

## **NON-CONVENTIONAL SOURCES OF ENERGY**

Under this sector, a research oriented scheme for generation of power from solar pond is implemented. The Pondicherry Experimental Solar Pond power project is a joint venture of Pondicherry Engineering College and Electricity Department of Government of Pondicherry, funded by the Government of India, under National solar pond development programme. The aim of the project is to install a power station to generate electric power of the order of 360 KW per day using organic rankine cycle coupled with salt Gradient solar pond.

During the Annual Plan 2004-05 advance payment to NAL towards design, fabrication works of solar pond, preliminary works for construction of second 2000 square meter pond, lining scheme for first 2000 square meter pond and maintenance of pilot solar pond.

## OUTLAY AT A GLANCE

Sector : NON-CONVENTIONAL SOURCE OF ENERGY

No. of Scheme : 1

Department : ELECTRICITY

(Rs. in lakh)

Tenth Plan 2002-07 Approved Outlay	:	60.00
Annual Plan 2002-03 Actual Expenditure	:	4.55
Annual Plan 2003-04 Approved Outlay	:	15.00
Annual Plan 2003-04 Revised Outlay	:	15.00
Annual Plan 2004-05 Proposed Outlay	:	25.00

(Rs. in lakh)

Sl. No.	Name of the Scheme	2002-03	2003-04		2004-05
		Actual Expenditure	Approved Outlay	Revised Outlay	Proposed Outlay
(1)	(2)	(3)	(4)	(5)	(6)
1.	Development of non-conventional sources of energy	4.55	15.00	15.00	25.00
<b>Total</b>		<b>4.55</b>	<b>15.00</b>	<b>15.00</b>	<b>25.00</b>

## Scheme No. 1

Sector : NON-CONVENTIONAL SOURCES  
OF ENERGY

Implementing Department : ELECTRICITY

1. **Name of the Scheme** : Development of Non-Conventional Sources of Energy.

2. **Objective of the Scheme** :

The objective of the scheme is to promote the use of new and renewable sources of energy and to conduct research and development on renewable sources of energy. Setting up of solar pond for production of thermal and electrical energy.

### 3.(a) **Actual physical Achievement 2002-03 :**

The work of construction of 500 Sq.m. solar pond has been re-structured and the pond has been maintained at 75°C.

### (b) **Anticipated Physical Achievement 2003-04 :**

The necessary work for the design, development and fabrication of Power plant had been done at National Aerospace Laboratories, Bangalore, and the special type of engine and its accessories have been fully fabricated at N.A.L., Bangalore. After having tested the O.R.C. engine successfully and power generated at N.A.L., the O.R.C. engine and its associated equipments have been shifted to Pondicherry Solar Pond site and also coupled with 500 Sq.m. Solar Pond. At present, trial runs are being conducted at site by the Scientists, N.A.L. Having satisfied the trial runs, the ORC engine will be technically commissioned during this financial year.

### (c) **Programme envisaged for Annual Plan 2004-05 :**

Works and land : Purchase of salt etc. for the maintenance of the Solar pond, erection of electricity distribution system and the balance amount to be paid to NAL after commissioning of the ORC engine.

4. **Remarks** : Continuing scheme