

*** Post-war Electric Power Development**

A schedule of heavy power equipment required by India as soon as possible after the cessation of hostilities has been prepared and steps have been taken to reserve for India the necessary manufacturing capacity, said the Honourable Dr. B. R. Ambedkar, Labour Member, Government of India, in his address to the second meeting of the Policy Committee on "Public Works and Electric Power" held in New Delhi on February 2.

Here is the full text of Dr. Ambedkar's speech :

I should like to begin by extending to all the representatives, old and new, present at this meeting a most hearty welcome. I say old and new because we have on our Committee new members who were not on the Committee when we met last. They are the nominees of the Federation of Electrical Undertakings in India and of the Indian Trade Union Congress. Electrical undertakings and organised labour are both vitally concerned in the future of electrical development in India and whatever they may have to say about the subject must receive due consideration in any decision that may be arrived at. I am sorry that an omission to have them with us should have occurred last time. I apologise for it, for it was indeed a very serious omission. I am sure we are all very glad to have them with us today and will be looking forward to their contribution to the discussion of the subject we have before us.

Power Engineers' Conference

I believe it would be of some advantage if I were to begin the few observations I have to make as Chairman by referring to what has been

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done by the Government of India in furtherance of the post-war planning for electrical development since the Committee last met on October 25, 1943, as most of you may have no knowledge about it. Soon after the last meeting of this Policy Committee, Mr. Mathews, the Electrical Commissioner with the Government of India, with the approval of Government, called together a Conference of leading power engineers in the country, both official and non-official, to consider postwar electric power development. The first thing the Conference did was to prepare a schedule of the heavy power equipment required **by India for electric development immediately after the war. In addition to this the Conference passed certain resolutions all of which, to use the language of the report, “represented the unanimous conclusion of their studies, investigations and discussion.”** These resolutions fell under four heads :—

- (1) Under the first come recommendations which set out some general and specific suggestions to the Provinces and States to be observed by them in regard to electrical development within their jurisdiction.
- (2) Under the second were grouped those which concerned the appointment of the Technical Power Board.
- (3) Under third come those related to certain prospective power developments considered by the Conference to the *prima facie* worth investigation without delay.
- (4) Under the fourth head were placed those which relate to railway electrification, manufacture of synthetic fertilisers and rural electrification.

As the members of the Conference said in the letter accompanying their findings, “this is the first occasion on which the power development programme has been reviewed as a coordinated whole and that the presence of engineers whose experience covers in the aggregate the varied conditions of the whole of India, has introduced an extremely valuable element in co-ordinating regional needs.”

Heavy Power Equipment

I am sure you will agree that we owe the Conference a great debt for unfolding to us the prospective electric power development for the

whole of India in the period immediately succeeding the cessation of hostilities in such clear cut manner. The Conference asked the Government of India to take appropriate action on the several recommendation made by them. The two recommendations in regard to which action lay with the Government have been already put into effect. They relate to the securing of equipment and the establishment of the Technical Power Board.

A schedule of heavy power equipment required by India as soon as possible after the cessation of hostilities has been prepared and steps have been taken to reserve for India the necessary manufacturing capacity. The total capacity reserved come to over 850 megawatts, at an estimated cost of Rs. 50 crores approximately. The aggregate of new capacity represented by these schedules comes to nearly 65 per cent of India's existing installed capacity. A more detailed inquiry might show that our requirements for equipment are larger than what has been booked for. But as it was impossible to delay the matter without putting India's interest in grave jeopardy, we had to take action immediately on such data as could be collected within the limited time that was available to us.

Technical Power Board

As you must have noticed from the Press Note issued on November 8, 1944, the Government of India has constituted a Technical Power Board. Besides the Chairman, the Board will initially have two full-time members and three part-time members. The Government of India has appointed Mr. Mathews, Electrical Commissioner with the Government of India, as the Chairman and has obtained the services of Mr. W. L. Voorduin from the United States of America as another member of the Board. Before he came to India, Mr. Voorduin was employed as a Project Officer of the Tennessee Valley Authority. It is proposed to have a third member to be called the Utilisation Member. Effort is being made to recruit a suitable Engineer who is conversant with Utilisation. These appointments of high level experts will assure you how very anxious the Government of India is to make the Board a strong technical organisation designed to collect ideas, conduct surveys and prepare schemes for the electrical development in consultation with Provincial and State Governments. I have referred

to this because it is necessary you should know what has happened in the interval and also to show that the Government of India has been pursuing the matter in all earnestness and with all speed.

