Monthly Monitoring Meeting

Friday 29 May 2020, 10:00 – 12:00

Teleconference

AGENDA

Ref	Time	Title	Owner
1	*10:05 – 10:20*	**SME slot – New record for coal-free electricity generation and COVID-19 webinars**	*ESO*
2	*10:20 – 10:35*	**SME slot – Carbon intensity green app**	*ESO*
3	*10:35 – 10:50*	**SME slot – Balancing costs**	*ESO*
4	*10:50 – 11:05*	**SME slot – Day ahead forecasting and ODFM**	*ESO*
5	*11:05 – 11:15*	**ESO to highlight any particular notable points from the published report**	*ESO*
6	*11:15 – 11:25*	**ESO to answer any questions which OFGEM has sent prior to the meeting regarding the published report**	*ESO*
7	*11:25 – 11:35*	**ESO to take other questions on the published report**	*Ofgem*
8	*11:35 – 11:50*	**Ofgem to give feedback on ESO performance**	*Ofgem*
9	*11:50 – 12:00*	**Review actions & AOB:** • **End of Year panel event on 3 June**	*All*

Meeting record

Monthly Monitoring Meeting

Date: **29 May 2020**
Time: **10:00 – 12:00**
Venue/format: **Teleconference**

ACTIONS

Meeting No.	Action No.	Date Raised	Target Date	Resp.	Description	Status
24	**55**	29 May	5 Jun	ESO	Provide stakeholder feedback from wider access VLP participants	Closed
24	**56**	29 May	24 Jun	ESO	Organise presenter for next performance meeting to discuss Virtual Synchronous Machines and a presenter for Power Available.	Open
24	**57**	29 May	24 Jun	ESO	Provide a complete IT issue resolution report related to the BSAD data issues	Closed
24	**58**	29 May	19 Jun	Ofgem	Ofgem to consider if the ESO can adjust Demand forecast taking into account the ODFM service	Open

MAIN ITEMS OF INTEREST

1. SME slot – New record for coal-free electricity generation and COVID-19 webinars

The Electricity System Operator (ESO) presenter gave commentary on the April new record for coal-free electricity generation and COVID-19 webinars

Key points:

- Great Britain has set a new record for the longest period of coal-free electricity generation in the country on 28 April.
- 20 April saw a record-breaking month for renewable electricity in Great Britain, with a new solar generation record of 9.68GW
- Weather continues to play the central role in determining the mix of electricity, but reduced levels of electricity demand play a role too. Lockdown measures in place since late March have seen a significant reduction in demand across the country.

The change in demand, along with frequent sunny and windy spells across the country, are all contributing factors to the latest records.

- We started a weekly customer and stakeholder webinar on to keep the industry up to date on our business continuity plans during the COVID-19 pandemic. We have discussed keeping our people safe while maintaining business as usual. The impact of the pandemic on demand and operability and seeking feedback on how we met operating challenges and how we can support industry participants. We have made the slides and recordings from these webinars available on the ESO data portal. The webinars have been well attended and we have received some great feedback from these webinars, showing that our increased transparency around decision making has been valued by our stakeholders.
- Each webinar has a Q&A session to address specific questions from industry and has given us the opportunity to explain the changing level of demand. It also allows us to see what future webinars should focus on.
- Provides transparency of real-time decision-making information, and hence a better understanding of real time operational issues allows market participants to review and submit their operational data appropriately to better meet system needs and facilitate more efficient and cost-effective operation.

Q&A Section:

Ofgem asked if the new record was for coal free or if it was for low levels of coal. ESO said it is a completely coal free record.

Ofgem queried whether Power Available was assisting in achieving coal free. These ESO responded that it does ultimately reduce overall CO2 as it allows more response and reserve on wind generation.

Ofgem enquired how the Power Available operates, if it is part of a Desk which looks at signals or if it is automated. ESO responded that it is a new system which allows the Control Centre to see how much power is available on the wind farms when completing despatch services. This integrates into our normal operating systems.

Ofgem asked if the COVID-19 webinars will continue after the current crisis has passed. ESO said we have received positive feedback that this has proved useful to industry therefore there is a possibility of moving it to a monthly basis in the future.

Ofgem asked if receiving feedback during these webinars has been useful to which the ESO responded that stakeholder engagement has improved and receiving immediate feedback has been valuable.

Ofgem asked if it is a quick process to load data on the Data Portal. ESO replied that it is mostly automatic with the manual side being straightforward.

2. SME slot – Carbon intensity green app

The Electricity System Operator (ESO) presenter gave commentary on the Carbon Intensity green app.

Key points:

- Launched the new app in April which essentially gives a front end of what is happening from the carbon perspective on the grid.
- Industry and consumers can log into this app and see current generation mixes and how clean the energy is.
- Gives projection ahead to see when it is the cleanest time to use energy and changes in different regions throughout GB and works towards the zero carbon ambition.
- Carbon Intensity has decreased with lowest record of 46g/CO2/kWh driven by the low demand and high renewables due to COVID-19 lockdown.
- The data behind it is to ensure transparency and originally developed between ourselves and other parties. People can view the datasets on our ESO Data Portal.
- In terms of usage, the API has been used across industry with millions of hits and thousands of active app users.

