

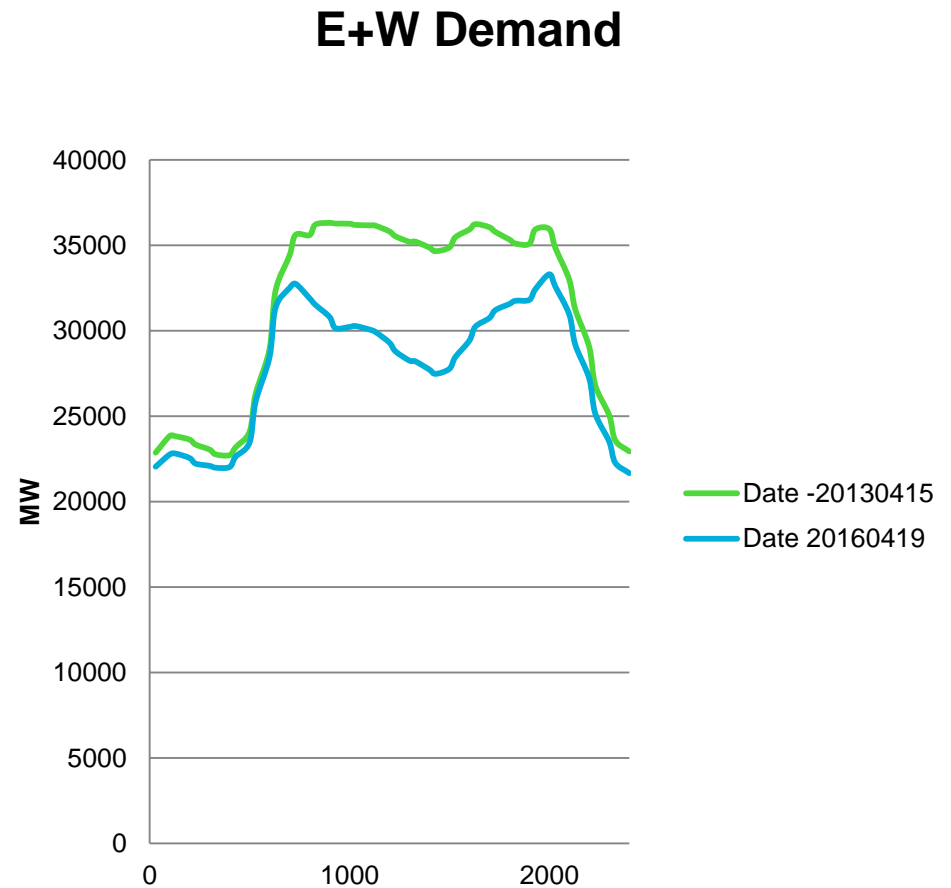
Emergency Instruction of Distributed Generation



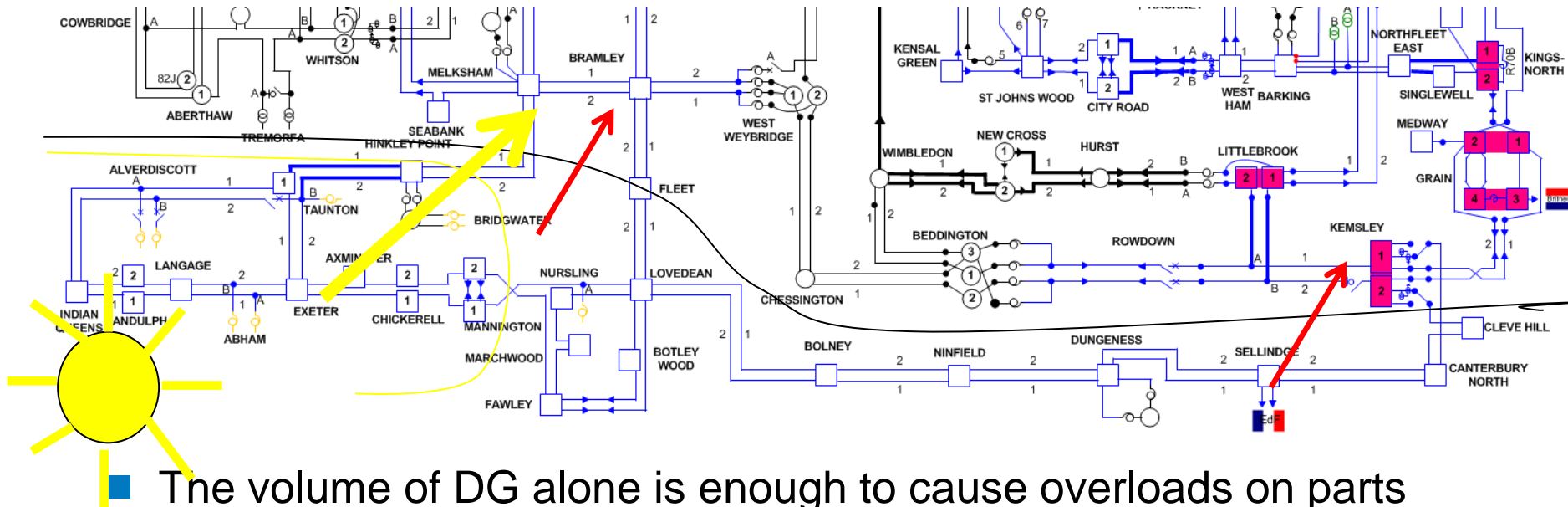
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Grid Code Development Forum
9th June 2016

Introduction

- The increased installation of distributed generation is reducing the transmission system demand and therefore displacing transmission connected generation.



Capacity – Main Transmission System



- The volume of DG alone is enough to cause overloads on parts of the MITS network, particularly with outages.
- There may be instances when Emergency Instructions will need to be issued to Network Operators to disconnect Distributed Generation when there is no other action to prevent the network or part of the network collapsing, putting people in danger, avoiding loss of demand etc

Current arrangements

- Currently if we needed to contact a Network Operator to issue an emergency instruction to reduce Distributed Generation in order to secure the network it would be under BC 2.9.1.4, using the principles set out in OC6.7.1. We would not be certain of the amount and timing of Distributed Generation that would be disconnected.
- BC2.9.1.4 states 'In the case of a Network Operator or an Externally Interconnected System Operator, Emergency Instructions will be issued to its Control Centre'.
- OC6.7.1 states 'Each Network Operator will make arrangements that will enable it, following an instruction from NGET, to disconnect Customers on its User System under emergency conditions irrespective of Frequency within 30 minutes. It must be possible to apply the Demand Disconnections to individual or specific groups of Grid Supply Points, as determined by NGET.
- In the short term, new GSP BCAs are to formalise these requirements to ensure that a reasonable amount of Distributed Generation can be disconnected in a timely manner. .

New GSP BCAs

- Each GSP will have their BCA amended to contain clause 10.2 ‘Controllability’ so that National Grid can disconnect embedded generation in DNO Networks.
- New Appendix F section 13 of the BCA.
 - ‘In accordance with the requirements of BC2.9.1.4, of the Grid Code, using the principles set out in Grid Code OC6.7.1, the User shall maintain a facility such that under emergency conditions on the National Electricity Transmission System, the User shall have the ability to de-energise the Embedded Generation detailed in Appendix G Part 2 & 3 of this Connection Agreement, upon instruction from The Company.
- New Appendix G details the embedded generation at the GSP.
- In the longer term, we will be looking to amend the Grid Code to replace the requirements in the BCA to ensure that in Emergency Situations we have the confidence and the specific ability to disconnected distributed generation. Also to ensure that the data submissions detailed in the BCA are required under the Grid Code.