The Triple Programme

There is another important development in electrical policy to which I would like to draw the attention of all of you here. You will recall that at the last meeting of the Policy Committee, Mr. Collins, on behalf of the Bombay Government, made certain references to the contemplated introduction of the "Grid" system in the Bombay Presidency. During the last year, we in the Government of India have given a great deal of thought to the regional as distinguished from the local development of electricity in different parts of this country. We have felt more and more that if the services offered by electricity are to be brought to the door of producers as well as the consumers at the cheapest possible rates compatible with efficiency, we may have to follow albeit cautiously and gradually, the triple programme on which the Central Electricity Board in the U.K. have worked from the very beginning, viz. :—

- (a) The creation of large-scale power stations located in the main industrial areas under the control of public supply undertakings ;
- (b) the construction of main transmission system (with smaller secondary lines attached to it for tapping agricultural and other outlying areas) so that the entire region to be developed by the main system can be held in a power ring or a series of power rings radiating out from the large scale power stations ; and
- (c) standardisation of frequency as far as possible within the region to be developed by the power system.

This triple programme constitutes the foundation of the "Grid" system, as we know it, to be operating in the U. K. since 1926 and it is my hope that if such a scheme of regional development is adopted in this country, we may before long bring the great boon of cheap electricity service to the door of everyone, high or low.

You may be interested to know that when the "Grid" system on a large scale was first contemplated in the U. K. it was estimated that by 1940-41 the national production of electricity would reach the

colossal figure of 25,000 million units and the working cost of electricity would by that date fall from 9.4d, as recorded in 1925-26, to less than 4d. per unit, while the large industrial consumer would be able to obtain his power requirements at $\frac{1}{2}$ d.

Items On Agenda

I will now turn to the Agenda for our meeting to-day. As you will see, there are altogether four items on the Agenda. Item 4 places before you for your consideration two schemes, one for the Technical Power Board and the other for sending Indians to foreign countries for training in electricity. Neither is a controversial subject. I will not therefore take your time in dwelling upon them.

Item 2 on the Agenda is unfortunately not quite so uncontroversial as item 4. Item 2 relates to the question of applying to electrical undertakings certain accounting principles for ascertaining their income, expenditure and profits. This item is not as controversial as it appears. The issue raised by this item covers two questions and not one, and the controversy would be very much narrowed if they were considered separately.

The first question is whether the dividend of an electricity supply undertaking should or should not be related to the charges for consumption of electricity. The second question is how to determine reasonable dividend. On the first question, I venture to say, there can be very little dispute. Electricity is to be a prime necessity of the people both for production and consumption. The price of such a prime necessity cannot therefore be at the will of the supplier. The whole industrial future of India will be put in great jeopardy if India could not ensure cheap and abundant supply of electricity. The necessity of correlating dividends to charges is therefore paramount. If this is granted, the necessity of enforcing rules of accounting which will give the undertaking a reasonable return but no more and choke all holes for concealed profits cannot be disputed.

Principles Of Accountancy

The issue then becomes a secondary one. In pressing for enunciating principles of accountancy we are not introducing any revolutionary idea. We are following the lines laid down in British Legislation on

Electricity contained in the London Electricity Act of 1925 and the Electricity Supply Act of 1926. The Electrical Commissioner with the Government of India has drawn up a Memorandum in which he has proposed a set of such accountancy principles for being applied to electricity undertakings. His Memorandum was circulated to the Provincial Governments and to Electrical Undertakings for their opinions. There has been unfortunately some divergence of opinion. As a means of bridging the gulf, the Government of India proposes to appoint an Advisory Board to advise on principles which may be just and proper. I hope you will regard this solution as a satisfactory one.

There remain items 1 and 3 of the Agenda. They are indeed the most important items of our Agenda and you will bear with me if I take some of your time to deal with them.

