

SNS COLLEGE OF TECHNOLOGY, COIMBATORE-35 DEPARTMENT OF MECHANICAL ENGINEERING



16MEOE1-Solar Energy Utilisation – **UNIT III CONCENTRATING COLLECTORS**Topic - CBS- solar power tower

Solar power towers convert sunshine into clean electricity. A heat transfer fluid heated in the receiver is used to generate steam, which, in turn, is used in a conventional turbinegenerator to produce electricity. Early power towers such as the Solar One plant used steam as the heat transfer fluid.

Low cost manufacturing methods are needed to make solar power tower viable technology for electricity production. Particularly, a low cost drive systems must be developed.

Receiver:

Smaller and simpler receivers are needed to improve efficiency and reduce maintenance.

Molten salt:

Molten nitrate salt, though an excellent thermal storage medium, it is not an ideal material due to its relatively high freezing point of 220oC.

