ESO Forward Plan FY 18/19

January reporting

21st February 2019

Foreword

Welcome to our monthly report for January 2019.

This report focusses on the subset of our key metrics which are reported monthly.

In addition to these metric updates, we also include concise information to keep you briefed on relevant progress against important deliverables. We have continued to keep these updates in a tabular format to make it easy to track our progress against what we set out in out in the last quarterly report.

Some of the key headlines for January are:

- We launched an EMR Delivery Body Consultation relating to renewables participation in the Capacity Market.
- We delivered the Charging Futures Forum during January which gave a focus to the Targeted Charging Review's minded-to position and the launch of the Balancing Services Task Force.
- We held the first BSUoS Review task force on 29th January.
- We had 100% on time delivery of the new half hourly BSUoS forecast.
- We published a consultation on 21 January 2019 on improved Procurement Guidelines reporting.
- We published the NOA report on 31 January. We also launched a webpage on the pathfinding projects at the same time to better engage stakeholders.
- We were pleased with our demand forecasting performance, against a background of 20 days in January where we saw triad avoidance behaviour.

Contents

We welcome feedback on our performance reporting to box.soincentives.electricity@nationalgrid.com.

Louise Schmitz
ESO Regulation Senior Manager

1.Performance

Principle 1

Support market participants to make informed decisions by providing user friendly, comprehensive and accurate information

Performance metrics

Metric 1 - Commercial Assessment Transparency

Performance

Month	FFR		Fast Reserve		STOR	
	On time	Right first time	On time	Right first time	On time	Right first time
April	●	●	●	●	n/a	n/a
May	●	●	●	●	n/a	n/a
June	●	●	●	●	●	●
July	●	●	●	●	n/a	n/a
August	●	●	●	●	n/a	n/a
September	●	●	●	●	●	●
October	●	●	●	●	n/a	n/a
November	●	●	●	●	n/a	n/a
December	●	●	●	●	n/a	n/a
January	●	●	●	●	n/a	n/a
YTD	●	●	●	●	●	●

● Published on-time ● Published right first time

● Not published on-time ● Not published right first time

Figure 1 - Metric 1 Commercial Assessment Transparency Performance

Supporting Information

Balancing service assessment results published to the agreed schedule:

- The FFR and Fast Reserve assessment results were published on time in January
- No STOR results were due to be published this month

FFR

Following FFR TR108 results publication, we identified some tenders were incorrectly accepted and rejected. This was due to manual error. One provider was impacted. We communicated the tenders that were affected and a thorough process review is underway to reduce or remove human error from the FFR tender process. This turns the status for FFR's RFT metric for December red

This month's FFR tender was for month ahead only. The FFR webinar was held on 23 January, the presentation and Q&A session are published.

FR

Prior to opening January's Fast Reserve tender, we had communicated via our Market Information Report our intention to consider procuring volume to be delivered between April 2019 and October 2019 during this tender round. 10 tenders were received from 4 different providers, and 2 tenders accepted for volume to be delivered during the period 1 April 2019 to 31 October 2019. The FR webinar was held on 23 January, the presentation and Q&A session are published.

Metric 2 - BSUoS Forecast Provision

Performance

Month	Percentage on time delivery of half hourly BSUoS forecast	Performance
December	100%	●
January	100%	●
YTD	100%	●

Figure 2 - Metric 2 BSUoS Forecast Provision Performance

Supporting information

100% on time delivery of half hourly BSUoS forecast. We are now publishing our half hourly BSUoS forecast on our website. We published this on time every working day in January ahead of the deadline of 08.00 of the day before for Tuesday to Friday and 17:00 Friday for the weekend forecast.

Full details of all metrics are here.