Q&A Section:

Ofgem asked if this app will assist consumers with smart meters to change their usage accordingly. ESO explained that we assume it does facilitate this but we don't have the data available to verify it.

Ofgem enquired if we have received any feedback from suppliers. ESO explained that we have not received any regarding the app. However, we have received positive feedback regarding the back end of the data interface.

Ofgem asked how we intend to view the impact of biomass on carbon intensity. ESO answered that there are several aspects to biomass and the low carbon section on the app does not include biomass, as renewable energy does not involve burning any carbon.

3. SME slot – Balancing costs

The Electricity System Operator (ESO) presenter gave commentary on the £122m outturn against the £67m benchmark.

Key points:

- Balancing costs in April were much higher compared to April 2019. The main drivers behind the costs of managing a low demand system as a result of the lockdown due to COVID-19.
- There was a significant increase in Energy costs due to greater levels of response, reserve and general balancing required to manage the uncertainty on the system.
- Constraints were slightly down but wind levels were fairly low and Western Link was available for the whole month whereas last year it wasn't.

- The large increase in RoCoF is a result of the low demands, £39.5m is a record monthly spend on RoCoF. This usually peaks in summer when we get to the lowest demand periods. However, with the low demands driven by COVID-19, we have experienced low system inertia and are therefore reduced the largest losses during both day and night time and increasingly had to run additional machines to raise the inertia level.
- Blackstart and Reactive were fairly consistent with last year.
- We saw a new record low demand of 15.2GW on 13 April (Easter Monday), although this has since been surpassed on the bank holiday weekend 25 May.
- The COVID-19 situation is a magnification of the issues the ESO has faced in the past year and is also how the system may well look a few years from now. We have seen that we have low demand, embedded wind and solar, depressing demand further, and interconnector imports and transmission connected wind displacing the Combined Cycle Gas Turbine (CCGT) and Biomass. The embedded solar and wind net off against this to give the Transmission System Demand. We then have all the factors feeding into the generation profile to meet that demand such as Nuclear, CCGT, Interconnectors, Transmission connected wind.
- We have had to increase the amount of CCGT and biomass on the system to provide inertia and voltage support. The large volume of actions is driving costs higher than we would normally expect.
- We formed our Short Term Operability Obeya to ensure we remain operable under the unprecedented system conditions. An Obeya is a format we are using for our long term operability strategy and we created a number of scenarios within the Obeya along with a number of new initiatives and services.
- We have set up regular meetings with DNOs, TOs, BEIS, OFGEM
- Published additional BSUoS forecasts to the market along with explanatory notes regarding additional costs.
- Hold weekly webinars to update the market on our COVID-19 measures.

Q&A Section:

Ofgem asked what a SOP was. The ESO replied that it is a system operating plan created before real time. An initial one is created and restudied and reassessed before being handed to energy teams to take actions.

Ofgem enquired about the high inertia and RoCoF costs and if we are envisioning this for the whole summer. ESO responded that with the synchronous plant not running and a generation mix along with low demand and high level of renewables, we are having to take more actions and this results in increased RoCoF costs.

Ofgem queried as to how we are maintaining frequency levels. ESO explained that with lower inertia levels, this makes frequency more volatile. Compensating for this requires more response and thus spending more in response and reserve.
Ofgem asked what specifically goes into the energy and balancing costs and the long term trend of increasing costs. ESO responded that with less conventional energy, prices are positive because fuel and operating costs are higher due to more actions being taken. As renewables are subsidised to run, they generally have negative bids and are also less

predictable therefore we need to hold more response and reserve. The system was traditionally long, with taking small bids throughout the day to balance the grid, however it is now shorter and less balanced.

Ofgem enquired about the weekly webinar question regarding how the ESO determined that the Sizewell contract was economical. ESO explained that large generators can cause issues at times of low demand. The modelling team calculated the numbers and found it prudent to turn Sizewell off to make the system more secure and save money.

4. SME slot – Day ahead forecasting and ODFM

The Electricity System Operator (ESO) presenter gave commentary on the Day Ahead Demand forecasting metric and how it is impacted by the ODFM service.

- This will have a greater impact on the monthly benchmarks, reported for indication only as per our Forward Plan 2020-21 target of being measured on our annual performance. There will be a lesser impact on the annual mean absolute errors by the ODFM than monthly.
- DA Demand forecast is published in the morning and the ODFM assessment is conducted in the afternoon therefore confirmed volumes of ODFM are not known until early evening. National Demand would be consistently underforecasted at day ahead stage.
- ODFM restrains the generation on the distribution network and this reduces an amount by which distributed generation is suppressed by National Demand and as a result, National Demand increases.
- In April we were still designing this tool, therefore it couldn't be used but will be relevant in May.
- The ESO proposes to adjust the National Demand for the volumes of ODFM enacted retrospectively, once they are known. This will then be reported in the metric.

