

CMRL to generate 2.77 cr units of power per year in Phase 2

ESTIMATED SOLAR ENERGY GENERATION PER YEAR

Madhavaram to SIPCOT (Siruseri)

1.56 crore units/year

Lighthouse to Poonamallee Bypass

49.1 lakh units/year

Madhavaram to Sholinganallur

71.8 lakh units/year

■ G JAGANNATH

CHENNAI: To cut down electricity bill, the Chennai Metro Rail (CMRL) has planned to generate 92,000 units of power a day from rooftop solar power panels in its proposed three new corridors.

In Phase II, the CMRL has estimated that the three corridors together have the potential to generate solar power to the tune of 27.78 gigawatt per hour or 2.77 crore units per year.

According to the detailed project report (DPR) of Phase II, the rooftop of corridors, sheds and buildings of elevated stations are proposed to be used for solar photovoltaic installation to optimise the solar energy potential.

Out of the 128 stations proposed - Madhavaram to SIPCOT (Siruseri), Lighthouse to Poonamallee Bypass and Madhavaram to Sholinganallur - 80 are elevated stations and the rest are underground. The DPR proposes to set up three depots at Madhavaram, SIPCOT and Poonamallee. "Based on the solar radiation intensity in Chennai, the peak solar power generation of Chennai Metro Phase II is expected to be about 50 kWp for the elevated stations and about 2000 kWp for maintenance depot," it said.

A CMRL official said that the cost of electricity is a significant part of the operation and maintenance expense. "We would be

able to significantly reduce it through rooftop solar power generation," the official said.

For solar energy harnessing system, CMRL official said that they would sublet the rooftop to

the project developer responsible for solar PV installation. "The power would be purchased by CMRL on the basis of the unit rate specified by Power Purchase Agreement (PPA). This is the model adopted in Phase I of the project as

well," the official noted.

In the Phase I, the Metro rail has so far installed solar plants with a capacity of 4.1 MW, and work on 2.5 MW is under progress.

DPR proposes to set up three depots at Madhavaram, SIPCOT and Poonamallee