2019	31/08/2019	3	5	21.00	55	Reject
ACHRW-1	01/09/2019	30/09/2019	3	5	21.00	55	Reject
ACHRW-1	01/10/2019	31/10/2019	3	5	28.00	55	Reject
ACHRW-1	01/11/2019	30/11/2019	3	5	28.00	55	Reject
ACHRW-1	01/12/2019	31/12/2019	3	5	28.00	55	Reject
Andershaw Wind Farm	01/05/2019	31/03/2021	25.9	23.2	34.31	13	Reject
ARCHW-1	01/04/2019	31/03/2020	39.44	39.44	2.83	40	Accept
Baillie Wind Farm	01/05/2019	31/03/2021	12.5	12.5	20.99	25	Reject
Berry Burn Wind Farm	01/05/2019	31/03/2021	28.0	30.0	36.97	24	Reject
BETHW-1	01/04/2019	31/03/2020	10	10	0.00	20	Reject
BTUIW-2	01/04/2019	31/03/2020	15	16	0.00	64	Accept
Clyde	01/04/2019	31/03/2020	273.8	191.8	123.93	13	Reject
CRUA - 1	01/09/2019	31/03/2020	39	39	585.00	58	Reject
CRUA - 3	01/04/2019	31/03/2020	39	39	585.00	57	Reject
CRUA -1	01/04/2019	31/07/2019	39	39	585.00	58	Reject
CRYRW-2	01/04/2019	31/03/2020	53	55	58.00	15	Reject
DNLWW-1	01/04/2019	31/03/2020	11	11	0.00	27	Reject
DRSLW-1	01/04/2019	31/03/2020	23	23	3.29	51	Accept
EWHLW-1	01/04/2019	31/03/2020	21	13	2.49	1	Reject
FALGW-1	01/04/2019	31/03/2020	34	67	83.34	15	Reject

FALGW-1	01/04/2019	31/03/2020	58	57	83.34	15	Reject
Griffin	01/04/2019	31/03/2020	70	70	90.94	35	Reject
HRSTW-1	01/04/2019	31/03/2020	62	65	9.08	11	Reject
KLGLW-1	01/04/2019	31/03/2020	78	78	5.59	38	Accept
MKHLW-1	01/04/2019	31/03/2020	18.4	18.4	1.32	65	Accept
STLGW	01/04/2019	31/03/2020	88.8	109.4	92.60	44	Accept
T_BHLAW-1	01/04/2019	31/03/2020	28.8	58.5	92.60	1	Reject
WHILW-1	01/04/2019	31/03/2020	127	155	25.00	39	Accept
WISTW-2	01/04/2019	31/03/2020	53	55	58.00	56	Accept