Metric 3 - Trades Data Transparency

Performance

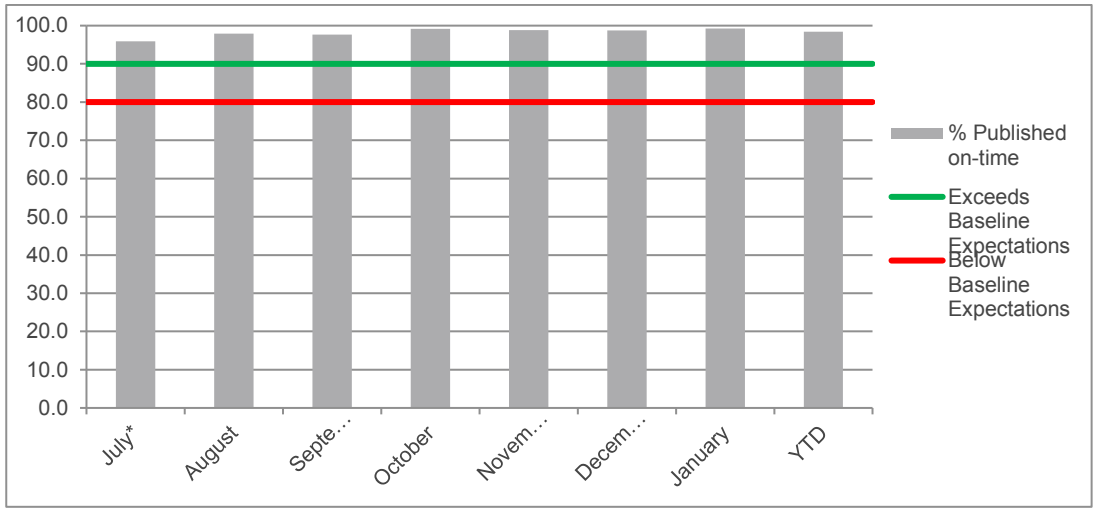

Figure 3 - Metric 3 Trades Data Transparency Performance

*indicates that July performance only shows performance from 16th-31st July

Supporting information

We have been publishing information about our trades on our new web portal since April. Since July we have been able to time stamp the trade allowing us to measure the elapsed time following the trade to its publication. In January, we successfully published 99.3% of its trades within 10 minutes of capture.

From 830 trades, we've reported 824 correctly within 10 min.

Metric 4 - Forecasting Accuracy

Performance

This metric will cover the accuracy of our published DA Demand and Balancing Mechanism Unit (BMU) wind generation forecasts. To access the data that sits behind these metrics please click here.

