

1. Training module for Solar Energy/ Smart grid/ Microgrid

The program covers the fundamental principles of Solar Energy/ Smart grid/ Microgrid, their design, implementation, and operation. At the end of the training program, participants should have an understanding of Solar Energy/ Smart grid/ Microgrid, will be able to design and implement basic microgrids and be equipped with the skills and knowledge to operate and optimize them. They should also be aware of the challenges and opportunities associated with Solar Energy/ Smart grid/ Microgrid.

Programme Title		Training on Solar Energy/ Smart grid/ Microgrid
Duration		5 days
Venue		NTPC School of Business, Noida, India
Day	Time	Topic
Day 1	Forenoon (FN) 3 hours	Solid State Transformers in microgrids and fault tolerance in microgrids
	Afternoon (AN) 3 hours	Overview of power systems, introduction to microgrids, components, configurations, and design.
Day 2	FN	Basics of Solar Energy, solar PV technology, modules, and advancements.
	AN	Techno-institutional models for microgrids; policies, regulations, and international practices.
Day 3	FN	Feasibility studies and planning for solar PV systems; case studies.
	AN	Design parameters, operation, and maintenance of Solar PV systems; demonstration of design tools.
Day 4	FN	Introduction to smart grids, building blocks, and architecture.
	AN	Demand response, cybersecurity, and smart grid analytics.
Day 5	FN	Field visit to NTPC facilities.
	AN	Valedictory session.