NAME :
COUNTRY :
REGISTRATION NUMBER :

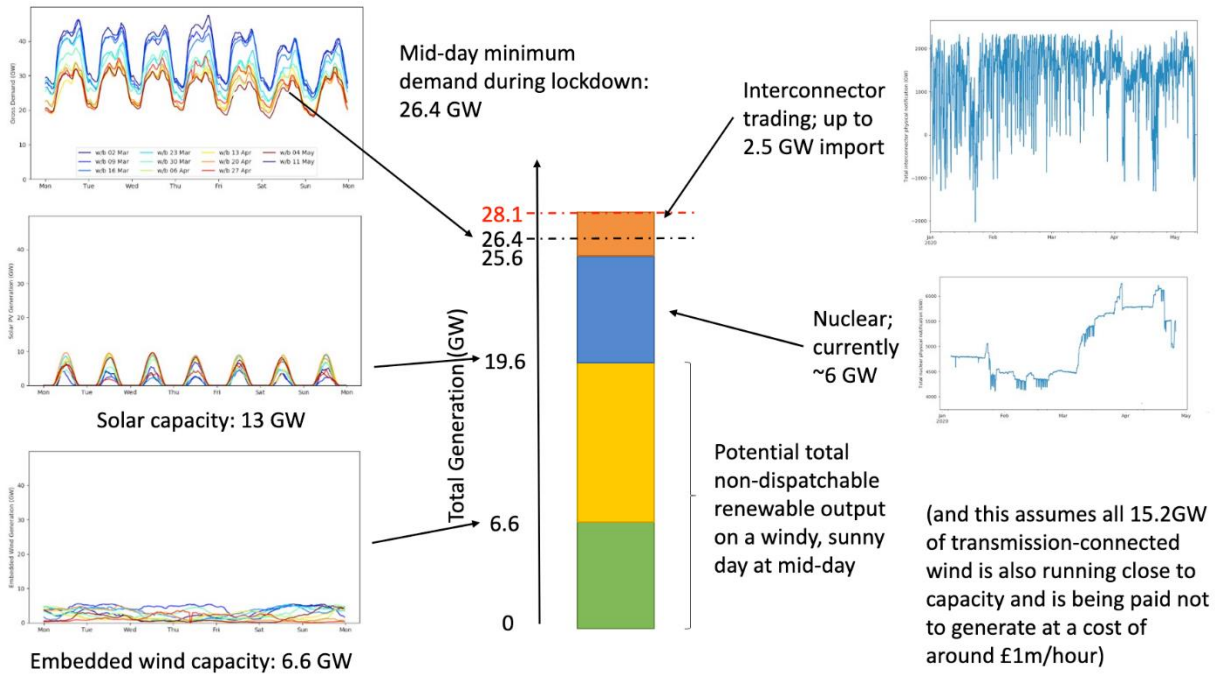
GROUP REF. :
PREF. SUBJECT :
QUESTION N° :

NAME : Graeme Hawker
COUNTRY : UK
REGISTRATION NUMBER : 2120

GROUP REF. : C1
PREF. SUBJECT : PS3
QUESTION N° : 3.1.4

Question 3.1.4: What are some of the lessons learnt over the pandemic period and which can be seen as ground-breaking factors to consider in the future?

The first lockdown of the COVID-19 pandemic in Great Britain (starting 23rd March 2020), coinciding with unseasonably low temperatures, gave an instance of low demand unexpected for the time of year, at the same time as high output from undispatchable distribution generation (DG) in the distribution networks. Combined with nuclear output and interconnector flows, this left a potentially untenable operational gap between residual demand (gross demand minus embedded distributed generation) and undispatchable generation, threatening the security of the GB transmission network. The solution employed by the ESO was to contract with a nuclear operator (Sizewell B) to reduce output, at considerable cost, for approximately 5 months through the 2020 summer.



This narrowing gap between minimum summer demand and undispatchable generation gives a glimpse of power system operation under future high volumes of DG, The operational margin during low demand periods minimised by non-dispatchable DG, including a driver to increase flexibility options: the need for increased visibility and control of DG, to avoid of suboptimal economic dispatch (constraint of zero-marginal cost generation). Also highlighted is the need to prepare for future events which may further suppress demand.