CosinSolar

To Provide Low-cost, High-quality, and Clean Energy!

QUARTERLY UPDATE

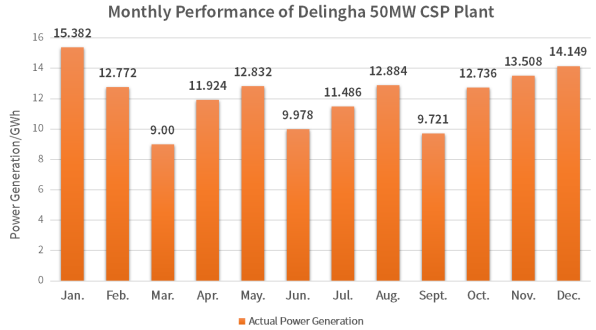
Mar. 2023

TOP NEWS

2022 Annual Power Generation Exceeding the Design Value -- SUPCON SOLAR Delingha 50MW Molten Salt Tower CSP Plant Sees Another Good Year

The total annual cumulative actual power generation of the **SUPCON SOLAR Delingha 50MW Molten Salt Tower CSP Plant in 2022 was 146.4 GWh, i.e. 100.26% of the designed annual power generation (146GWh), completing yearly target.**

The plant has been operating in good conditions. As shown in the monthly power generation in Figure 1, it has 124 days seeing a completion of 100% of the designed generation. In addition, if we deduct the days from September 28, 2022 to October 7, 2022 where the grid was under line maintenance and waste about 4.267 GWh, the annual power generation could reach 103.18% of the design value.



122 GWh

In the first full year of production after handover, the plant's cumulative actual power generation reached 122 GWh.

146.4 GWh

In 2022, the plant's cumulative actual power generation reached 146.4 GWh, i.e. 100.26% of the designed annual power generation(146GWh), setting the highest operating record among the tower CSP plants worldwide.

421 GWh

As of December 31, 2022, the plant's cumulative actual power generation has reached 421 GWh.

PROJECT PROFILE

SUPCON SOLAR Delingha 50MW Molten Salt Tower CSP Plant, 50MW of installed capacity with 7-hour molten salt storage system, is one of China's first batch of CSP demonstration projects. It has a solar field with 27,135 sets of 20m2 heliostat, and is designed to generate 146GWh electricity annually. Aiming to save 46,000 tons' standard coal, and reduce 121,000 tons' CO_2 emission, it is producing enormous environmental and economic benefits. Fully designed, constructed and operated on Cosin Solar's own patented technologies, now the plant has passed complete technical assessment of Fichtner, a German independent engineering consulting company, earning the remarks of “The design of the plant corresponds to state-of-the-art design known by Fichtner”.

TOP NEWS

The Tower of Jinta ZhongGuang Solar “CSP + PV” Pilot Project 100MW CSP Project Reached the Top

On November 9, 2022, the tower of Jinta ZhongGuang Solar "CSP + PV" pilot project 100MW CSP project reached the top, making a milestone progress of project construction.

The concrete tower is 195 meters tall and the overall height, if counted to the center of the receiver, is 220 meters. We started placing concrete of tower foundation on June 17, 2022. After 146 days of relentless efforts and with well-organized project management, we finally completed the tower construction on November 9. As a core structure of the whole tower CSP plant, tower is always an important project milestone. Its successful completion will lay a solid foundation for the rest project construction.

