



Concentrating Solar Power Projects

Redstone CSP Project

This page provides information on Redstone CSP project, a concentrating solar power (CSP) project, with data organized by background, participants, and power plant configuration.

Project Overview	
Power Station:	Redstone
Location:	Potmasburg Northern Cape South Africa
Technology	Power Tower
Nominal Capacity:	100 MW
Status	Under Construction
Start Year:	2023

Status Date

Status Date	October 26, 2023
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Background

Break Ground Date	2021
Expected Generation (GWh/year)	466
Lat/Long Location	-28.298476,23.368182

Participants

Developer	ACWA, SolarReserve Saudi Arabia, United States
EPC	SEPCO III China
Electricity Generation Offtaker	Eskom
Construction Job Years	2000
Annual Operations Jobs	100

Costs

Total Construction Cost (2020)	116000.00 million
Total Cost USD (2020)	\$704.22 million
Specific Cost/kW USD (2020)	\$ 7042
LCOE USD/kWh (2020)	\$ 13
Policy Support Scheme	REIPPPP BW 4

Plant Configuration

Solar Field

# of Heliostats (or dishes for dish systems)	41260
Collector/Heliostat Engineering or IP Owner	Brightsource USA
Collector/Heliostat Model	LH-2.5

Solar Field (Receiver)

Receiver Working Fluid	Molten Salt
Receiver Working Fluid Category	Salt
Tower Height (m)	250
Receiver Manufacturer	Cockerill Belgium

Power Block

Nominal Turbine or Power Cycle Capacity	100 MW
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Thermal Energy Storage

Storage Capacity (Hours)	12
Storage Description	Molten salt
TES Engineering Company	Shanghai Lanbin Petrochemical Equipment (LANPEC Technologies Limited) China

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