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Approximate model of the Rice Solar Energy Project, currently under construction in California by SolarReserve Rice Solar Energy, LLC. This plant model was built using publicly available information.

The plant uses a molten salt power tower together with direct thermal storage in a two-tank configuration. The surround field contains about 17200 heliostats arranged on a roughly circular field with a diameter of 9000 ft / 2750 m. The external cylindrical receiver sits atop a 540 ft / 165 m tall concrete tower that is offset from field center towards the south. The power plant uses a reheat steam turbine with six feedwater heater cycle, exhausting to a dry air cooled condenser to minimize water consumption.

Outputs of icon 40, Solar Tower w/ Storage, show the field layout for the design condition of solar noon on the summer solstice. The computed encompassed land area is about 1455 acre. At gross output of 150 MWe with six hours of storage, the solar field land usage for this plant is 9.7 acre per MW, or 3.9 hectare per MW.

