

Management of Offshore Transmission Owner (OFTO) Systems

Practical Considerations and Lessons Learned

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Abstract

The development and application of high voltage system management procedures for control room and field staff are key considerations for an OFTO to ensure compliance with all relevant legislation, codes and standards.

Objectives

Examples of the issues that an OFTO must consider are:

- understanding the requirements of transmission system codes and standards as relevant to control room and field operations
- installing the necessary telecommunications infrastructure to ensure reliable connectivity between control room and field, including suitable redundancy/back-up
- developing robust procedures and systems to ensure ongoing compliance
- identifying additional safety rules procedures to address OFTO requirements
- selecting, training and authorising control room and field staff
- preparing alarm handling guidance for control room staff to ensure a timely, consistent and appropriate response to system alarms and events
- ensuring availability of competent field staff such that attendance at site can be achieved within a suitable timescale in event of emergency

Methods

Typical services that an OFTO must develop or procure are:

- control room
- access and work control
- safety rules
- 24/7 standby engineer
- first response to onshore and offshore alarms and events
- routine substation inspection
- provision of suitably authorised personnel for planned and reactive works

Results

Operational experience has demonstrated the following:

- the volume of work required to support projects has been seen to vary considerably and has presented major challenges in the development of resourcing and pricing models;
- the more specialised nature of OFTO systems is difficult to resource due to the relative lack of competent personnel;
- training and authorisation of control room and field staff is time-consuming but critical to success;
- efficient alarm handling is essential in order to ensure that alarms and events are properly assessed and prioritised, and that the appropriate follow-up procedures are implemented;
- requirement to attend site in response to alarms and events can be significantly greater than anticipated for a transmission system

