

The background features a large, semi-transparent white 'X' shape. Behind the 'X', there are two distinct images: on the left, a perspective view of solar panels under a bright sky; on the right, a close-up of a gas burner with a blue flame. The overall color palette is light and airy, with soft blues, oranges, and whites.

SGF Work stream 6

Meeting 2 - 29 May

Notification – current framework

NTOC Section 2, paragraph 4 (generation increases – G83)	“If you install.. small scale generating equipment at the premises... with an aggregate rating of no greater than 16 amps per phase... then you must inform us of your intention to use the source of energy in parallel with our network no later than 28 days after the equipment is commission”
NTOC Section 3, paragraph 2 (load increases)	“You must contact us in advance if you propose to make any significant change to the connection or to the electrical lines or equipment at the premises or if you propose to do anything else that could affect our network or if you require alterations to the connection”
Distribution code Section 8.2.2 (load increases)	“a User [could read Supplier or Customer] should give adequate notice of any significant changes to the User’s system or operating regime to enable the DNO to prepare its development plan, budget for, and implement any necessary system modifications. Such information should include any changes either increasing or decreasing demand...”
NTOC Section 2, paragraph 2 (max capacity)	“Our [read DNO] obligations under this agreement are subject to the <u>maximum capacity</u> and any other design feature under the connection”

Most not drafted with heat pumps or EV in mind. Will therefore need tightening. The G83 requirements set good precedent

Notification – adapting current framework for domestic customers

- Is the NTOC the right place for provisions around notification?
 - Current G83 obligations are contained within NTOC
 - NTOC is the main link between DNO and customer
- Suspect that domestic customers are unaware of NTOC provisions
 - Is there a greater role for suppliers in educating domestic customers?
 - Do DNOs currently have a maximum capacity for domestic customers?
 - How is maximum capacity communicated or enforced in practice?
- Under G83 (& NTOC), DNOs receive notice of generation (less than 16 amps) 28 days after the event
 - Are there any benefits in having upfront notification?
 - Could similar arrangements be put in place on demand side?
- How can installers of low carbon technologies be encouraged to provide notification?
 - This seems to be working on the generation side
 - Potential to ask for changes to the IET wiring & Building regulations

Commercial solutions - Storage

Proposition	Impediment	Enabler
Cost of storage means that at present it may only be viable if stored electricity can be sold to the market	DNOs unable to buy and sell electricity in market as prevented from having generation and supply licences	Potential for arrangements with third parties for access to storage facilities?
No clarity on how storage will be charged for network access	CDCM & CCCM set out the basis on which DNOs charge for access. DNOs required under their licence to comply with CDCM & CCCM.	All DCUSA parties can raise mods to CDCM & CCCM (subject to 'not veto' by Ofgem). Need to think about impact of storage on network in order to devise appropriate charges.
Insufficient transparency in regulatory and market arrangement in which storage would operate	Uncertainty	Future publications?

Need to devise straw man outlining most efficient arrangements for DNOs to access storage facilities

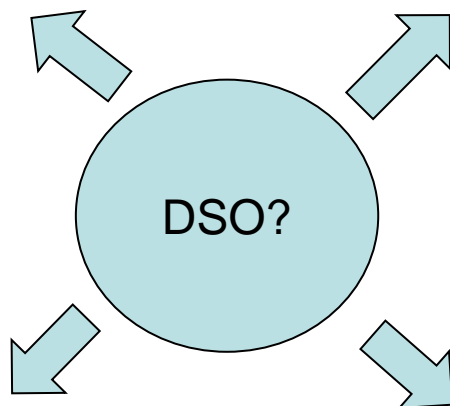
Commercial solutions – DSO role

Need to conceptualise what DSO role is before assessing what impediment or enablers are.

Interaction with TSO
and sharing of
balancing data

DNOs not currently doing
this
What volume of DSR and
local system balancing
would drive this

Interface with suppliers
to share data



Responsible for real time
balancing of local system

DNOs already undertaking local
balancing of some form
DNO can already approach
customers
When does it become a DSO?

Daily interaction with customers
for response & automatic control

When do we anticipate that DNOs may need to have a DSO role?
What impediments are there to moving to such a model?
What enablers are required to move to such a model?

Integrated Systems

- Are Integrated Systems are separate Smart Grids solution or:
 - A type of DRS?
 - A type of Storage?
 - Other
- LCNF and Innovation Stimulus – Cross Industry Projects
 - Gas Distribution
 - Electricity Transmission
 - Local Authorities
 - Other?
- Any impediments/Enablers:
 - Direct incentives?
 - Encouraging any role the DNOs might play in Local Authorities' integrated energy schemes?



Promoting choice and value
for all gas and electricity customers