

National Power Training Institute is a national apex body for training and human resources development in the power sector, serving the national for over four decades.

Subodh Garg, who recently took over as the new Director General of NPTI, speaks on a wide range of aspects on the critical issue of human

Interview



resources in the power sector. Garg dwells on the health of the current manpower pool in the power sector, and spells out his agenda on how NPTI is gearing up to serve the burgeoning power sector. An interview by **Venugopal Pillai**.

To begin with, please tell us about your top priorities as the new Director General, NPTI. What are some of the demonstrable objectives that you would like to attain in the next 3-4 years?

Ever since taking over as Director General, we are working on number of proposals so as to meet the current and future requirements of qualified manpower and their training needs so as to meet the challenges of Indian power sector. We are in the process of implementation of AICTE norms at NPTI which shall enable us to start new academic programs like M.Tech in Power Generation/Transmission & Distribution besides Renewables, in addition to B.Tech (Power) which we are conducting at three locations.

We are also thinking of starting one year Executive MBA in Power Management to fulfill the demand of working professionals and also MBA (Power Management) course through Distance Learning and e-learning, which shall provide high quality power management MBA education at the door step of a student. This will provide a large pool of highly qualified techno-commercial managers to manage the power Sector.

In pursuance to Jawaharlal Nehru Solar Power Mission and the government's mission to increase the spread of clean and green energy, we are planning to set up Renewable Energy Excellence Centers at various institutes of NPTI.

NPTI is now emerging as the world's leading integrated power training institute

— Subodh Garg, Director General, National Power Training Institute

NPTI is taking initiatives for improving the state sector thermal PLF of 58.37 per cent against Central sector thermal PLF of 80.29 per cent, through training interventions.

NPTI is now emerging as world's leading integrated Power Training Institute in developing leadership talent and innovative human resource solutions for the Power industry. We would like to establish Power Training centers abroad specializing in Power Sector through Franchisee model on Public Private Partnership (PPP) mode.

It is said that human resources are the most critical factor for the power sector. On a scale of 1 to 10 (where 10 indicates the best score), how do you rate the human resource element, with respect to both quantity and quality, in the Indian power sector?

There is large requirement of trained manpower for new upcoming power plants, transmission system, power exchanges, distribution sector etc. There is huge shortage of trained technical manpower who can work in erection and commissioning of power plants, maintenance of T&D system, etc. Thus, we would rate the human resource element, with respect to both quantity and quality, in the Indian power sector at point 6.



Live Line Training at HLTC, Bangalore

Supercritical power plants are very high on India's ambitions with the entire new power generation capacity in the 13th Plan period expected to be on supercritical parameters. What are NPTI's plans in offering training courses for supercritical power plants?

We have plans to establish training simulators based on supercritical power plant parameters. Very soon, we shall be adding 800-mw training simulator at our Faridabad Institute which will go in a long way to provide trained manpower for manning supercritical power plants.

It is widely believed that the sheer churn-out of electrical engineers in India is insufficient and that electrical engineering, as a career choice, has lost out to other disciplines like computer software, etc. What is your view, and what do you suggest as remedial measures?

In my opinion the number of electrical engineers being produced in India is sufficient to meet the needs of the power sector and also other infrastructure sectors. Yes, few years back the students did prefer computer-related courses as compared to electrical engineering but recently the trend has changed. The choice of electrical engineering is increasing now. The demand for electrical engineers has increased manifold because of boom in the Indian power sector. Further, there is a plan to add about 1,00,000 mw of power generation capacity during the 12th Plan, requiring additional manpower. The major requirement in this is that of electrical engineers.

Please tell us about NPTI's plans to increase its geographical presence, in keeping with the pan-India growth in the power sector.

NPTI is presently imparting two-year fulltime MBA Course in Power Management, approved by AICTE, and also four-year B-Tech. (Power Engineering) course at three institutes and this course is also approved by AICTE. In addition to this, we are also conducting a number of other long-term, medium-term and short-term courses in the area of thermal power generation, hydropower generation, transmission & distribution, GIS, regulatory affairs, etc.

NPTI has recently started new training institutes at Nangal and Guwahati. NPTI has also undertaken work of running ITI at Solapur, Maharashtra and Mining Training Institute at Barkagaon, Hazaribagh (Jharkhand). NPTI has presently nine Institutes spread all over the country namely at Faridabad, Badarpur (New Delhi), Nangal, two

Institutes at Bangalore, one Institute at Neyveli, Guwahati, Durgapur and Nagpur.

