

ELECTRICITY

The Electricity Department is operating and maintaining power generation transmission and distribution system in these islands for providing electric power supply to the general public and various categories of consumers in different parts of the islands. The per capita energy consumption in these islands is around 250 KWH per person per annum as against the national average of 350 KWH. The department also functions as a nodal agency for implementing Renewable Energy Programme & Schemes and Integrated Rural Energy Programmes of the Ministry of Non Conventional Energy Sources of these Islands.

Due to geographical and topographical peculiarities of these Islands, including separation by sea over great distances, there is no single power grid for all the electrified islands and instead a power house caters independently to the power requirements of an area/island.

There are 34 diesel generating powerhouses scattered in various islands with aggregate total capacity of 38.8 MW as on 31-8-2003. The installed capacity of the stations ranges between 6 KW to 12500 KW. One Hydro electric power station with a capacity of 5.25 MW has also been established and commissioned at Diglipur, North Andaman. This Hydro powerhouse was in operation since September 2001 and resulted in saving of Rs.8.00 crores towards purchase of HSD oil. Apart from the above a 20 MW diesel power house has been set up under private participation at Bambooflat, South Andaman and is in commercial operation since April 2003.

I. Village Electrification

No. of villages electrified	Duration of ele. Supply	Source of elec supply	. %age of population covered
311	24 Hrs.	DG Sets	92.4%
32	5-16 Hrs.	- do -	2.8%
18	5-12 Hrs.	Solar PP	0.8%
118(*)	5 Hrs	Solar	2.4.%

Note (*)covered by SPV System a decade ago are required to be electrified as per new definition of village electrification under PMGY during 10th Plan.

II. Major Achievements:

	Particulars	Unit	Target	Achievement
1.	D.G.Capacity	MW	44.001	Diesel-15.65 Hydel- 5.25 IPP- 20.00
2.	HT Line	KMs	39.13	39.13
3.	LT Line	KMs	136.87	136.87
4.	Power Transformer	Nos(KVA)	1/(630)	1/(630)
5.	Service connections	Nos.	9302	9302

VHF Communication Network has been established in South, Middle & North Andaman connecting all the areas including Neil, Havelock & Long Island for better monitoring and quick fault rectification for improved services to the consumers.

III. Major schemes proposed for implementation

1. Aug. of DG Cap. at Rangat, Middle Andaman -5 MW
2. Aug. of DG Cap. at Neil -2x128 KW, Havelock -3x250 KW, Katchal -2x250 KW, Champion -3x65 KW, Teressa -2x128 KW, Chowra -2x128 KW, Long Island -1 x128 KW + 2x65 KW.
3. Conversion of Overhead System to Underground System in the funnel and transitional area in the proposed Airport extension at Port Blair.
4. Aug. of DG Cap. by 10 MW at South Andaman (S/A).
5. Addition of 10.3 MW DG Capacity at various islands other than S/A.
6. C/o 66/110 KV Andaman Grid for inter-connection of Power Houses.
7. Conversion of O.H System to UG Cabling System in thickly populated areas of A&N Islands.
8. Rural Electrification under PMGY.
9. Implementation of IT Governance & VHF Communication System.

Generating capacity Scenario at the end of 10th Plan: 72.40 MW

VI. New & Renewable Sources of Energy:

23 Solar Photo Voltaic Power Plant at various places with total installed capacity of 156.54 KWP have been established. 2 small capacity SPV Power Plants, SPV Pumps, Solar Hot Water Systems, Biomass Gasifiers, Ocean, wind, solar Energy, etc., are also programmed to be established in these Islands during

10th Plan as per the reports submitted by expert team who visited these islands during May 2001.

To reduce wood fuel consumption and to provide better facility to the poor mass, improved fixed and portable chulhas have been distributed to 1847 beneficiaries up to 3/2003.

Grid Connected Solar Power Plant:

A 50 KWP Grid Connected Solar PV Power Plant has been established at Neil and is under operation. This will feed power to the local grid during day time and save HSD oil. A similar 50 KWP SPV Power Plant is being programmed to be established at Havelock, which has been approved by MNES.

Energy Conservation & Renewable Energy:

Conservation of energy is of utmost importance in these islands due to the fact that electric power is subsidised and generated by using costly imported HSD oil. Public contact programmes are being organised to generate awareness amongst all the save energy by reducing or avoiding the use of incandescent bulbs, Air Conditioners, Power Intensive Electrical Appliances and using CFL & Tubelights which consume less power and have a longer life. The Mobile Exhibition Van having working renewable energy devices is displayed to the general public for bringing awareness about use of renewable energy devices, energy efficient devices, conservation of energy and safe use of electrical energy. Such programme was recently held for around 15-20 days at Dairy Farm, Haddo & Chouldari.