

EDF Energy (Thermal Generation) Limited – Article 5 REMIT

ERRA Webinar: Market Surveillance III: Supervisory Tools
and Sanctioning– 1 December 2021

Nathan Macwhinnie

Head of Market Intelligence & Oversight
OFGEM



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1. Background

- Why is electricity balancing important? – imbalances risk outages, blackouts, leading to v significant costs and disruption.
- How does the ESO balance the system? - electricity trading continues up to one hour before delivery (known as gate closure) for each half hourly settlement period. After gate closure the ESO has a number of tools (or contracts) it can use to ensure supply meets demand – the Balancing Mechanism (BM) is usually the most efficient and transparent.
- What are the challenges? - because electricity cannot be stored at scale the system needs to be kept in balance close to real time, yet supply and demand are changing constantly.

- The BM is used by the ESO to help ensure that generation is equal to demand in every half-hourly settlement period.
- **Bids** and **offers** are submitted by generators and other market participants, after gate closure, specifying the price at which those parties would be willing to increase their output or consumption above (or reduce it below) intended level.
- At times of peak demand very significant BM costs are incurred to ensure the system is in balance. Across 2019 costs reached £600m in total. In September 2021, low wind, a number outages, and the gas price crisis, the imbalance price reached a 20 year record high of £4950 MW/h.

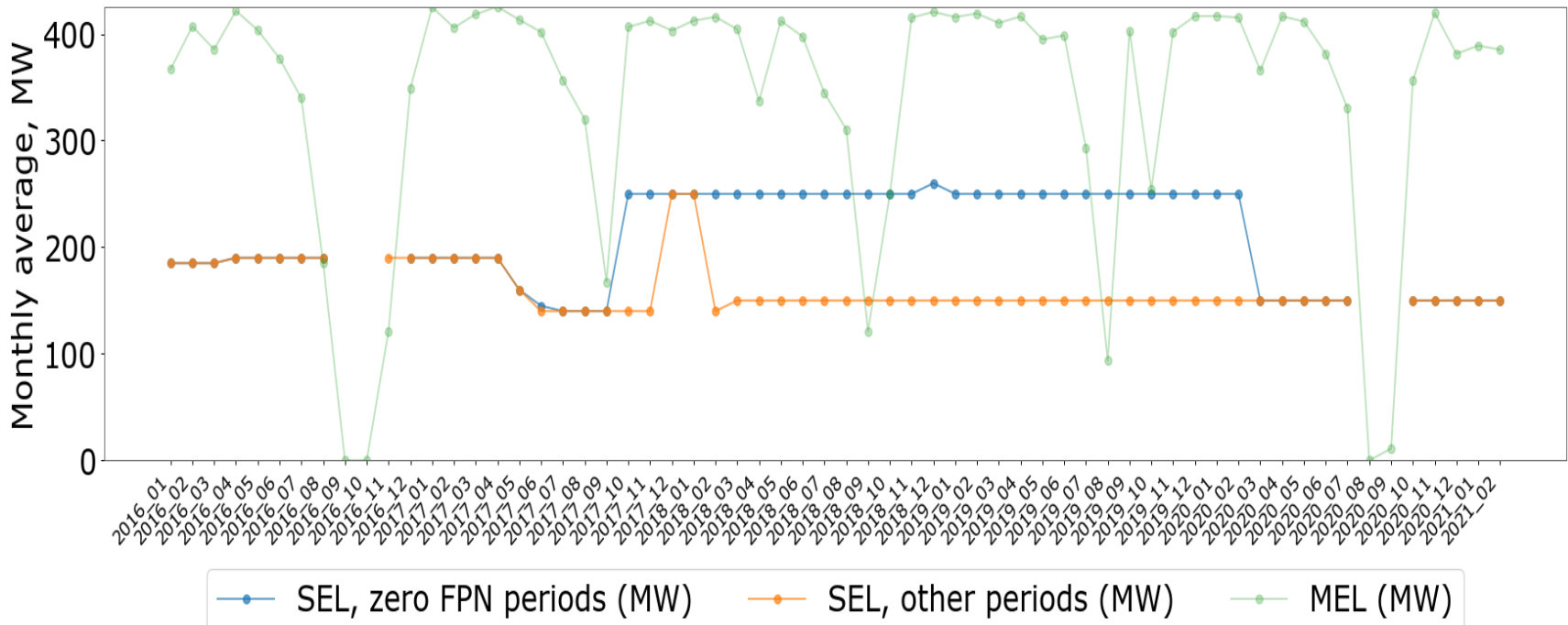
- As well as bids and offers, generators must submit to the ESO details of certain operational characteristics of their plant (dynamic parameters). This information is used by the ESO to help decide which bids and offers to accept.
- Among these parameters is the **Stable Export Limit**, defined as the minimum amount of power (in MW) that the unit can export under stable conditions.
- The SELs submitted by generators play a crucial role in determining the actions that the ESO takes in the BM. This is because often the ESO uses the BM to bring a generator online at the minimum level of generation possible.
- Often what the ESO needs are not MWs (energy), but things like inertia and upward reserve (that the gas first power station is on, and so available to ramp up power very quickly if needed). SELs are also important in this context.