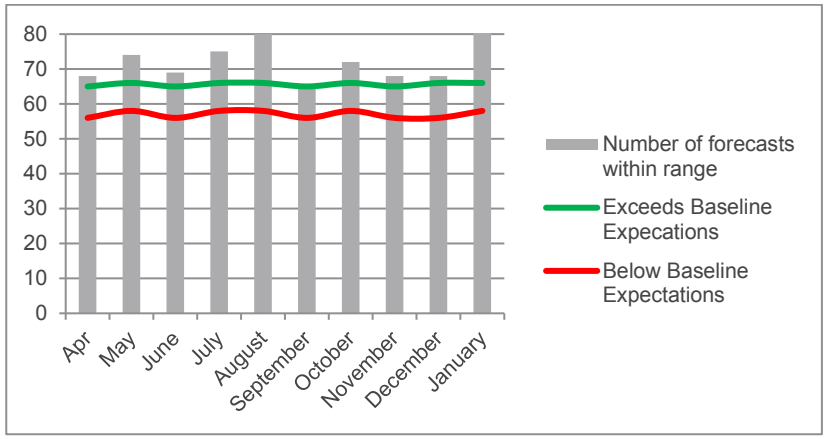

Figure 4 - Metric 4 Demand Forecasting Performance

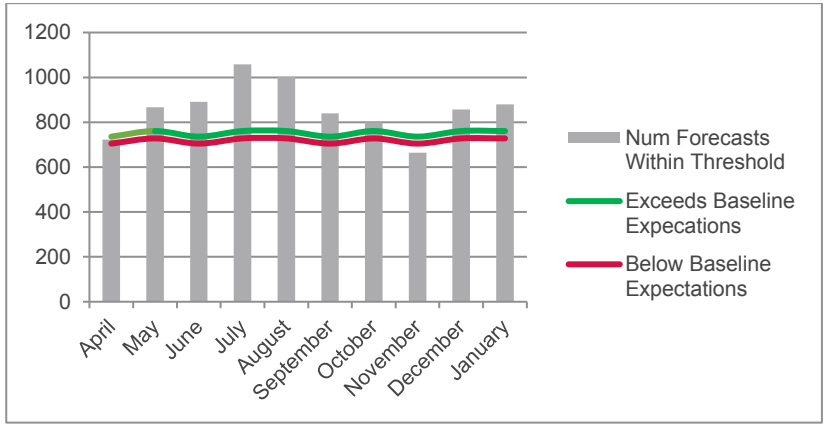

Figure 5 - Metric 4 Wind Forecasting Performance

Day Ahead Demand Forecasting Performance

In January 2019, we achieved a day-ahead (DA) demand forecast performance above our baseline expectation. We met demand monthly accuracy targets 67.7% of the time. Targets have been set to deliver a 5% reduction in error, on a monthly basis, against the average of the monthly performance over the last three years.

During this year's mild winter, the active Triad Avoidance level is relatively low. That led to Triad Avoidance on days when previously we would have never seen it, such as 2nd January. In January, we observed 20 days on which there was Triad Avoidance.

Wind Balancing Mechanism Unit Forecast Performance

In January, we achieved a DA Wind BMU performance of above expectations. We delivered wind BMU forecasts which were within the month's accuracy target 59% of the time.

The target for each half hour for the season December18 – February19 was 5.46%, having now considered the last three year's performance data up to and including March 18.

January had lower than average wind-speeds for the time of year, with around 3 days of isolated high wind-speeds and wind power outturns.

We continue to review our wind power models and are currently phasing in new cubic spline models for a number of sites. This should bring improvements to the forecasting accuracy at the highest wind-speed conditions. In January we updated our record of wind capacity to reflect the most up to date UK wind power deployment.

Principle 2

Drive overall efficiency and transparency in balancing, taking into account impacts of ESO actions across time horizons.

Outcome	2018/2019 Deliverable	Target	Actual	Status	Baseline/ Exceeding
Transparency of our requirements and balancing activities	Publication of improved Procurement Guidelines, and report, with a framework on our current approach to the procurement of Ancillary and Balancing Services.	Q4		Consultation Published on 21 January 2019, awaiting responses. Closure by end of financial year	Exceeding
	Publication of the Future of ENCC Study, recommendations and scope of future work.	Q2/Q3		Will be delivered by year end.	Exceeding

Performance metrics

Metric 5 - Balancing cost management

Metric description

This metric measures the total incentivised balancing costs excluding Black Start spend compared with the benchmark. For full details of how this was calculated please see the performance metrics definition document here.

Performance

For monthly breakdown of costs, please refer to the hotspots and the accompanying data tables found here.

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	YTD
Benchmark cost (£m)	56.9	68.3	90.7	65.2	72.4	57.5	99.6	70.0	79.0	65.8	725.4
Benchmark adjusted for WHVDC (£m)	62.6	72.9	102.9	74.3	86.5	71.4	129.1	70.0*	79.0*	65.8*	814.5
Outturn cost (£m)	56.3	59.4	84.6	78.3	72.2	140.3	145.5	107.7	95.2	77.0	916.5

Figure 6 - Metric 5 Balancing Cost Management Performance

*no adjustment needed as WHVDC was in service

Metric performance detail

In January, we spent £11m more than the benchmark cost, with constraints accounting for 53% of total spend. Several days of high constraint costs were driven by periods of high wind and low demands, which also contributed to RoCoF spend.

Details per day

1st - Trades on interconnector to avoid advancing at least two generating units to bridge the gap created by interconnectors swing resulting in cost saving.

4th - Interconnector traded for margin in the afternoon and in the evening added value cost saving.

7th - Interconnectors trades in excess of 500MW for margin, saving ~£20k

8th - In the morning, constraint real-time optimization allowed a unit to synchronise, saving £20k over 2 hours. In the late evening, Constraints were reassessed to reduce by approx. 4 hours the time an intertrip was required, generating cost savings and improving security.

