



SPE ELECTRICAL



CASE STUDY 16: FOREST PARK - ENERGY FROM WASTE

HV DESIGN & STUDIES

Client:	Trant Engineering
Industry:	Industrial
Plant Type:	Energy from Waste
Project:	HV Design & Studies
Contract:	Lump Sum
Date:	2018

“SPE was appointed to undertake all of the HV design and system studies for a new 3.5MW energy from waste generating plant.”

SPE was contracted by Trant Engineering Ltd., to carry out the HV design and power system studies for a new 3.5MW energy from waste power generation plant, located in the Isle of Wight in the UK.

SPE's scope include design and development of the HV electrical network SLDs, plant electrical control philosophy, development of protection and control systems, and steam turbine generator (STG) synchronization facilities, development of the power system studies including loadflow, short circuit, voltage disturbance and protection co-ordinations studies, review of vendor documentation and assisting with the DNO connection.

SPE attended numerous meetings and helped to coordinate the HV electrical design with the various stakeholders including the DNO, end user, switchgear manufacturer, STG manufacturer and mechanical equipment handling contractor.

In addition to the base scope, SPE also provided various ad-hoc consultancy advice on the use of generator control modes (isochronous and droop) and guidance on the interface and development of a power management system.