SUNGROW
CASE STUDY

CHERNOBYL: LET'S GREEN IT!

SUNGROW INVERTERS
SG60KTL

CHALLENGE

The government of Ukraine announced plans to use Chernobyl's nuclear wasteland for solar energy generation. At the same time in Belarus, a 22.3 MW PV plant had been under construction in the district of Brahin, around 20 miles from Chernobyl. The plant has been built next to the confinement of the fourth nuclear reactor which exploded during the infamous 1986 nuclear disaster. The extension of the current 1 MWp plant to a massive 100 MW capacity is the next step to a further roll-out.

SOLUTION

One of Sungrow's flagship products, the string inverter SG60KTL, was deployed for this project, an ideal choice for the installation and system design requirements. The 60kW PV inverter features compact design with best of performance in extreme, harsh conditions and therefore provides an optimum value proposition to investors. Furthermore it is optimized for easy transportation and installation. An integrated string current monitoring function allows for fast trouble shooting, supporting cost-efficient operation and maintenance.

BENEFIT

More than 30 years after the Chernobyl accident, the Ukrainian government aims to give a new green and sustainable life to thousands of hectares within the exclusion zone in Northern Ukraine. While long-lasting radiation makes the area unfit for human habitation, agriculture or forestry, available land and remaining electric transmission facilities make up the ideal purpose: utilizing the power of solar PV to generate clean and green electricity.

Location
Chernobyl Nuclear Power Plant, Ukraine

Project Developer
Solar Chernobyl Limited

System
Grid-connected
ground-mounted system

EPC and O&M
Consortium
"Rodina-Enerparc AG"

Completion date
January 2018

Capacity
1 MWp

DESCRIPTION

Sungrow string inverters lining up nicely underneath the mounting system

The "Solar Chernobyl Power Plant " is a joint project of Ukrainian renewable power plant developer Rodina and German IPP, developer and EPC Enerparc AG, a long-term partner of Sungrow. The objective of the consortium is to implement renewable energy projects in areas that were demolished by the Chernobyl nuclear disaster. The building consortium already had experience in building solar plants on contaminated ground.

The SG60KTL inverters have been designed for a maximum altitude of 4000m which equals a radiation level of roughly 2,0mSv/year = 0,22nSv/h, making these inverters an ideal choice for this project's requirements.

*"In order to implement the Solar Chernobyl project, safety was the number one priority for us. Therefore, we have collaborated with trusted partners only, one of which is Sungrow. It is the leader of its industry and has acquired a reputation in the global market for reliability and high quality equipment " - **Evgeny Variagin, CEO of Solar Chernobyl LLC and Consortium Rodina - Enerparc AG**

Staff on site discussing technical specifications of the SG60KTL v182

"90% of our solar parks are equipped with Sungrow inverters"
*- **Oliver Herzog, Executive Director Enerparc International GmbH***

Sungrow Power Supply Co., Ltd ("Sungrow") is a global leading inverter solution supplier for renewables with over 68 GW installed worldwide as of June 2018. Founded in 1997, Sungrow is a leader in the research and development of solar inverters, with the largest dedicated R&D team in the industry and a broad product portfolio offering PV inverter solutions and energy storage systems for utility-scale, commercial, and residential applications, as well as internationally recognized floating PV plant solutions. Sungrow EMEA's headquarter is based in Munich, Germany, with local subsidiaries in Italy, Spain, France, UK, Turkey and UAE. The Company has shipped more than 5 GW of PV and Storage products to key markets in the region, mostly in the utility-scale segment.