

SQSS DC Converter Infeed Loss Risk Workshop 2 September 2022

Context

This was the second workshop to discuss a potential change to the HVDC Converter loss risk in the SQSS. SQSS panel members, HVDC developers and some additional interested parties were invited to attend.

As before the remit of the group is to assess the following:

Treatment of DC bipole with no common mode of failure as two separate poles

Increase of DC Converter loss risk from normal (1320MW) to infrequent (1800MW)

It is planned for the proposal to be submitted to the SQSS panel at the November meeting.

The discussion focussed on 3 points:

- Review participants of the potential workgroup, are the right people at the table?
- Update on additional data
- Have we missed anything? Are there any other factors to consider?

Participants of the workgroup

All agreed that suppliers should be included in the workshop, but that otherwise there is a reasonable distribution of interested parties.

Update on request for additional data

In order to assess the above proposals NGESO have requested the following additional data:

- Converter failure rates/reliability data various CIGRE papers have been received, also supplier contacts have been provided and reached out to
- Anchor drag incident data Crown Estates have provided several consultation papers and ESCA guidelines. Also CIGRE TB 815 was suggested as a source
- Cost saving data for reduced landing points HND will provide this data but Imperial College may also have some relevant information
- Knowledge of other subsea cable codes of practice ESCA should cover it

Have we missed anything? Other factors to consider?

As previously discussed, re the treatment of bipoles with a metallic return, the additional text relating to anchor drag risk needs further analysis and discussion for the following reasons:

- Distance from the shore is a factor due to lack of shipping near the coast
- Proximity of shipping lanes should also be considered



- Depth of cables
- Every project is different, individual risk assessments may be required

Also, it was highlighted that shipping collisions with offshore platforms should be considered.

Re the change of the DC Converter loss risk from normal (1320MW) to infrequent (1800MW), developers agreed that any reduction in costs would be welcome but in general all agreed that further assessments with reliability data are required before any change can be implemented.

The issue of multi-purpose interconnectors was raised but concern for the other TSOs was deemed not the responsibility of the SQSS but the interconnector in question.

The workshop agreed that there are no additional issues to consider at this point

Participants

Roddy Wilson SSE

Cornel Brozio SPT

David Lyon Frontier Power

Nicola Barberis Negra Orsted

Dave Monkhouse National Grid Ventures

Biljana Stovkojska BP

Darshak Shah BP

Ben Marshall HVDC Centre

Morris Bray Crown Estates

Robin Gupta Vattenfall

NGESO:

Bieshoy Awad Proposer

Richard Proctor

Fiona Williams Chair/Proposer