Distribution System Security and Planning Standards Review Project Update

24th October 2018

Planning Standards Review – Project Update

Stakeholder Engagement

- Initial phase of stakeholder engagement nearing completion

  External:
  - Renewable generation customers – Solar - Wind
  - Demand response providers
  - Energy storage providers

  Internal:
  - Planning Teams
  - Operations Team

- Gathering and reviewing information/feedback to inform the Terms of Reference for the project
- Further stakeholder engagement meetings will be planned before year end and throughout the project

Planning Standards Review – Project Update

External Collaboration:

- The project team is member of the ENA Working Group on Security of Supply standards (for GB and NI) and is interacting to ensure best practice is employed

Consultancy support:

- Enquiry documentation preparation finalised
- Enquiry to open shortly
- Plan is to appoint consultants to support the project work, to commence in early 2019

Planning Standards Review – Project Update

Updates:

- Updates provided at DCRP meetings 27th June / 2nd October

- Ongoing updates will be provided primarily through future DCRP and GCLG meetings

DSO Connections Overview

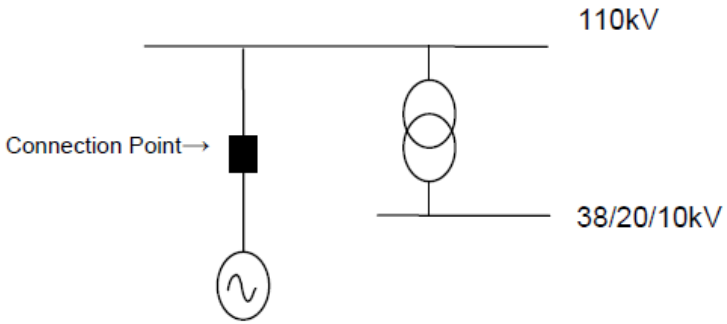
24th October 2018

Typical DSO Connections considered

Least Cost Technically Acceptable (LCTA) solution:

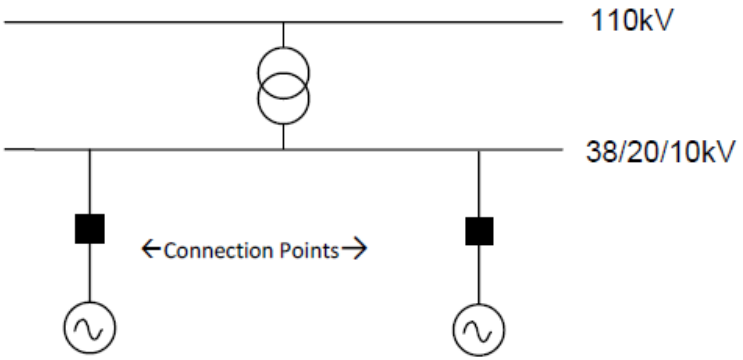
Connection Type A

WFPSs are classed as being connection type A when connected, at 110kV to a **DSO** operated 110kV busbar.



Connection Type B

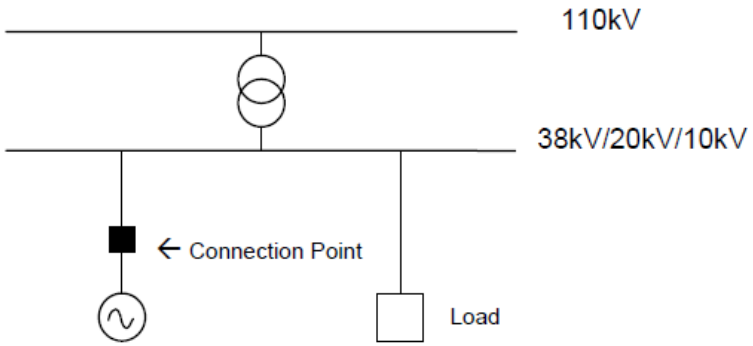
WFPSs are classed as being connection type B when connected at a **Distribution System** voltage (≤ 38 kV) to a dedicated **WFPS(s)** transmission station. There are no load **Customers** connected to the **DSO** operated 38/20/10kV busbar.



Typical DSO Connections considered

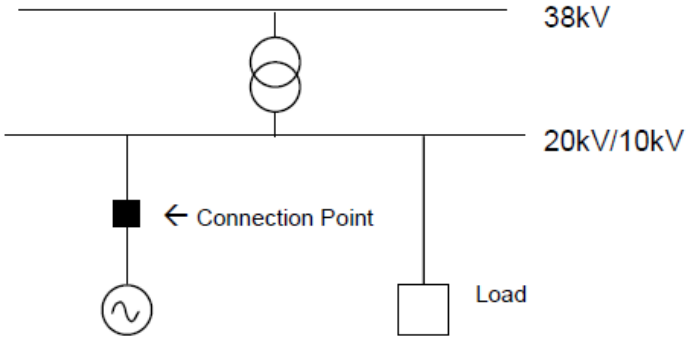
Connection Type C

WFPSs are classed as being connection type C when connected to the **Distribution System**, via a dedicated feeder, into an existing 110kV station.



Connection Type D

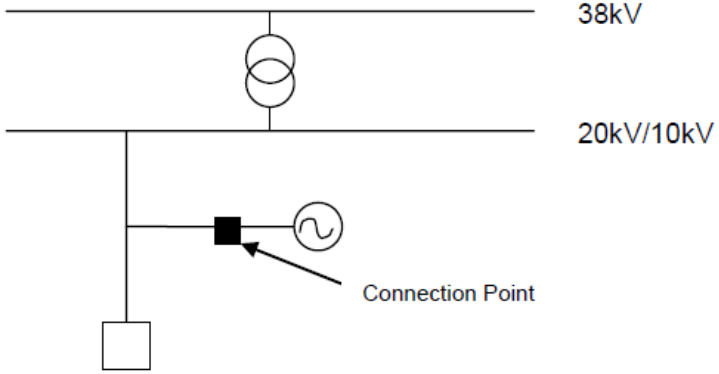
WFPSs are classed as being connection type D when connected to the **Distribution System** via a dedicated 38kV, 20kV or 10kV feeder into an existing 38kV distribution station.



Typical DSO Connections considered

Connection Type E

WFPSs are classed as being connection type E when connected to an existing distribution line with load.



Technical studies

Transformer Capacity Availability of transformer capacity is assessed for the connection of any generator :

- A 10% overload on transformer MVA rating is permitted
- Conditions of minimum load are assessed
- Existing committed generation is accounted for
- Real and reactive power flow accounted for
- Any resultant transformer overload will drive a transformer reinforcement

Link to ESB Networks Generator connection presentation

Link to Distribution code

Thank you