The Optional Downward Flexibility Management webinar will start shortly. Please mute your microphone and turn off your camera. **Please note the webinar will be recorded.**
Agenda

1. Why is this service required?
2. Who can participate?
3. Key Features
4. Registration process
5. Weekly submission process
6. Settlement
7. Dispatch
8. Market information
9. Use of ODFM alongside other actions
10. Q&A session

Please send in your questions via the Webex chat function to the host.

We will collate and answer them in the Q&A session at the end of the webinar.
Why is this service required?

• As the ESO, we balance generation and demand in real time
• Hold enough reserve to turn generation up or down to meet demand second by second
• When demand is low, we would expect embedded generation to be running along with nuclear, renewable generation etc.
• There may be a requirement for additional flexibility to balance generation and demand, as well as to achieve sufficient negative reserve and high frequency response
Why is this service required?

• **ODFM** enables access and control of flexibility that is not currently accessible to ESO through the BM and other market mechanisms.
• ODFM is required for during the low demand periods, typically during the overnight periods
• We anticipate our requirement will be for **3-6 hours** during overnight periods at the **weekends and Mondays**
• If demand is much lower during the summer due to higher wind/solar PV levels, this requirement may be on any day and for extended periods
• Our MW requirement will vary day to day depending on the demand and the generation profile. We anticipate that this will be between **0-3000MW**.
### Who can participate?

<table>
<thead>
<tr>
<th>Eligible</th>
<th>Non-eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver the service for a minimum of 3 hours</td>
<td>NOT be separately registered as BM Units or otherwise active in the Balancing Mechanism</td>
</tr>
<tr>
<td>Operate the service via email utilisation from NGESO</td>
<td></td>
</tr>
<tr>
<td>Operate the service on non-working days and bank holidays</td>
<td></td>
</tr>
<tr>
<td>Have a total unit capacity of 1MW or more</td>
<td></td>
</tr>
<tr>
<td>Delivery by export reduction or demand turn up.</td>
<td></td>
</tr>
<tr>
<td>Generation assets must reduce to 0MW export</td>
<td>NOT be participating in or contracted to any other balancing/flexibility or related services during periods when the service is offered</td>
</tr>
<tr>
<td>Demand assets must sustain consistent increased demand</td>
<td></td>
</tr>
<tr>
<td>Be capable of following pre-agreed min/max ramp up/down rates</td>
<td>NOT have a condition in their DNO connection agreement whereby they are signed up to an Active Network management (ANM) Scheme / Flexibility Connection</td>
</tr>
<tr>
<td>Comply with all other service requirements and obligations set out in supporting documentation</td>
<td></td>
</tr>
</tbody>
</table>
Key features

- Optional Service, volumes can be called for day ahead dispatch from 23:00 – 23:00
- Assets must be able to sustain delivery for a minimum of a 3-hour continuous period
- The service is an “all or nothing” service, whereby 100% of the volume offered would either be accepted or rejected.
- Utilisation £/MW/h service fee, submitted on a weekly basis
- All instructions will be sent via email and sent no later than 17:00 for delivery between 23:00 that day, to 23:00 the following day
- Time limited service across the summer period, expires 31 Aug 2020
Registration process

Provider
Contact ESO via account manager

Provider
Submit Forms A & B

NGESO
Form C approval

Node
Registering new contracted unit & eligible asset

Node
Allocate/ remove eligible assets

Node
Update availability & pricing

Provider
Data Template
Submitted no later than Wednesday 15:00

nationalgrid ESO
Weekly submissions

If no information has changed, there is no requirement to submit on a weekly basis.

Provider
Submits data on weekly basis

NGESO
Daily assessment

Provider
Email within 60 minutes to acknowledge instruction

NGESO
Data published on BMRS

Provider
Deliver for contracted settlement periods

No later than 15:00 Wednesday.

Instruction emailed no later than 17:00 for delivery, 23:00 onwards.
Settlement

- Utilisation-based service fee (£/MW/h).

- Settlement data required as soon as possible after utilisation, no later than 5 business days.

- All new parties must submit a new vendor setup form which can be found on our settlements webpage.

- Service will apply ABSVD to the relevant registered MPAN(s).

- ODFM actions will not feed into cashout.

- Costs will be recovered via BSUoS.
Dispatch

• All units area assessed in line with the following principles:
  • Assess whether the volume is accessible to NGESO due to system constraints
    • Units restricted due to network constraints are rejected
  • Assess whether the volume is available during the period of our requirement
    • Reject all bids which cannot deliver in the settlement periods for which for service is required.
  • Bids are ranked according to their effective price (£/MW/hr / NGESO forecast load factor).
  • Assess the ramping times for units and any additional costs incurred from this
  • Accept bids in effective price order until the requirement is met.
  • All other bids above the requirement are rejected.

On 9 May 2020, NGESO instructed 238MW of forecast volume for delivery on 10 May 2020 between 04:00 – 07:00.
Market information

• The forecast volume of ODFM instructed will be shared using our System Operator Notification And Reporting system: SONAR.

• You can set up email notifications from this site using this link.

Our post event reports on the volume and prices are shared on our ESO Data Portal:

https://data.nationalgrideso.com/ancillary-services optional-downward-flexibility-management-odfm-market-information
**ODFM is an additional tool for NGESO**

<table>
<thead>
<tr>
<th>Everyday Actions</th>
<th>Order</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bid actions on all other flexibility in the BM, including super-SEL</td>
<td>#1 based on Cost</td>
<td>Forecast at Day Ahead volumes, action taken in real time</td>
</tr>
<tr>
<td>Selling power to the continent to create exports on the interconnectors</td>
<td>#1 based on Cost</td>
<td>Forecast at Day Ahead, action taken at Day Ahead by National Grid Traders</td>
</tr>
<tr>
<td>Creating demand through pumping demand at pump storage sites</td>
<td>#1 based on Cost</td>
<td>Managed within the control timescales action taken within day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enhanced Actions (if everyday actions are insufficient)</th>
<th>Order</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage of ODFM service</td>
<td>#2 based on Cost</td>
<td>Enacted at day ahead based on forecasts of other actions.</td>
</tr>
<tr>
<td>Issuing an NRAPM and flag as alert status on the ENTSO-E transparency platform.</td>
<td>#3</td>
<td>Issue if, the above actions still leave a requirement. Managed within the control timescales action taken within day</td>
</tr>
<tr>
<td>Taking additional actions obtained through NRAPM</td>
<td>#4</td>
<td>Managed in real time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency Actions</th>
<th>Order</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Instruction to Transmission connected generation</td>
<td>#5 can only be done following #2</td>
<td>The ESO will not Emergency Instruct a BM unit that as been instructed on</td>
</tr>
<tr>
<td>Emergency Instruction to DNO to disconnect DER</td>
<td>#5</td>
<td>As per GC0143, DNO decides which DER to disconnect</td>
</tr>
</tbody>
</table>
Useful links

Key pages on the Data Portal:

• Optional Downward Flexibility Management (ODFM) Market Information
• Optional Downward Flexibility Management (ODFM) Service Documents
• COVID-19 Preparedness

• MBSS
• Settlements
• SONAR
• BMRS

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Questions