



## Face2Face

In this interview with IEEMA, Mr R K Verma, Chairman & Managing Director, M P Power Transmission Co Ltd talks about potential of renewable energy sources in the state, capacity addition targets, reforms in state power sector, new techniques adopted by MP TRANSCO, etc.

**Q** Hydro-electric power is one of the cleanest and most viable renewable sources of energy. Madhya Pradesh Government has been constantly promoting non-conventional power plants, including hydro, through various policies, incentives and agencies specially created for this purpose. The policies formulated so far by the State Government had been applicable to all kinds of non conventional power producing sources. What is current scenario of renewable energy in the State as Madhya Pradesh is the State of rivers?

**A** In MP State, the installed wind power capacity is 159 MW and bio mass capacity is 9.58 MW. Besides this, a number of Mini and Micro Hydrel Projects are also in operation in the State and due emphasis is being given to develop small hydro Projects.

In Hydro Sector, the installed capacity in the State sector is 917 MW while the State's share from installed capacity of Indira Sagar, Omkareshwar, Maheshwar and Sardar Sarovar Hydro Electric Projects in the State is 1000 MW, 520 MW, 400 MW and 826 MW respectively. Thus total hydrel power capacity available in the State is 3,663 MW.

**Q** Estimated potential for generation from Small Hydro-power Projects (SHPs) is 15,000 MW in India, out of which MP's estimated potential is 410 MW. Despite various promotional schemes and measures, MP could set up only 41 MW of SHPs, which is only 2.42% of National installed capacity of 1693 MW. Govt aims to provide 10% of gross power generation in the country through non conventional energy sources by the year 2012. How the state government is promoting Small Hydro Projects?

**A** A number of mini and micro hydro projects are already in operation in the State and all facilities are being provided for developing additional small hydro projects. As far as output from such plants is concerned, it needs to be appreciated that the same depends upon the rain potential and sometimes on the available head, to run such plants economically. In any case small hydro plants are getting required support in the state of MP.

**Q** MP is facing acute shortage of power and also slowdown in capacity addition, which affects the industrial growth. What are the plans to achieve 11th Plan targets? Which are the upcoming projects in MP?

**A** To mitigate the shortage, the State of MP is making all out efforts for capacity addition. During the current plan, we have already commissioned a 500 MW thermal unit at Birsinghpur and 210 MW thermal unit at Amarkantak. Also, addition of two units of 250 MW capacity at Satpura and two units of 600 MW capacity are planned at a new power station coming up at Malwa. Out of these units, one unit each will be commissioned during financial year 2012 and thus thermal capacity addition by Generating Company of MP State during 11th plan would be 1,560 MW. The balance units will be commissioned in 2013.

In addition, a 400 MW capacity hydrel plant at Maheshwar will be commissioned in 2010-11. Apart from this, State of MP has a share of 483 MW in various projects being developed by NTPC such as - Sipat, Kehalgaon, Barh, Modra, Nagpur.

There are a number of other private projects coming up such as - Torrent, DVC, Chandrapur and Durgapur, Sasan UMPP, Pragati Power, Bina Power

etc. Our total share from these projects would be around 2,380 MW. Thus to summarize, the target for capacity addition in the State of MP by June 2013, is around 4,980 MW, which is considered to be quite adequate and will make the State power surplus. It may be mentioned that the works in the newly constructed 1200 MW power station at Malwa and extension work of 500 MW at Satpura have already commenced and we do not anticipate any delay in implementation of these schemes.

**Q** The MP Power Transmission Company Limited announced huge investments for reforms in the power sector. What is the present scenario of the same?

**A** Power Sector Reforms in MP State have been undertaken with the financial assistance of approximately Rs 2,000 Crores from ADB, PFC and other financial institutions. MP Transco has been able to successfully meet all targets under the reforms, 12 to 18 months ahead of schedule. The Company has also improved upon its different operational parameters in the course of past seven years since implementation of the reforms. During this period, the transmission capacity of the State has been enhanced from 3,890 MW to 8,100 MW, while the availability of transmission system has been increased from 95% to 99%. The transmission losses in the State have been brought down to 4.09% from 7.93%. The power reforms in transmission sector of the State have thus been able to meet all expectations.

**Q** MP at present mainly depends on Coal based power stations at Satpur (Sarni) 1,143 MW, Sanjay Gandhi TPS ( Bhirsinghpur) 840 MW and Amarkantak (Chachai) 290 MW. What are the future plans to promote Thermal Power Generation in the State? How many IPP are coming up in the State? What are the plans of tie-ups with private players?