10th - constraints reassessed to enhance security.

15th - in the early morning Interconnectors were traded for margin generating a cost saving ~ £35k over 3 hours.

16th - in the evening interconnectors were traded for margin generating a cost saving ~ £42k over 3hours. Overnight trades on the interconnectors for energy, instead of advancing plants generated costs saving benefits ~ £15/MWh

18th - Interconnector traded for margin across the day generated costs saving ~ £20k. In the late evening, a generator was run in a different mode reducing the need to synchronize an additional unit for volts, saving £65k.

22nd - Constraint reassessed in real time resulted in no additional machine to be planned over the darkness peak, with a cost saving of ~ £200k.

24th - Interconnector traded for margin avoided running a generating unit at over £300/MWh.

29th - Largest loss increased from 1260MW to 1400MW from 06:00 till 21:00, saving ~ £20k.

Principle 4

Promote competition in the wholesale and capacity markets

Outcome	2018/2019 Deliverable	Target	Actual	Status	Baseline/ Exceeding
Delivering Code Change	Publish energy adequacy and operability updates in the context of EU exit	Early Q4	Q4	We continued to work closely with BEIS, Ofgem and wider stakeholders and plan to publish an update related to EU Exit in February 2019.	Exceeding
	Comprehensive review of BSUoS	Ongoing		We selected and announced task force members, communicated to and engaged with stakeholders through the Charging Futures Forum on 15th January 2019 and held the first task force on 29th January 2019. A Podcast is available summarising what happened at the first meeting.	Exceeding
Capacity Market Modelling	Consult on our renewables derating method and results	Q4	On track, dependent on BEIS timescales	Launched consultation with supporting event	Exceeding
	Consult on our distributed generation derating method and results	Q4	On track, dependent on BEIS timescales		Exceeding
Facilitate and deliver code change under Charging Futures	Deliver Charging Futures Forums that are open to all network users.	Q1,2,4	On track	Delivered the Charging Futures Forum during January which gave a focus to the Targeted Charging Review's minded-to position and the launch of the Balancing Services Task Force. The task force has since had its first meeting. We have also supported the launch of the Access and Forward Looking Charges SCR with facilitating a Webinar.	Exceeding
	Deliver webinars, podcasts and plain English publications under the Charging Futures (CF) Brand. Adapt the content and format in response to the ongoing requirements and preferences of all CF members.	Q1-4	On track		

