



**SPE ELECTRICAL**



## **CASE STUDY 15: ROYAL HASKONING DHV**

### **ETAP POWER SYSTEM STUDIES**

<b>Client:</b>	Royal Haskoning DHV
<b>Industry:</b>	Marine / Industrial
<b>Plant Type:</b>	Shipyard
<b>Project:</b>	System Studies
<b>Contract:</b>	Lump Sum
<b>Date:</b>	2017

**“SPE was appointed to undertake a significant ETAP study for a site containing over 150 substations and a total power demand in excess of 120MW.”**

SPE was contracted by Royal Haskoning DHV, to carry out a series of power system studies using ETAP for a large shipbuilding yard located in the Middle East.

SPE’s scope included creating a full ETAP model of the whole site, consisting of 8 major load areas, each containing multiple local substations. The total number of substations on the site was in excess of 150, and had a maximum power demand of over 120MW, creating an exceptionally large and complex site.

SPE carried out a series of loadflow, short circuit, motor starting and arc flash studies for the entire site, considering multiple operating configurations and contingencies. The final 90+ page study report provided extensive in-depth explanation and detail of the studies undertaken.

In addition to the base scope, SPE also provided various ad-hoc consultancy advice on the use of soft starters, fault level mitigation techniques and guidance on the interface and operating conditions with the utility company.