With regard to item 1, it might be well to refresh your memory by telling you how the position stood at the last meeting of the Policy Committee. At the close of the discussion of the items on the Agenda the Policy Committee desired that the Labour Department should draft a Resolution embodying the measure of agreement reached and that it should be placed for discussion at a subsequent meeting of the Policy Committee. A draft Resolution was accordingly drawn up which is in the following terms :—

“That this meeting recommends that the further development of electricity supply in India be actively pursued as a State or quasi-State enterprise and that steps be taken to eradicate any factors that retard the healthy growth of electrical development in the Provincial, State or Local authority—owned undertaking as well as the commercially owned undertakings.”

It was felt that the draft Resolution was not very clear. The Resolution spoke of further development. It said nothing about the undertakings that have already come into existence. The Resolution spoke of the necessity of controlling factors likely to hamper or retard the healthy growth of electrical development but did not specify what the factors were. It was therefore felt desirable that the Resolution should be again carefully considered in the Policy Committee to clear up elements of doubts. This is how item 1 comes to be what it is.

State Control And Ownership

The discussion at the last Policy Committee meeting seemed to indicate clearly the intention that electrical supply enterprise in areas where there is none at present should be pursued as a State or a quasi-State enterprise ; but there remained an element of doubt as to the extent to which the State should come in those areas in which electrical undertakings were already functioning. For instance, is it advisable that the State or other authority should as a general rule exercise an option to take over an undertaking whenever under the terms of an individual licence such option arose ? And is it advisable that the State should exercise control over existing privately—owned undertakings for the purpose of securing bulk supply for regional development or control of generation ? There may be cases in which in order to secure suitable regional development bulk supply from some other undertaking should be given to some existing undertaking and that it may be that the manner in which an existing undertaking operates and expands may have to be brought into line with general schemes for regional development. We wish, therefore, in this discussion to get clarification not only as to the extent to which State ownership should come in but also as to the extent to which the State should control where State ownership cannot immediately become operative.

Jevon's Economic Criteria

The issue between State enterprise and private enterprise has ever been a matter of controversy. This controversy is now resounding in India in full blast since we have started the project of planned economy. Old Jevons in his tract on *State in relation to Industry*, attempted to formulate certain economic criteria by which the line between State enterprise and private enterprise can be drawn and which have been the gospel of the opponents of State enterprise. According to Jevons, there were four criteria which ear-marked an industry for State ownership. They were (1) small capital account: (2) routine operations : (3) the co-ordination of several services such as Posts, Telegraphs and Telephone and (4) the sufficiency of a single all-embracing plant as in the case of water and gas supply.

The followers of Jevons in this country propose to add some more criteria, the object of which is to restrict the field of State enterprise

except in one case, viz., they are prepared to enlarge the field by allowing the State free field in such cases which could not be profitable for private enterprise to undertake. The controversy may have had some solid basis when private enterprise was a fact. But to-day private enterprise is only a phase. There is nothing private in an economic order when industry is carried on by huge Public Joint Stock Companies. There is nothing of individual enterprise in an economic order where the slogan of a business firm is caution and not adventure and where the prime consideration is to stabilise profits by seeking to maintain in an orderly permanence existing economic conditions. It is unnecessary for me to enter into this controversy. For there are very few opponents of State ownership and State control who do not make an exception in the case of electricity.

Item 3 raises the question as to who should exercise the option when it falls due by reason of the termination of the licence issued to an electrical undertaking for the supply of electricity. The matter of purchasing an electrical undertaking. This question is now regulated by the provisions of Section 7 of the Indian Electricity Act. According to this section, the authority to exercise the option to purchase vests in the first place with a Local Authority and where the Local Authority does not elect to exercise the option it passes to the Provincial Government. The question raised by item 3 on the Agenda is whether it is not desirable that option should also be given to the Central Government and, if so, at what stage and under what conditions. It is proposed that the Central Government should also have an option to purchase. Having regard to the fact that electricity is a public utility, there ought to be no difficulty in vesting the Central Government with such an authority.

Provincial Or Central Control ?

Unfortunately, there seems to be some reluctance to accept this principle. Planning in India has been confronted with two issues, the issue of State versus Private enterprise and the issue of Provincial or Central control. With both issues we are all quite familiar and item 3 deals mainly with the second issue. To those who believe in State enterprise it should be a matter of small consideration whether the enterprise should be Provincial or Central and little or no objection

should be raised to Central control in cases where a Province does not desire to take on such control, or where in the interests of regional development extending beyond the boundaries of a Province, Central control may be considered necessary. In the case of electricity, as in the case of waterways, suitable schemes cannot be limited by provincial boundaries, and though there must clearly be the closest co-operation and co-ordination between the Centre and the Province, it does seem advisable that the Centre should be able to step in cases where State control is found necessary for regional development and where a Province does not itself wish to bring an undertaking under State control.