Q&A section:

Ofgem asked how we will retrospectively apply the correction. ESO explained that once the actual volumes are available, we will demonstrate the National Demand being higher in the outturn and adjust the forecast accordingly. This would be described in the commentary in the monthly report. The ESO then agreed to send through the data showing how this would be reported, ahead of producing the monthly report

5. ESO to highlight any particular notable points from the published report

- Demand Forecasting performance benchmark was met despite COVID-19, and April usually being one of the most variable months.
- Wind Generation Forecasting performance benchmark was met due to average wind and weather conditions.
- Security of supply had zero excursions

- System access management did not meet our target due to COVID-19 as people began virtual working and handovers were affected. These have now been rectified.
- BSUoS forecasting was higher due to low demand and low inertia levels.
- Flexitricity was the first Virtual Lead Party (VLP) transaction that went through the BM wider access.
- Right first time connection offers performed well with only one ESO related reoffer
- We published a system operability framework document to describe the potential operability benefits of Virtual Synchronous Machines and related technologies.

6. ESO to answer any questions which Ofgem have sent prior to the meeting regarding the recently published report

None

7. ESO to take other questions on the published report

Ofgem queried the uncertainty regarding COVID-19 low demand levels and how we had met our demand forecasting target. The ESO explained that the demand forecasting team have been proactive with preparing for COVID-19 and using lessons learned from Europe.

Ofgem asked under which deliverable the carbon intensity app sits. The ESO responded that it feeds into the wider ambition of zero carbon and believe stakeholders will find it valuable.

Ofgem enquired if we are expecting network operators to delay outages. ESO commented that there are various discussions taking place to discuss what will happen post June and will keep Ofgem informed of updates.

8. Ofgem to give feedback on ESO performance

- Stakeholders and Ofgem appreciate the COVID-19 webinars that have been taking place and feedback has been positive.
- Ofgem queried the accuracy of BSAD data recently and would like to receive a full IT report on the problems and the solution. The ESO agreed to follow-up on this.

9. Review Actions

- Actions 54 and 55 have been completed.
- Actions 55 to 58 have been added.

10. AOB

- Discussed end of year event logistics
- The ESO now have a better view of which deliverables in 2020-21 will be affected by COVID-19. The Forward Plan will have an addendum with a table of the deliverables affected and why. We will also add an appendix with how we have addressed Ofgem's Formal Opinion. The Forward Plan tracker will also be updated.

Appendix 1 – Timetable

1. Annual Requirements

- Monthly
  - 15th working day of M+1 keeps cost basis historic
  - Meeting 20th working day of M+1
- Quarterly
  - 15th working day of M+1 following Q end (Jul, Oct, Jan)
- Half Year Report
  - 15th working day in October (M+1 after half year completed)
- Year End- Ofgem's Proposal
  - 7th May -consultation & draft licence (5 wks after year end)

2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	2020
May	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**
M	**M**		**M**	**M**		**M**	**M**		**M**	**M**	
		Q						**Q**			
					1/2YR						**FYR**

2. Monthly requirements

Date	Action	Owner	Note
15th Working Day	Monthly report submission date	ESO	
No later than 5 Working Days before meeting	Provide the Chair with meeting papers	ESO	
20th Working Day	Monthly Monitoring Meeting	Technical Secretary	
25th Working Day	Minutes from meeting submitted	ESO	
End of Month	Chair to approve minutes from meeting	Chair	
2nd Working Day after approval of the minutes	Publication of meeting minutes	Technical Secretary	

3. 2019-2020 Reporting & Meeting Dates

Month	Report Published (15th WD)	Ofgem Meeting (20th WD)	Report Type
May	22/05/2019	30/05/2019	
June	21/06/2019	28/06/2019	

July	19/07/2019	26/07/2019	Q1 Report
August	21/08/2019	29/08/2019	
September	20/09/2019	27/09/2019	
October	21/10/2019	28/10/2019	Half Year Report
November	21/11/2019	29/11/2019	
December	20/12/2019	10/01/2020	
January	22/01/2020	29/01/2020	Q3 Report
February	21/02/2020	28/02/2020	
March		28/03/2020	
April			
May			End of Year Report

Appendix 2 – Previously Closed Actions

Meeting No.	Action No.	Date Raised	Target Date	Resp.	Description	Status
21	**50**	30 Jan	28 Feb	ESO	ESO to present the update on the Wider Access project in the next meeting	Closed
22	**51**	28 Feb		ESO	Confirm how staff moves associated with the Early Competition project will affect the Role 3 ambitions. Confirm whether these positions	Closed
22	**52**	28 Feb		Ofgem	Ofgem to confirm date of End of Year event	Closed
22	**53**	28 Feb		Ofgem	Ofgem to organise time with panel members for deep dive on balancing costs end of May	Closed
23	**54**	27 Mar	20 May	All	Contingency plan for End of Year panel event on 3 June and balancing costs deep dive on 28 May. ESO and Ofgem to look at own virtual	Closed
23	**55**	27 Mar	10 Apr	All	Ofgem to submit query to ESO regarding loss of load probability	Closed