**A** New power stations under construction by Generating Company of MP are 2x250 MW extension at Satpura and a new power station of 1200 MW capacity at Malwa (Singaji). Apart from this, for second stage expansion of Malwa project, MP Genco has signed an agreement with BHEL for installation of thermal power station of 2x800 MW capacity. This work is planned for completion in 38 months. MP Genco has also processed project reports for approval from concerned authorities for setting up of 1,600 MW capacity thermal plant at Bansagar, 500 MW extension of thermal power plant at Birsinghpur and addition of one more 250 MW unit at Amarkantak thermal

power station. Survey and other initial activities have commenced for setting up of a 1,600 MW capacity thermal plant at Chandia near Katni district.

As far as tie-ups with private players is concerned, the State Government has signed MoUs with 42 private players, who intend to install thermal plants to the extent of 55,545 MW capacity. As per these MoUs, the State of MP will be entitled for 5 to 7% share of installed capacity on variable charge basis and will have the first right for procurement of 30% generated capacity from these plants. Share of the State from Ultra Mega Power Plant stands at 3,010 MW. The Power Trading Company in the State of MP is looking after the trading business on behalf of Distribution Companies. Power Trading Company has submitted expression of interest in different Companies to the extent of 6,463 MW and has signed Power Purchase Agreements with various Companies to the extent of 4,166 MW.

From the above, it would kindly be observed that the State of MP is briskly marching ahead to meet capacity addition targets set in 11th and 12th Plans.

As far as availability of coal is concerned, there is sufficient coal available in the State itself. However sometimes it is difficult to procure good quality coal. MP State, therefore, is also taking action for import of around 5% of its coal requirement to meet emergency requirements, in case of delay in availability of coal from indigenous sources.

**Q** What are the different stages of implementation of power projects in the state? How MP is implementing R- APDRP?

**A** Power Plants presently under construction in the State of MP are 2x250 MW extension at Satpura and a new power plant of 2x600 MW capacity at Malwa (Singaji). Both these plants are thermal plants. In the private sector, the hydel power station under construction is of 400 MW capacity at Maheshwar.

As regards R-APDRP, State of MP was one of the first States to obtain loan sanction from PFC to the extent of Rs 228 Crores for implementation of Part-A of the scheme. Under Part-A of the scheme, installation of IT based system is to be done for correct assessment of losses. For this purpose, the Distribution Companies of MP have already appointed the consultant as well as implementing agency

for procurement and commissioning of IT based monitoring system and various activities have been planned to complete the work under Part-A within targeted schedule. As far as Part-B of the scheme is concerned, detailed project reports for obtaining loan assistance of Rs 1,950 Crores are already in the finalization stage and MP would be one of the first States to submit their DPR to PFC for obtaining loan assistance for implementation of Part-B of R-APDRP scheme.

As regards implementation of programme, the consultant, implementing agency and all other infrastructure has already been developed by the Distribution Companies to ensure that the Restructured-APDRP scheme is positively implemented within specified time, so that the advantage of 50% grant by Government of India for Part-A as well as Part-B of the scheme could be availed. At State Government level, strict monitoring of progress of all activities is being done.

**Q** The MP Transmission Company strived hard to provide the required focus on use of new and emerging technologies and innovative techniques for an enhanced performance. What are the new techniques adopted by MP TRANSCO?

**A** MP Transco has adopted the following techniques/emerging technologies for improving its performance in different spheres:

- Use of Numerical Relays in place of old sluggish relays
- Portable Digital three phase off line Overhead Transmission Line Fault Analyser System
- Punctured Insulator Detectors
- Thermo Vision Scanning
- Leakage Current Monitors for Metal Oxide Surge Arrestors
- Precision Transmission Winding Resistance Measuring Kit
- Tan Delta and Capacitance Measurement Kit
- Three phase Relay Testing Kit with Current Generator
- Hot line Maintenance Tools
- Insulated Scaffolding System for working in live condition in EHV sub-stations upto 800 KV
- Electronic Total Station for Survey, Profiling etc. of EHV lines
- Portable Dissolved Gas Analysis Kit
- GPS Based Time Synchronization Equipment

**Q** What are the transmission losses in the State? What are the measures taken to reduce the losses? What new developments are taking place to upgrade and modernize transmission & distribution system?

**A** The transmission losses in the State during the year 2007-08 and 2008-09 have been 4.09%. With the strengthening of EHV transmission system in the State, the Company has been able to bring down the transmission losses from a level of 7.93% in the year 2002-03 to the level of 4.09%. This loss reduction has been possible in spite of around 28% hike in the energy handled by the system. The Company plans to bring down its losses further in the coming years.

