

**Development of Electrical Industry in India\***

**E**LECTRICITY, in recent years, has become the basis of national economy in industrial countries. A comparison between the indices of electricity production and earning capacity of the people indicate the great rôle that is played by power industry in the economic prosperity of a country.

Electrical supply industry in India has progressed slowly during the past. Recently, however, attempts are being made in many Provinces and States to rationalise the supply industry and centralise, as far as possible, power generation. There is no co-ordination established, so far, between various development authorities. The technical and commercial experience of other countries show that there is a vital need for such co-operation if the country is to exploit to the full, its natural advantages. Electrical manufacturing industry in this country is also of recent origin and is making slow progress. The only manufacturing activities worth mentioning are those of the Indian Cable Co., Jamshedpur; the lamp factories at Bombay, Calcutta, Agra and Bangalore; the transformer winding section of the Government of Mysore; the porcelain insulators (up to 11 K.V.) manufactured at Bangalore, Bengal, etc.; small workshops manufacturing A.C. or D.C. fans, heaters, torchlight casings, dry cells, accumulators, etc., radio repair shops which have recently sprung up in big cities like Calcutta and Bombay, and the Government telegraph workshop at Calcutta. The Indian Electrical Market is mostly in the hands of foreign manufacturers.

Technical research, on which electrical manufacturing industry has to depend for its economic existence in the international field, forms one of the main considerations of the industry to-day which is spending millions of pounds in research. This progress is so rapid that the rate of obsolescence to-day has surpassed depreciation of both the manufacturing equipment as well as manufactured goods, so that the industry is still in fluid condition and no manufacturer can hope to survive unless he has adequate means to keep himself in a line with this progress.

Based on these and other considerations the following tentative plan for the creation of a "Central Electricity Development Board", representing the Central and Provincial Governments and other electrical interests in the country, has been put forward.

The function of the Board should be firstly to co-ordinate, develop, guide and integrate, to the extent possible, the supply industry in the country; secondly to stimulate and guide the proper formation and co-ordinate the policy and

efforts of the manufacturing industries to be started. With these aims in view the Board should be empowered.

1. To organise at the centre (a) technical and research; (b) commercial and statistical, services under its control.
2. To devise legislation for the formation of Central Financial Trust to work in co-operation with the Board.
3. To develop suitable trade relations with foreign firms with a view to start manufacturing industry in India with their co-operation.
4. To organise Indian technical education and services in co-operation with Indian educational centres and manufacturing firms in this country and abroad.
5. To devise legislation, in proper course of time, relating to such matters as general supervision, protective tariffs, standard specifications, electricity rates, relations with consumers, electrical prices, etc., which are essential for the healthy development of the industry.

It may be suggested that in general the main monetary burden of a supply scheme should be shouldered, as it is done to-day, by the Government of the Province in which the scheme is located whereas the major portion of the capital required for financing a manufacturing concern should come from private sources. The Central Trust would thus be relieved of a major responsibility, and can depend upon the initiative of Provincial Governments and private industrialists to make a success of an undertaking. The sharing of capitalization by foreign firms whose aid is essential, at least in technical matters will have to be considered in this connection.

The provincial electrical engineering departments should maintain the necessary services to work in co-ordination with the Central Organization. Provincial surveys relating to power and other resources, potentialities of load development, connections with local industrialists, commercial propaganda, and such other matters, should be left to the Provincial Departments.

Potentialities of electricity in a country cannot be assessed merely from the immediate profit-earning capacity of the electrical industry. In a general programme of industrial regeneration of a nation the part played by power and implements of cheap production claim equal attention. Judged from this point there is a wide field for electricity to grow in this country. At this stage, therefore, what is necessary is a guiding hand that would rally the scattered resources of the country, guide them into proper channels and bring about a proper co-ordination between this basic industry on one hand and all the productive industries on the other, to the mutual benefit of both and to the general prosperity of the country.

\* Based on the report on the "Development of Electrical Industry in India" submitted recently to the National Planning Committee, from the Department of Electrical Technology, Indian Institute of Science, Bangalore.