Dynamic Cable Rating Application

Intended User

Developers, funds, utilities, investors, buyers/sellers of offshore wind projects looking to save £10's mn in capex by using our dynamically rated cable approach based on combining established IEC methodologies which can help reduce the size and number of cables. This digital tool is only available alongside our cable consulting services.

The Problem

Subsea cables have traditionally been designed assuming that the cables operate at full load with a conductor temperature at the maximum permissible level for the lifespan of the cable system. Steady state thermal rating therefore delivers a conservative thermal rating that fails to optimise the cable asset over its service life often limiting the potential power transmission. In addition, the IEC algorithms do not take into consideration the time taken to heat the thermal mass of the installed environment assuming instead a worst-case scenario of steady state temperature. There is an industry need to bridge the gap between conservative steady state ratings and dynamic in-service thermal ratings, monitored in real time.

Our Solution

In response to the industry need, ITPEnergised developed a series of dynamic rating digital tools to address the need to model the thermal performance of cables in service more accurately and therefore offering the opportunity to lower cost. The methodology combines established IEC principles by ITPEnergised and this approach has been used in real projects in the UK and Asia Pacific.

Typical benefits

⇒ Capex savings in £10's mn and delivering material LCOE, IRR, NPV and payback year benefits

⇒ Uses established IEC principles in combination

⇒ This digital tool is only available and accessible with ITPEnergised cable consulting services

⇒ Compatible with other ITPEnergised NZA digital tools such as our financial modelling suite

⇒ ITPEnergised is continually evolving the digital technology

Contact us for a demo at info@itpenergised.com quoting **NZA50X**