**Q** After formation of MP Transco Company in July 2002, the Company took up the challenge of expansion of transmission system and ensured commissioning of substantial EHV substations and transmission lines within five years period. What efforts are taken by the state to meet these challenges?

**A** At the time of its formation in July 2002 the Company faced severe challenges on account of an overloaded system, poor voltage profile, weak power delivery system, technological obsolescence and numerous handicaps in preventive maintenance.

In order to overcome the above challenges, the Company had drawn a blue print for swift expansion and strengthening of its transmission system with the loan assistance from ADB, NABARD, PFC etc. With meticulous planning and effective project management, the Company has been able to complete all activities covered in this massive plan involving an outlay of around 2000 Crores, 12 to 18 months before schedule. Also, with due emphasis on maintenance management, the Company has been able to enhance the availability of its transmission system from the earlier level of 95% to around 99% now.

**Q** What are the proposed targets in the 11th plan for the growth of transmission lines and associated substations? What is the current status of the plan?

**A** The 11th Five Year Plan for MP Transco envisages a total expenditure of Rs 3,948 Crores, involving commissioning of 11,000 Ckt. km EHV lines and 11,482 MVA transformation capacity addition. We are confident of achieving this target.

**Q** What is your opinion on OPEN ACCESS REGULATIONS by CERC? How it will be beneficial to MP ?

**A** Open Access Regulations by CERC are well designed and provide ample opportunities to all class of consumers and industries to avail power as per their requirement and also from the sources as per their choice. The Open Access has already been implemented in MP and it is very much beneficial to the State because not only Transmission and Distribution Companies are able to earn revenue but also in the present era of deficiency in availability of power, the Open Access Regulation is providing reasonable support to the State.

**Q** Is there sufficient manpower and infrastructure available to implement RGGVY scheme?

**A** The available man power and infrastructure to implement RGGVY scheme is insufficient. In MP State, we are trying to overcome the problem of man power shortage by way of deploying retired personnel to monitor the project. There remains a shortage of contractors for undertaking RGGVY projects. The efforts are being made in this direction to overcome this shortage.

**Q** Now that US nuclear deal is finalized, is there any opportunity for the State to go for nuclear power generation plant?

**A** Recently the Nuclear Power Corporation has decided to set up a Nuclear Power plant at Chutka. As of now, the State has no plan of its own to go for nuclear power generation.

**Q** Do you think that there is a shortage of trained, skilled labour in the power sector?

**A** Yes, there is considerable shortage of trained and skilled labour for the power sector. In MP we are trying to overcome this shortage by various measures, which include recruitment of fresh Technical Assistants and their extensive training in leading institutions like NPTI, CPRI etc.

**Q** Do you feel that MP will be power sufficient State in the next five years?

**A** Yes, in the next five years, MP State will be able to overcome its power shortage and will become a power surplus state.

**Q** Do you think that Indian Electrical and Power equipment manufacturers are capable to supply equipments for growing power sector? What is your opinion on imported equipments?

**A** In my view, Indian Electrical and Power Equipment Manufacturers are capable to cater to the requirement of present power sector as well as growing power sector, except that for 765kV class and above, proper infrastructure is yet to be developed.

As far as imported equipments are concerned, generally quality has been found to be satisfactory; but there is acute problem of availability of spares and services for commissioning and repairs.

Other problem is that mostly construction activities are outsourced to some agencies. Such agencies do not have proper infrastructure and they mostly intend to complete the work utilizing local manpower, because of which most of the projects get delayed. If proper analysis of progress of various RGGVY, APDRP and Power Project Installation works is done, it would be revealed that acute delay involved in implementation of projects is because of improper planning, outsourcing of activities and carelessness in regard to quality of various bought out items, which are utilized for turnkey works.

**Q** What are your expectation from IEEMA and its Members? What is your opinion about ELECRAMA organized by IEEMA?

I expect that IEEMA members will always emphasize the quality control measures in manufacturing processes.

As far as ELECRAMA is concerned, no words would be enough to express my appreciation to IEEMA for organizing such a grand event. ELECRAMA provides opportunity to all power utilities to witness demonstration of a large number of maintenance, testing and operational equipments. Apart from this, a number of innovations and new technologies were demonstrated in ELECRAMA-2010, by various manufacturers, which were found to be very useful. I am sure, a number of organizations will take advantage of such new emerging technologies. IEEMA must have put in lot of efforts to organize this wonderful event on such a grand scale and therefore, I would like to compliment IEEMA for their efforts.

*Interview by Rajeev N Ketkar,  
IEEMA, Mumbai.*