I don't think I can usefully add anything to what I have already said about questions arising out of the Agenda. However before I close, I would like to say how very necessary it is for you to bear in mind that whatever decision you take it must accord with the public opinion in the country regarding the future of Indian Economy. It would be a mistake to suppose that there is no Indian public opinion on the future of Indian Economy because one does that opinion is I do not wish to dogmatise although I am sure that it is far more Leftist than many are inclined to allow.

The point I am anxious to emphasise is that the need for an accord between the plan and public opinion can hardly be exaggerated in a country like India which has as its ideal a Parliamentary system of Government. People talk about the success of planning in Russia. But they forget that the success is due largely to the fact that Russia has no Parliamentary Government. Planning in a Parliamentary Government where those who plan live under the constant threat of no confidence motions and cannot be sure whether they can remain long enough to put their plans through is a very doubtful proposition. Whether planned Economy is inconsistent with Parliamentary democracy and, if it is so, how the two can be reconciled is a very large theme and this is not the place to deal with it. All, therefore, I wish to do is to caution you that if our plans are not to be scrapped by our successors, we must take care that they are in accord with what the large majority of people believe to be for the greatest good of the greatest number.

Committee's Recommendations

The Policy Committee on "Public Works and Electric Power," recommended that the development of electricity supply for areas outside existing licenced areas should be actively pursued, as far as possible, as a state or quasi-State enterprise. If for any reasons the State was not prepared to undertake such development in any area within a reasonable time, private enterprise should not be excluded. They further recommended that, provided efficient and economic operation could be assured to the public, options existing under any licence to acquire an undertaking should, as a general rule, be exercised when they arose. Steps should be taken to eradicate any factors that retarded the healthy and economical growth of electrical development on regional lines whether in Provincial, State or local authority—owned or in commercially—owned electrical undertakings.

In another recommendation the Committee accepted the necessity of laying down financial principles for the control of electric public utilities both in the interests of public utilities as well as of the general public. An Advisory Board should be set up under Section 35 of the Electricity Act to advise Government on the nature, extent and method of application of such principles. On this Advisory Board there should be two representatives of the Central Government, two representatives appointed by agreement with the Provinces, and one representative of the Federation of Electricity Undertakings. The Board may appoint such assessors as may be necessary.

The discussion on the proposal to amend Section 7 of the Indian Electricity Act of 1910, with a view to evolve a systematic and coherent policy for planning electrical development, raised a number of points for examination by the Central Government. The Committee agreed that the Act should be so amended as to give the Provincial Government the first option to take over an undertaking. The question of amending the Act so as to give power to the Centre to take over electric undertakings, if Central control was considered necessary for inter-Provincial development, was discussed. There was difference of opinion on some aspects of the question, and it was decided that the matter should be further examined in consultation with the Provinces.

Government's Training Schemes

The Policy Committee welcomed the appointment of the Central Technical Power Board, and the Central Government's scheme for sending ten Indian Engineers to receive training abroad on the commercial and administrative side of electricity supply industry. Four of these officers will receive training in the U.K., four in the U.S.A. with the Tennessey Valley Authority, and two in Canada. Two officers belong to the Central Government, four to Provincial Governments, two to State Governments and two to Public Electricity Supply Undertakings. The Government of India will bear the entire cost of the training of the two Central Government Officers. It was stated that while under this scheme Indian Engineers would be trained in the commercial and administrative aspects of electrical industry, Government intended to send two more batches for training in the technical aspects.

The meeting which was presided over by the Hon'ble Dr. B. R. Ambedkar was attended by the Hon'ble Sir Ardeshir Dalal, Planning and Development Member, Government of India, the Hon'ble Mr. K. Shahbuddin, Minister of Commerce, Labour and Industries Department (Bengal), the Hon'ble Rai Bahadur Gokuldas, Minister for P.W.D. (Sind), Sir Mirza Ismail and Raja Dharam Karam Bahadur. Official representatives of the Central and Provincial Governments and non-officials representing the All-India Trade Union Congress, Federation of Electrical Undertakings and Indian Engineering Association also participated in the discussions.

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