ENERGY

'Electricals will prosper if power grows in a healthy manner'

Transformers and Electricals Kerala Ltd was incorporated in 1963 for designing and manufacturing extra high voltage electrical equipment and later ventured into developing high-capacity transformers in India. **Arun K. Gupta,** in an email interaction with **Sandeep Menezes,** discusses prospects for the electrical equipment sector in the 12th Plan.

— **Arun K. Gupta,** Managing Director, Transformers and Electricals Kerala Ltd

Q What is the current market scenario with regard to extra high voltage electrical equipment in India? How much growth do you foresee in next five years?

The envisaged power capacity addition during the 12th Plan is anywhere between 76,000 to 1,00,000 MW. Taking a realistic view of the current economic growth in India, which is now expected to be less than 7 per cent and the not so good performance during the 11th Plan, we may end up around 75,000 MW. This can get translated into a projected demand of transformation capacity of about 4.5 lakh MVA which is far less than the available domestic capacity in next five years.

Adding to the woes is the price war going on amongst the domestic transformer manufacturers and the invasion by Chinese and Koreans players. Financial year 2011-12 saw an average industry capacity utilisation of about 70 per cent which is not very healthy. Lot will depend on the proactive decision making by the government which is currently facing accusations due to its inability to set the power sector on the right path of growth.

The recent budget announced has not addressed the issues being faced by the domestic electrical equipment industry, particularly in the areas of customs duty waiver for import CRGO laminations and a level playing field for domestic manufacturers against the Chinese and Koreans.

If the power sector grows in a healthy manner, the electrical industry will also prosper in the same proportion

Q India earlier relied on imported equipment to meet its power transmission requirements. How have domestic manufacturers evolved technologically in recent years?

So far the Indian manufacturers are still sourcing all the four key raw materials i.e. CRGO lamination, copper conductor, solid insulating material and transformer oil from overseas. The base mineral oil for transformer oil is also imported. So this is a challenge for the steel and copper industry, to bring in requisite technology so that we can also have domestic manufacturing capacity for these items. Government may have to play an important role in encouraging various players to diversify into manufacturing of these high-technology raw materials.

Q What are the challenges in designing and manufacturing extra high voltage electrical equipment?

The only challenge lies in using standardised specifications and technical GTP for a particular application by all the transmission utilities. Today, each utility has its own design which makes it very difficult for a transformer designer to design and tailor make the transformer.

This also adds to the overall manufacturing cycle because the entire designing process up to issuance of detailed drawings may take two to three months for a large size transformer. This standardisation would result in Common Specification having Uniformity in Rating, Voltage ratio, Tapping Range, Percentage Impedance, Vector group, Losses, Temperature Rise, Noise Level and Basic Insulation Level of Winding.

The requirement of fittings like bushings, cable box, tap changer, rollers etc. are to be considered rating wise. This would also fix up location of radiators, bushings, cable box, conservators, and correspondingly, the foundations.

Q What is TELK's long-term strategy now that NTPC has acquired a stake?

TELK is poised to enter the 765kV voltage space in the near future. A technology tie-up is under finalisation with a foreign collaborator and as soon as the same is finalised, capital investments from NTPC and Government of Kerala will be infused for creating the new manufacturing facility.

After NTPC acquired a stake in TELK, the company has fully turned around and declared its third consecutive year dividend for 2011-12. Today, TELK is a zero debt company with a consistent profit track record for last four years and a positive net worth of over ₹116 crore.

Q Your company has set a manufacturing target of 6,400 MVA for 2012-13 against the installed capacity of 4,500 MVA. How do you plan to achieve it?

In the year ending March 2012 we already achieved a capacity utilisation of 130 per cent by manufacturing 5800 MVA. Simultaneously, we also took up an expansion programme in which we are going to add about 1000MVA capacity and this new capacity will be available by August 2012. With this augmentation and by further improving our productivity levels, we expect to achieve the target of 6400MVA.

Q We understand that TELK has built transformers for the 110kV hybrid substation at Cochin International Airport.

The CIAL substation is a hybrid substation which is a first among the airports in our country. The idea is to have a system that needs less space compared to a conventional one and is less expensive compared with a gas-insulated substation. In fact, hybrid is a combination of conventional plus GIS.

Q Does TELK intend to launch any new products?

TELK is exploring various new options like entering the EPC and GIS space. The company is also considering resuming in-house production of CTs and PTs in a commercial manner and also expanding the capacity of 220/400kV bushings so as to be able to market the same to other manufacturers on a commercial basis.