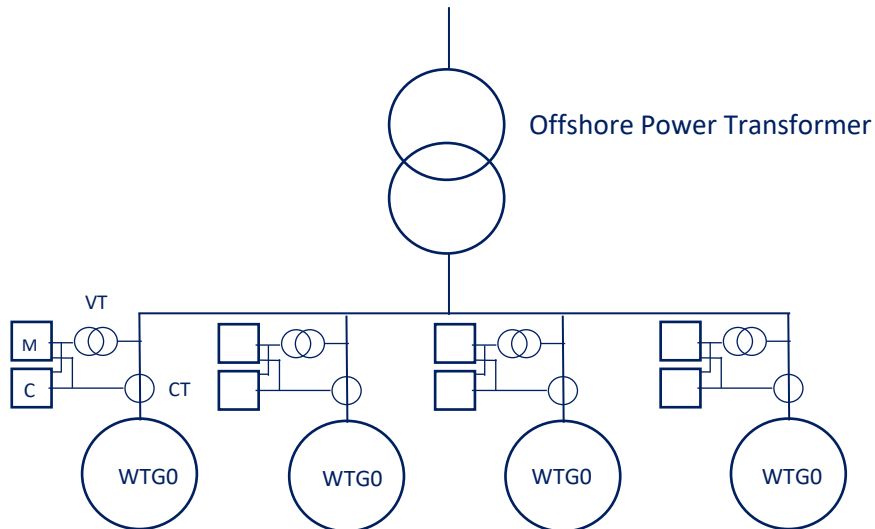


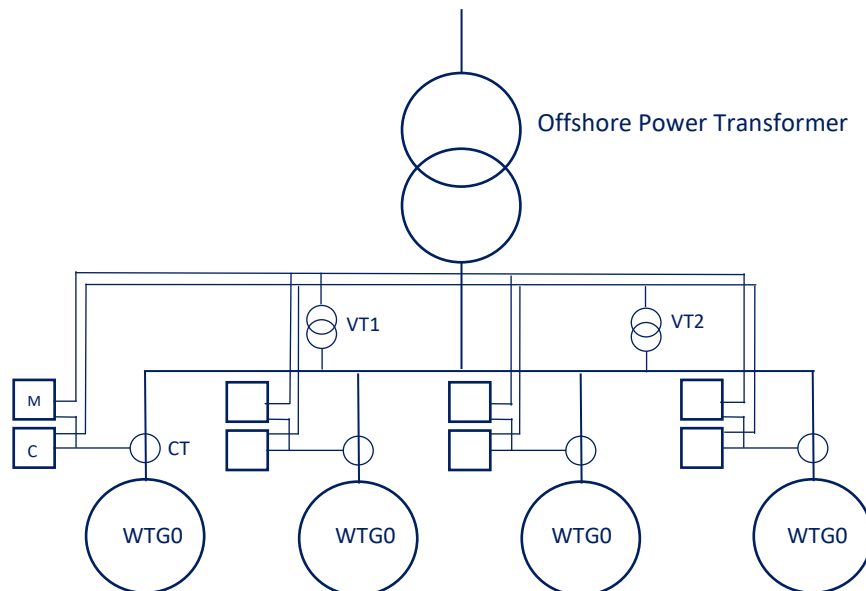
Issue 87 Summary

Over the course of two Issue 87 group meetings, the group has identified a solution that reduces the need for multiple voltage transformers (VTs), at the feeder/string¹ level on Offshore wind farm platforms, by allowing the placement of VTs at the busbar.

Existing CoP2 solution for Offshore wind farms (=>132kV Offshore transmission voltage)



Proposed CoP2 solution for Offshore wind farms (=>132kV Offshore transmission voltage)



Having considered the benefits to this approach, the group wish to extend the solution to cover onshore sites (generally), as well as Offshore wind farms.

¹ i.e. Power Park String.

However, the group acknowledged that onshore wind farm and other onshore site owners and developers were not well represented in the original Issue 87 group membership and so, prior to progressing this change to the BSC, the group wish to publicise this proposed expansion in scope and seek industry views and feedback from a wider range of parties.

Background

The size and weight of Metering Equipment used in Offshore substation platforms at Offshore wind farms, which are subject to Offshore Transmission Owner (OFTO) arrangements (>132kV Offshore transmission voltage), can significantly affect the cost and complexity of development. This is because additional space on an Offshore platform results in an increase in cost.

The Proposer believes that a solution to reducing the VT requirements for these Offshore Metering Systems, following the CoP2 requirements, is to place VTs at the busbar, proposing an arrangement where the main Meters are connected to one VT and the check Meters are connected to a separate VT. This increases the availability of the solution as a failure of a VT would not impact on the Metering System and reduces the need for several VTs on the string levels, which decreases the cost.

The Issue 87 group members agree and recommend that a change to the BSC be made to reflect the solution.

Expansion of scope

In the first meeting, the Proposer noted that the proposed application of the solution to Offshore sites was a result of having come across examples from Offshore sites only, but would be happy to extend the solution if there was appetite to do so.

Having considered the benefits offered by the proposed solution to the issue, the group wondered whether this approach works only for Offshore wind farms or if it would be acceptable to extend the solution to cover onshore sites as well, noting that an extended solution could offer similar benefits to the initial proposal and provide futureproofing for more complex onshore configurations (e.g. multi-feeder sites with a common busbar).

At the second meeting, the group considered the example of an onshore wind farm and wind farm extension with another circuit with an additional main and check Meters that had been added at a later stage. The group noted that this arrangement offered futureproofing as it does not require any further VTs to be purchased if the windfarm gets extended further as the busbar VTs can be used for the future circuits.

The group were satisfied that this seemed to offer the same resilience but for less cost. On the basis that it is robust, offers redundancy and is cost effective, they were happy to support this expansion in scope, with the Proposer agreeing.

Next Steps

The group agreed that the scope of the defect should be broadened to encompass onshore sites as well as Offshore wind farms.

ELEXON

The group recommend that a Change Proposal should be raised to take forward the outcomes of Issue 87 but have asked Elexon to engage with a wider array of parties than initially represented in the Issue 87 group, particularly welcoming views from owners, developers and operators of onshore sites.

If you would like to learn more about this proposed change to the BSC and discuss any feedback that you would like to be considered, please contact BSC.Change@elexon.co.uk or ivar.macsween@elexon.co.uk