Performance metrics

Metric 9 - BSUoS Billing

Performance

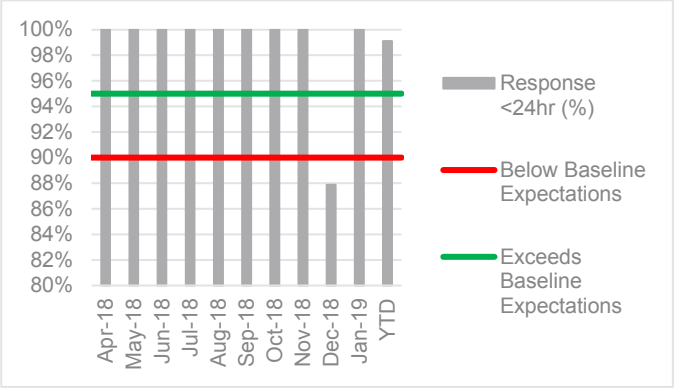

Figure 8 - Metric 9 BSUoS query response time

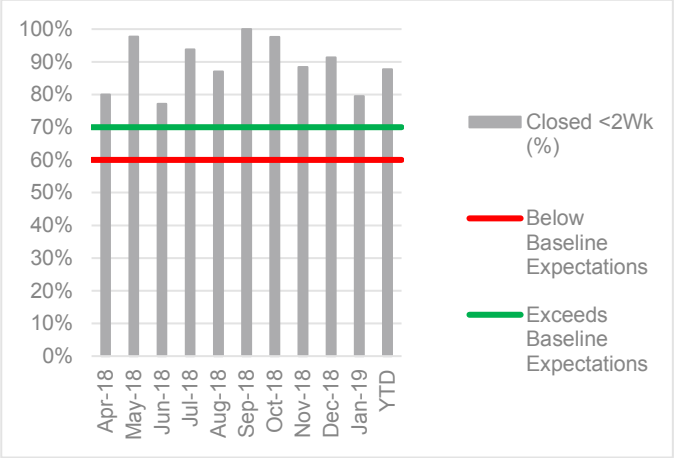

Figure 9 - Metric 9 BSUoS query resolution time

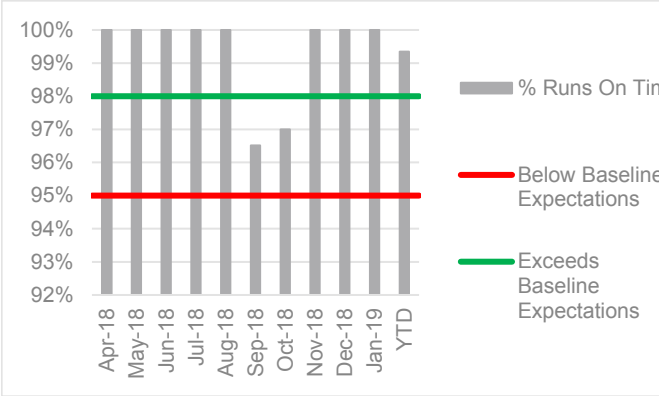

Figure 7 - Metric 9 BSUoS bills timeliness

Supporting information

Queries: We closed 44 queries during the month. We received 41 new queries in January. We received 5 customer survey results following query closure, all rated excellent. (Ratings available are: - Very Poor / Poor / Good / Excellent)

Billing: All daily billing runs were completed on the day that they were due, 100 runs completed in January.

Communications: On 3 January, we issued a Charging Circular to our BSUoS distribution list to advise customers of some delays to the BPA & BCR reports being issued that day due to a system issue we were dealing with. All reports were issued by close of business that same day.

On 16 January, we issued a charging circular to our BSUoS distribution list and then also published it on our website to advise customers of a new daily report that we had made available via our SFTP service

Metric 20 - Month ahead BSUoS forecast vs outturn

Month	APE below 10%	APE above 20%
April	●	
May	●	
June		
July	●	
August		
September		●
October		●
November		
December	●	
January		
YTD	4	2
Target	5 or more green months	Less than 5 red months

Figure 10 - Metric 20 Month ahead BSUoS forecast vs outturn

Supporting information

Our forecast in January had an error of 18%.

Principle 6

Coordinate effectively to ensure efficient whole system operation and optimal use of resources

Performance metrics

Metric 14 - Connections Agreement Management

Number of agreements that need updating	Number of agreements that need updating identified 9 months ago	Number of agreements updated within 9 months	Percentage of agreements updated within 9 months	Status
8	6	5	83%	●

Supporting information

This metric measures the number of connection agreements updated within 9 months of notification.

9 months has now passed on the timeline for some of these agreements. Five out of six agreements have now been updated. Initially there were seven, but one was then found to affect the same connection agreement. So, it is only included once.

Progress is being made on the remaining agreements, and one will be sent to the customer shortly. One of the agreements is still out of date after 9 months due to a complicated contract issue, we are exploring the different options to move it forward.

