

Optional Downward Flexibility Management (ODFM) ESO requirements

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.

This ODFM is a service to allow the ESO to access the flexibility that is not currently accessible in real time.

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.
- Our requirement for ODFM is for during the **low demand** periods of the day. These low demand periods are typically during:
 - The overnight periods between 23:00 – 07:00

	23:00-01:00	01:00-03:00	03:00-05:00	05:00-07:00	07:00-09:00	09:00-11:00	11:00-13:00	13:00-15:00	15:00-17:00	17:00-19:00	19:00-21:00	21:00-23:00
Low Demand Period	Yes	Yes	Yes	Yes			Yes	Yes	Yes			
Requirement for Normal Demands		Sat Sun Mon	Sat Sun Mon	Sat Sun Mon								
Requirement for Low Demand and high wind PV Output	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day	Any Day

- We anticipate our requirement will be for **3-6 hours** during overnight periods at the **weekends and Mondays** and we will dispatch the service when a requirement is identified at day ahead.
- If the demand is **much lower** during the summer due to much higher wind and/or solar PV levels, this requirement could be on **any day** during the week and for extended periods
 - During a protracted period this could be a requirement from **23:00 – 16.30**

- 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 **0-3000MW**.
- Our current forecast means that we expect to have to assess the requirement to call on the service for a minimum of 35% of the days in the period covering May, June, July and August.