We are also strengthening our Institutes by upgradation of infrastructure to meet the growing training demands in India besides planning to start new institutes/centres abroad. Bhutan Government has also sought the assistance of NPTI to augment their training Institutes. Ministry of North Eastern Region has also sought the assistance of our Institute to augment the qualified technical manpower needs of the north-eastern Region. Besides, we are providing training to a number of trainees of foreign countries-Sri Lanka, Afghanistan, Nigeria, Oman, Kazakhstan, Bhutan, Thailand, Ethiopia, Cameroon, Ghana, Dominica, Botswana, Myanmar etc.

Apart from coal-fired power generation plants, which has been India's mainstay for energy needs, large hydropower plants are also fast coming up. What are your plans in offering training with



NPTI's corporate office at Faridabad, Haryana

respect to mega hydropower plants? In the same vein, what are NPTI's plans for renewable energy?

Visualizing the training needs of technical manpower in the area of hydropower, we have recently established Hydro Power Training Institute at Nangal in 2009 offering customized and specialized courses related to the hydropower sector. We are in a process to commission Hydro simulator at Nangal this year to impart on-hand real-time training to the trainees. Various medium and Long term training programmes in hydropower are also being conducted at NPTI, Badarpur Institute and as well as at Faridabad Institute. Our faculty members have undergone trainers' training in September this year on Hydro Power Simulator in USA.

We are also planning to start Post Graduate Courses in Renewable through PPP Model at various locations of NPTI, though we are already conducting short term courses in this area.

India appears to be very serious about its power T&D infrastructure upgrade with an investment outlay of ₹4.5 trillion in the XI Plan and ₹6.4 trillion in the XII Plan period. What is on NPTI's agenda to help create a bank of skilled manpower in the power T&D sector?

NPTI is running six months training courses on O&M of T&D system at its Power System Training Institute, Bangalore, Nagpur and Guwahati centres with 100 per cent placement. Our Hot Line Training Cen-



A 500-mw simulator at NPTI

ter, Bangalore is conducting training programs on Live Line Maintenance. We are also conducting Certificate Course in power distribution in collaboration with IGNOU. We are also planning to start e-learning programs to facilitate training through distance education.

Indian engineering institutions are allegedly more academic oriented, and quite weak when it comes to imparting "hands-on" and "practical" training to students. What is your view?

Yes, we can say that Indian engineering institutions are more academic-oriented and power industry requires more "hands on" and "practical" trained engineers. To fill this gap, NPTI has started 4-year B.Tech in Power Engineering course with the objective of creating a pool of committed and competent professionals equipped with appropriate technical skills to run it optimally. This course is first of its kind in India.

We are also providing MBA in Power Management which is also the first of its kind in India to cater the specific requirements of the power sector. All the students of above courses are getting 100 per cent campus placement in the leading companies of India.

How is NPTI faring with respect to offering consultancy services and expertise for setting up training institutes? Please discuss some such proposals.

NPTI has ventured into providing consultancy services in preparation of detailed project reports (DPR) under R-APDRP. NPTI is also REC Quality Monitor for Tier-II inspections of RGGVY works for six states. NPTI has also been awarded the third-party inspecting agency works by few distribution companies under RGGVY. We are also planning to enter as a project management consultant for implementation of 'Part-B' works of R-APDRP.

NPTI is also providing consultancy services in the field of human

resources development including training need analysis, upgradation of training facilities, customized course designs, and evaluation of performance appraisal etc.

NPTI has been providing complete solutions to several power sector organizations for setting up of training institutes. Very shortly, we shall be managing Solapur Power Training Institute in Maharashtra and Mining Training Institute at Barkagaon in Hazaribagh (Jharkhand).

As said earlier, Bhutan government has also sought assistance of NPTI for upgrading the existing training institute and also for setting up new training institute in that country. We have recently completed a consultancy assignment for setting up of training institute in Kabul under the Ministry of Energy & Water, Afghanistan.

The philosophy of public private partnership (PPP) is beginning to work and show results in the Indian power sector. Does NPTI intend to embrace the PPP culture to further its nationwide growth?

Yes, NPTI is already using PPP model to increase its spread and growth and to meet out the requirements in new technologies like GIS, renewables, power exchanges, etc. NPTI is executing number of consultancy assignments in association with private organizations in the areas of R-APDRP, RGGVY, capacity building, etc. We are already running GIS Excellence Centre at corporate centre under the PPP model.

Over the past 40 years, NPTI has given 1.4 lakh trained personnel to India's power sector. Given the growth plan that NPTI has chalked out, how soon do you think will the next 1.5 lakh be churned out?

Our activities have increased manifold! NPTI growth rate is touching new heights every year in terms of number of trainees and revenue earning. With this background, we should be able to achieve the next 1.5 lakh training personnel target in the coming 5-7 years.