Metric 15 - System Access Management

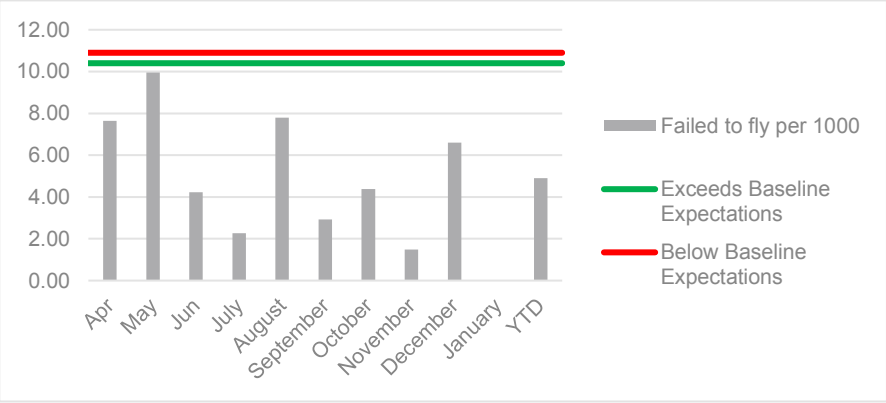

Figure 11 - Metric 15 System Access Management Performance

Supporting information

In January, we had no outages that were classified as fail to fly.

Metric 21 – Right First Time Connection Offers

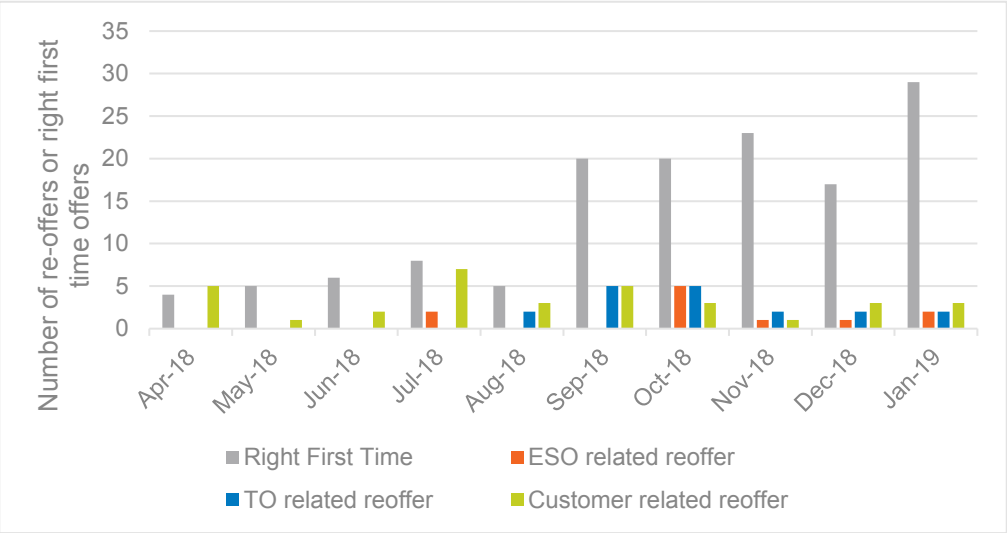

Figure 13 - Metric 21 Right first time connections offers

Performance	
Year to date number of connections offers	187
Reoffer required due to ESO error	11
Year to date percentage of connections reoffers caused by ESO error	5.9%
Exceeds expectations; On target: Below expectations	0-5%; >5-15%; >15%

Figure 12 - Metric 21 Right first time connections offers year to date performance

Principle 7

Facilitate timely, efficient and competitive network investments

Outcome	2018/2019 Deliverable	Target	Actual	Status	Baseline / Exceeding
Improve the Network Options Assessment models and methodologies to support Extending Competition in Transmission (ECIT)	Publication of the NOA report	Q4	Q4	We published the NOA report on 31 January, notifying interested parties by email and also posting on social media. We also launched a webpage on the pathfinding projects at the same time to better engage stakeholders.	Baseline
	Publication of the 2019 NOA recommendations.	Q4	Q4	The NOA report was published on 31 January which contains all the recommendations which have been communicated to the TOs.	Baseline
	Improve and develop our modelling capability, further embedding the interconnector modelling and our analysis of offshore networks.	Q1	Q1	NOA interconnector methodology incorporated in overall NOA methodology April (consultation)/ July (final) includes a number of modelling improvements. The NOA for interconnector analysis is complete and published as part of the NOA report on 31 January. A range of optimal level of interconnection has been identified, based on the FES 2018. This year improvements to the process also include an assessment on ancillary service analysis.	Baseline

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