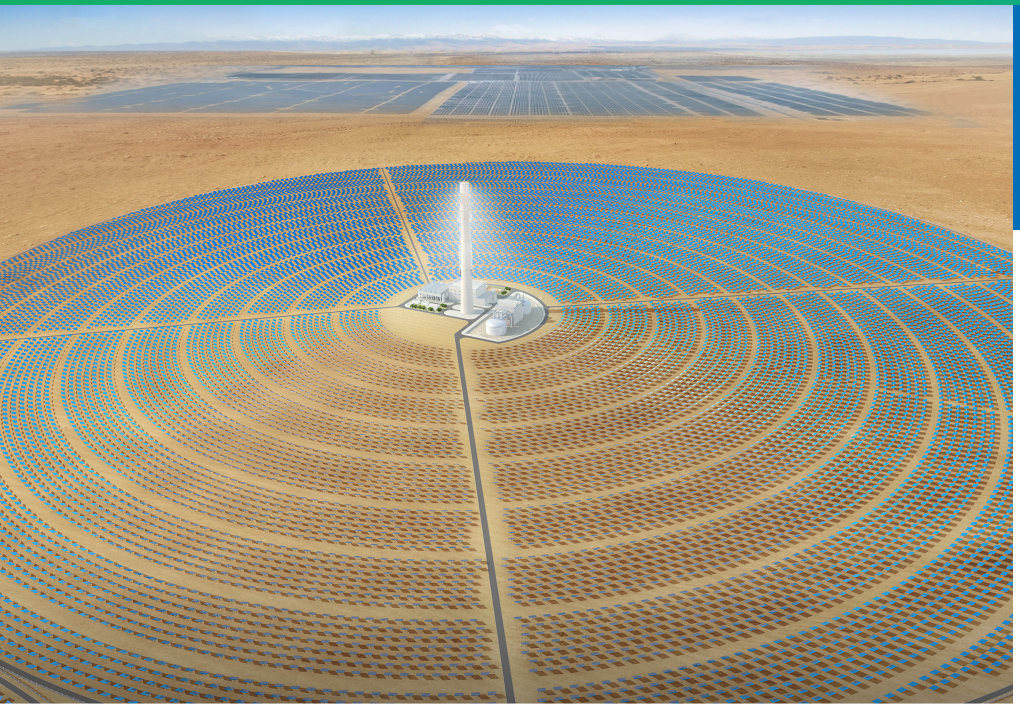
Currently, all work is progressing well. We have completed the first and second design reviews on grid access system. In terms of structural construction, we have reached top for the tower, the electric control building and the air-cooling system structure. Foundation of the molten salt storage tanks has been mostly completed. Auxiliary systems and the upper structure of the front area of the plant are under construction.

PROJECT PROFILE

Jinta ZhongGuang Solar "CSP + PV" pilot project is developed and constructed by Jinta ZhongGuang Solar Power Generation Co., Ltd., with a total installed capacity of 700MW. It is a hybrid power plant with 100MW CT CSP and 600MW PV. The 100MW CT CSP project, with a 9-hour molten salt thermal storage, uses solar thermal tower technology fully developed by Cosin Solar. Its designed annual production is 1370 GWh and will save 480,000 tons of standard coal and reduce 1,310,000 tons of CO_2 emission per year.

TOP NEWS

CNPEC Awarded Solar Field and MSR System to Cosin Solar for CGN New Energy Jixilugu DC 490MW Hybrid Project



On November 11, 2022, we received the "Notification of Award" from China Nuclear Power Engineering Co., LTD. (“CNPEC”), confirming that we have won the bid for Solar Field and MSR System equipment supply for the CGN New Energy Jilin Daan Jixilugu DC 490MW Hybrid Project (“Project”), in other words, we will provide advanced Solar field and MSR system and related services for the 100MW CSP part out of the project.

PROJECT PROFILE

The total installed capacity of the Project is 490MW, including 130MW PV, 260MW wind power and 100 MW CT CSP. The 100MW CT CSP, with an 8-hour molten salt thermal storage, will adopt the solar thermal tower technology fully developed by Cosin Solar. Using curtailed PV power to heat molten salt, the project will become a hybrid power plant optimizing utilization of CSP, PV and wind power based on demand curve.

Jixilugu DC 1400MW Hybrid Project. Being one of the first batch of China’ s large-scale solar and wind hybrid projects developed on desert, Gobi, represents China’ s exploration on a new development patch of “CSP+new energy. Tapping into our experiences in developing and constructing the first batch of CSP demonstration projects in China, it will become a peak regulator based on CSP technology with energy storage after completion.

UPCOMING EVENTS

RENMAD Almacenaminento 2023

March 29—30th, 2023

Toledo, Spain

Cosin Solar will attending this event and will mading a keynote speech.

China International CSP Station Conference CSPPLAZA 2023 Annual Conference

June, 2023

Hangzhou, China

Conference organizer: Cosin Solar & CSPPLAZA

CONFERENCE INVITATION: we sincerely invite the industry associations, enterprises and relatede units to actively participate.

CosinSolar

A Global Leading Provider for Molten Salt Tower CSP

- **The former SUPCON SOLAR，officially renamed in July 2021 into Cosin Solar Technology Co., Ltd. (Cosin Solar for short)**
- Founded in 2010, focus on Tower CSP and Energy Storage technology
- Independent R&D with fully patented technology and homebred equipment
- Technology consultancy, Equipment integration, Engineering services
- Development, Investment, Construction, Operation of projects

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