## **ABOUT HYDRO TRAINING INSTITUTE**

Hydro Training Institute was established on 01.2.1979 at Athikadavu and later shifted to the present premises on 01.01.1993 and since then it has been functioning here. This institute got its recognition as Class-I category institute by Central Electricity of Authority, Ministry of Power, New Delhi from September 2003.

# **LOCATION**

This Institute is located near the Barrage Power House –III in a place called Kuthiraikalmedu which is 15 Kms away from Bhavani towards Metturdam. Green surroundings around the institute provides conducive learning environment.



Entrance of the Institute

Front facade of the Training

### **VISION**

Training for all personnel in Hydro Generation Circles of TANGEDCO for updating their knowledge and skills on latest developments and emerging technologies.

### **INFRASTRUCTURE**

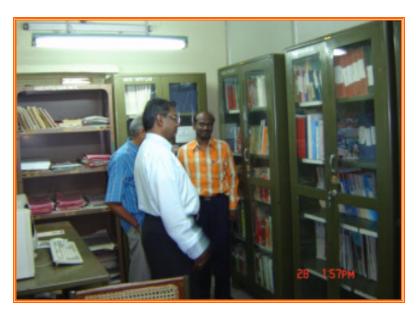
An air conditioned lecture hall furnished with state of training facilities like Laptop, LCD and OHP, Audio & Video facilities is available to provide a fine learning environment. Computers and a laptop with a scanner and laser printer, facilitates in preparation of course materials, and other office communication papers. Broad band internet connectivity is provided for all, for speedier communication and for downloading certain related papers in connection with the training courses. Recreation and sporting facilities, like Carom, Chess, Table Tennis enables the trainees to spend their leisure time more beneficially.

### **HOSTEL AND CANTEEN:**

Hostel can accommodate 72 trainees at a time. A mess attached with the hostel caters for the dining needs of the participants, round the clock.

### LIBRARY:

The Hydro Training Institute has a Library of its own which is equipped with textbooks and literature related to hydropower generation and certain management topics. Apart from this, considerable number of reference manuals, around 185 technical books are available in the library for ready reference by the core, guest faculty and the trainees. Also CEAs technical magazine "Vidyut Bharati" is being received for updating the knowledge on power scenario.



# **MODELS**

Out of several models available at the institute following mechanical and electrical hydro machineries replaced during overhauling times in hydro power houses had been received and kept as models in the lawns of HTI for demonstration purposes. Some of them are: Impulse Turbine, Butterfly Valve, Francis Turbine, Servo Motor, Pilot Exciter, Stator, etc.,







### TRAINING SINCE INCEPTION

In the present location, since January 1993, so far 8039 Engineers and 4773 Staff totaling to 12812 employees have undergone different kinds of training programmes upto March 2011.



# Training programme for Engineers:

The training programme for Engineers have been designed in such a way to impart training both theoretically and practically. Some of the on site training Programmes are.

- 1. Rewinding of HT and LT motors
- 2. Meeting with Manufacturers of Batteries & Relays
- 3. Emerging trends in Material Handling System & Hydraulic system
- 4. Dynamic Balancing & Vibration Analysis
- 5. Diagonisis & Preventive actions in structures
- 6. Work shop on long Pending Issues at Hydro areas

### **On-site programme on topics such as (Engineers/Staff)**

- 1. SF6 Gas Leakage detection & arresting in Circuit Breakers
- 2. Maintenance of Control Panels & Relays
- 3. Trouble Shooting in Excitation System
- 4. Maintenance of Compressor
- 5. Maintenance of Pumps & Oil System
- 6. Alignment of Turbine & Generator
- 7. Quality Management in Drinking water System
- 8. Silt clearing measures in reservoirs
- 9. Green Building for Energy Conservation

## HRD training programme:

The Engineers/officers of hydro generation circle are given training on HRD topics such as:

- 1. Communication skills, Leadership management and Team Building
- 2. Strategic Change management for Organisational Excellence

## **Regular Training Programme:**

The Engineers/officers of hydro generation circle are given training on following topics such as:

- 1. Workshop on Grid Discipline, Load Management
- 2. Uniform commercial accounting and Financial management in Generating Stations
- 3. Administrative regulations and Disciplinary proceedings
- 4. Legal aspects, Court Craft, RTI and Audit Issues in Power plants

## **FACULTY**

## Inhouse faculties:

- > Team members of HTI,
- > Retired Chief Engineers / Superintending Engineers of TNEB
- > Experts in various fields from TANGEDCO & TANTRANSCO

## **External faculties:**

Faculties from

> Manufacturing Companies like

ABB (P) Ltd , Crompton Greaves, Exide Batteries, Megawin Switch Gears (P) Ltd, Salem, GE Prolec, Chennai, EASUN MR Tap Changers, Chennai, EASUN Reyrolle, Hosur, VESAT, Coimbatore, Texmo Industries, Coimbatore, Indian Oil Corporation Ltd, Coimbatore, Nerolac Paints Ltd, Chennai, LG India Ltd, CRI Pumps (P) Ltd, Coimbatore, Ador welding Ltd, Mumbai, Madras Hard Tools (P) Ltd, Chennai, Wens Quality Assurance (P) Ltd, Chennai, Suguna Group of Industries, Coimbatore, Axial & Radial Engg & Co., Coimbatore, Shanthi Gears, Coimbatore, Larsen & Tubro Ltd., Chennai, Sukshma Dynamics (P) Ltd, Coimbatore, Shaw Engineering Corporation, Chennai, Thordon Bearings, Visakapattanam, Grip Cranes, Coimbatore, MM Engineers (P) Ltd , ELGI Equipments (P) Ltd, Coimbatore, Procoat (P) Ltd, FOSROC Chemicals India Ltd, Bangalore, BASF India Ltd, Chennai, ACC Cements, Coimbatore, Zydex Industries, Vadodara, etc.,

- > Institute of Road and Transport Technology, Erode
- > Sri Vasavi College, Erode
- > Govt. College of Technology, Coimbatore

- > Doctors, Psychologists, Financial Experts, HR Trainers, Yoga Masters
- > Indian Concrete Institute, Chennai Chapter
- > Copper Promotion Council of India, Chennai
- > Karunya University, Coimbatore

### **FUTURE PLANS**

- Planning for inclusion of outside participants for regular training programmes on chargeable basis
- Planning to setup a working model of a pumped storage scheme
- Planning to setup a simulator for a small hydro power plant
- Certified diploma courses in Hydro Power Plant Engineering