

We design and plan networks, cables, transformers, sub-stations and power plants of wind and solar projects (up to 400kV) using both technical and economic criteria. If you have requirements for reactive power / voltage control, we can come up with a range of options and dimension the equipment appropriately for you. If harmonics can be an issue, we can determine the extent of the problem and dimension any required filter unit so that the relevant regulations can be met. Where system operators require grid code compliance testing, we can act as your engineer and ensure that the tests are recorded, performed properly, and will not cause damage to plant or personnel. To plan your installation, we apply modern standard software. Based on a detailed model of your system, we can identify potential problems early and resolve at an early planning stage.

Our core competencies are:

- Studies to verify the suitability of assigned point of connection
- Design and planning of cable networks and sub-stations (medium and high voltage)
- Design and planning of reactive power compensation equipment
- Harmonic analysis and filter design & testing
- Power system stabiliser tuning & testing
- Protection selectivity, protection checking and testing
- Grid code compliance testing
- Planning in accordance with the relevant guidelines
- Administrative process for grid connection
- Knowledge of the requirements of medium and high voltage electrical generating plants

An extract of our solar projects is shown in the following table:

Project	Year	Country	P _{Inst} [MW]	Comment
PV project Heßdorf	2023	Germany	42,9	Feasibility study, evaluation for different voltage levels
PV project Alteglofsheim	2023	Germany	4,5	Basic and detailed planning, support at assignment and commissioning
PV project Hambach	2022	Germany	72,9	Planning of internal mv-substation
PV project Laubst	2022	Germany	44,9	Ampacity calculation
PV project Jackerath	2022	Germany	10,4	Planning of internal mv-substation
PV project Sulzkirchen	2022	Germany	24	Basic and detailed planning, support at assignment and commissioning
PV project Speichersdorf	2022	Germany	18,9	Basic and detailed planning, support at assignment and commissioning
PV project Schnabelwaid	2022	Germany	6,5	Basic and detailed planning, support at assignment and commissioning
PV project Neu-Ulm	2022	Germany	0,4	Correction factor for reactive power allocation
PV project Wittlich	2022	Germany	1,9	Grid connection concept
PV park Eddelak	2021	Germany	10	Basic and detailed planning, support at assignment and commissioning
PV Park Lärz	2021	Germany	< 50	Cable design, electrical loss calculation with storage considered, park control design
PV Park Hemau-Hagetshof	2021	Germany	15	Cable design, reactive power assessment, verification of protection settings
PV Spielberg / Streitberg	2021	Germany	8,6	Control and metering concept
PV project Nellingen	2020	Germany	6,3	Assessment of harmonics
PV Park Delphinus	2020	Germany	29	Electrical loss study depending on reactive power
PV project Großhabersdorf	2020	Germany	1,9	Evaluation of arc damage
PV Park Rottenbach II	2019	Germany	9,3	Cable design, consulting concerning choice of inverters in order to fulfil reactive power requirements
PV project Schmidgaden	2018	Deutschland	0,7	Awarding of a sub-station's contract
PV Park Hiowe Mahe-Shai	2018	Ghana	20	Consulting services, PPA review
PV Park Don Rodrigo	2018	Spain	135	Cable design, short circuit calculations
PV Park Lough Road Cluster	2016	UK	23	Electrical design verification, Harmonic studies according to G5/4, Transformer energisation and flicker
PV Park Meuro	2016	Germany	70	Electrical loss calculation