



**SPE ELECTRICAL**



## **CASE STUDY 9: STORENGY LTD**

### **NEW 9.5MW COMPRESSORS: POWER SYSTEM STUDIES**

<b>Client:</b>	Storengy
<b>Industry:</b>	Oil & Gas
<b>Plant Type:</b>	Gas Storage
<b>Project:</b>	System Studies
<b>Contract:</b>	Lump Sum
<b>Date:</b>	2017

**“SPE was appointed to undertake a series of power system studies to support connection of two new 9.5MW VSD compressors.”**

SPE was contracted by Storengy to undertake a series of power system studies to support the addition of two new 9.5MW, Variable Speed Driven (VSD) compressors to one of their sites in Stublach, UK.

SPE’s scope included developing an ETAP model of the whole power system, including the existing and new equipment and the associated solution mining loads. Once the model had been created and validated against the existing site operation, SPE undertook a loadflow and short circuit study to confirm the system operation parameters. Subsequently SPE were then tasked

Once this had been completed, SPE then re-evaluated the existing system protection coordination settings across the whole plant from the LV up to the 132kV connections; SPE then undertook a new coordination grading exercise for the new VSDs and associated auxiliary loads.

Subsequently, SPE were then tasked with carrying out an arc flash investigation into the site using the new protection settings, in order to determine the incident energy levels and required PPE equipment for operatives.