

# ODFM Requirement Paper

Summer 2021

## Context

In our role as Electricity System Operator (ESO) we balance generation and demand in real time. To allow us to do this we need to 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, any transmission connected renewable generation, interconnectors and some conventional generation. This conventional generation that is running is largely self-dispatching at SEL. With this profile, 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.

ODFM is a last resort service to allow the ESO to access the flexibility that is not currently accessible in real time in the event that insufficient flexibility is forecast at the day ahead stage.

## What volume are we looking for and when?

Please submit the volume and price for your availability in all time windows during a day, and do not be constrained by the indication of times shared here. The day by day requirement will be assessed on an ongoing basis.

## Central forecast

For seasonal normal weather conditions there is no requirement for ODFM for the low demand periods of the day.

Our requirement for ODFM is for during the **low demand periods of the day** on days where the weather conditions are not average with much higher wind and/or solar PV levels. These low demand periods are typically during the **overnight periods between 23:00 - 07:00**, but could be in the afternoon period.

These lower demand periods are more likely to occur on the **weekends or bank holidays**.

Where there is a requirement we anticipate that it will be for **3-6 hours** during overnight periods at the weekends or bank holidays and we will dispatch the service when a requirement is identified at day ahead.

Our megawatt (MW) requirement for ODFM will vary day to day dependent on the demand and the generation profile. We anticipate that this will be between **0-300MW**.

The credible forecast for ODFM requirement in demands caused by weather variability is **4 weekends** in the summer.

We will assess whether there is a need for ODFM dependent on the national demand forecast and the generation profile. There are many variables impacting the need for additional downward flexibility beyond the forecast demand e.g. forecast generation mix and interconnector flows. To aid transparency, as a generic rule of thumb, when national demand is above 16GW we would not anticipate there would be a requirement. Note there may be circumstances whereby demand is below 16GW and ODFM is not required and vice versa

## COVID sensitivity forecast

If the demand is much lower during the summer due to return to lockdown with similar effects to the lockdown before Christmas, then the requirement could be higher. We anticipate that this will be between **0-1500MW**. If this is the case the requirement caused by the lower demands and weather variability could be for **4 weekends** in the summer.