



DG Customer Service

Flexibility and Capacity Working Group



What drives Cost to connect DG ?

Constraint	Thermal	Voltage	Fault Level	Harmonics	Desired outcome
EHV	n-1 Issue	Can be managed by Q constraints or compensation	Investment solution	Investment or managed output at margins	Flexible connections to minimise non safety related investments
HV	Not normally an issue	Voltage rise under extreme conditions drives sole use asset costs	Investment solution	Not normally an issue	Voltage managed connections
LV	Not normally an issue	Voltage rise worst in electric heat areas	No issue	Little evidence of any issues	Improve voltage regulation on the main.

- ▣ Maximise usage of existing networks
 - Provision of enhanced DG developers services
 - Development statement mapping wind, planning consent and capacity
 - GSOP inhibits discussion on options around connection cost drivers
 - Development of a portfolio of commercial offers: non managed, managed, parameter driven

- ▣ Offer new solutions to maximise energy output
 - ENW Smart Voltage solution trials
 - C2C Use of meshed networks
 - Voltage managed output.

- ▣ Primary HV switchgear will need replacement or protection via Fault Current Limiters or other smart solutions.

Allowed return for the DNO comprises 3 parts

- Operation and Maintenance allowance £1kW
- Incentive £1kW
- DG RAV

Risks and limitations of scheme

- Investments to enable DG capacity may be retrospectively deemed inefficient if DG does not materialise
- Evidence of likely development precludes use of DG incentive
- Cap on allowed rate of return can act to penalise smart solutions

Proposal

- DG reinforcement supported by stakeholder evidence deemed efficient.
- Cap to be removed or increased to remove boundary issues.
- Should Caps be absolute or return based?
- EHV Investment schemes > £5M to be subject to ex-post adjustment and justification approval by Ofgem.