- Under the Grid Code, participants in the BM must ensure that their dynamic parameters “*reasonably reflect the expected true operating characteristics of the BM unit*”, and are prepared in line with “*Good Industry Practice*”.
- Under REMIT regulations, generators are required not to use deception and/or disseminate information which gives false or misleading signals as to the supply of wholesale energy products.
- In Ofgem’s view, any generator who, for commercial reasons, submits to the ESO dynamic parameters which do not reflect the operating characteristics of the BM unit would be disseminating information which gave or was likely to give false or misleading signals as to the supply of, demand for, or price of wholesale energy.
- Crucially, this means that companies must submit SELs and other dynamic parameters which reflect the **technical** characteristics of their power station, and not the **commercial** preferences of the company as to how it is used in the BM (this is what prices are for)

2. EDF West Burton B – Case analysis

- **West Burton B** is a CCGT gas-fired power station, located near Retford in Nottinghamshire. It was EDF's only gas-fired power station. It has three units, each registered separately in the BM, with a combined capacity of 1,332MW.
- In 2019, West Burton B was the largest recipient of offer payments in the BM, receiving over £70m to increase generation as a result of having an offer accepted.
- Our analysis picked up that EDF was frequently changing its SELs at West Burton B.
- On further investigation, it became apparent that EDF had for some time been routinely submitting higher SELs in periods in which it was available to be used in the BM, compared to the SELs it submitted in periods where it was already due to generate (and so could not be dispatched in the BM). This behaviour went back to Autumn 2017.

West Burton B1



- Our concern was that, by inflating its SEL above the true level, EDF was forcing the ESO to pay it for power that it did not need when using the generator in the BM.
- Specifically, as a result of EDF submitting a SEL of 250MW when the power station could have in fact stably operated at 190MW, the ESO was having to pay for an additional 60MW of generation each time it wanted the unit on the system.
- Because of the length of time that EDF had been inflating its SELs, the amount by which SELs were being inflated, and the extent to which West Burton B was used in the BM, we considered that the scale of the potential consumer detriment was likely to have been significant.
- For confidentiality reasons we cannot provide precise figures, and the true extent of the overpayments is subject to certain assumptions.

3. Enforcement

EDF pays £6m Ofgem penalty for sending false information to National Grid

Emily Gosden, Energy Editor

Thursday December 17 2020,
12.01am, The Times



The French energy group “frequently inflated” its disclosures of the minimum possible output from its West Burton B power station in Nottinghamshire

ALAMY

EDF has paid a £6 million penalty after providing false information about the minimum amount of electricity its gas-fired power plant could provide to National Grid.

- Ofgem's REMIT Procedural Guidelines set out the process we expect to follow in enforcing a REMIT breach.
- For contested cases this involves an independent hearing by Ofgem's Enforcement Decision Panel (EDP). Parties can contest the decision of the EDP in the courts
- For settlement cases the process involves a hearing of Ofgem's Settlement Committee. This entails the production of a number of detailed documents, including Summary Statement of Issues Letter (to company), preparation of extensive case file for submission to the Committee, and the production of formal REMIT Notices.
- 'Alternative Action' enabled us to recover a significant payment to the voluntary redress fund; quickly get details of the case into the public domain; while avoiding the costs and uncertainties involved in a full investigation.
- We are currently consulting on changes to our Procedural Guidelines including:
 - That the Director may make decisions in settlement cases (as opposed to SC)
 - Condensation of three settlement windows into one with single settlement discount
 - Explanation of Alternative Action process

Penalty steps	
Detriment calculation (Step 1)	
	Did the company benefit, is restitution to other parties possible?
Seriousness of breach (Step 2)	
Relevant revenue	" ... the amount of revenue generated by a firm from a particular product line or business area may be indicative of the harm or potential harm that the breach may cause."
Seriousness level	Level 5 = 20%; Level 4 = 15%; Level 3 = 10%; Level 2 = 5%. The nature and impact of the breach, was it deliberate, was it reckless.
Aggravating/mitigating factors (Step 3)	
Reduction due to A/M factors	Eg. Was it repeated? Did the company cooperate?
Penalty_adjusted	
Deterrence (Step 4)	
Increase for deterrence	Penalty too small to provide deterrence so uplift needed
Settlement discount (Step 5)	
Settlement type	Different windows: 30% early, 10% late.

**4. What has
happened since
then?**

- Since the EDF case, we have also been focusing our attention on the conduct of other generators in the market when submitting SELs and other dynamic parameters.
- This resulted in a finding and payment for similar behaviour against ESB Independent Generation Trading Limited in August 2021.
- As well as inflating SELs, ESB IGT submitted data to the ESO, on request of its traders which inflated the plant's Minimum Non-Zero Time ('MNZT'). This relates to the minimum time that a Balancing Mechanism unit must run for in response to an instruction to generate from NGENSO.
- These practices meant that the ESO, at times, was required to purchase a greater volume of power from ESB IGT than needed when the plant was called on to generate in the Balancing Mechanism.
- We continue to monitor the market for other similar behaviour.

- In addition to enforcement action, to provide clarity to market on our expectations regards dynamic parameters at the end of September 2020 we published an open letter titled 'Open letter on dynamic parameters and other information submitted by generators in the Balancing Mechanism'
- The September 2020 letter set out our expectation that generators should ensure that they are meeting their obligations under the Grid Code and REMIT when submitting this information in the BM, and that any generator who, for commercial reasons, submits to the ESO dynamic parameters which do not reflect the operating characteristics of the BM unit would be disseminating information which gave or was likely to give false or misleading signals as to the supply of, demand for, or price of wholesale energy.
- Since the publication of the letter there appears to have been a marked reduction in potential instances of generators increasing SELs when they are available to be used in the BM (see next slide).

% of FPN=0 periods in which SEL inflated, by BM unit group



Questions?

My contact details:

Nathan.Macwhinnie@ofgem.gov.uk