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Symposium on Coordination of Power and Telephone Plant*

Introductory Remarks

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I UNDERSTAND I am expected to outline shortly what has led to the splendid cooperation between the Associated Companies of the American Bell Telephone System and the Power Companies of the United States in the matter of coordinating their facilities to avoid interference with the service of either.

Previous to 1921 disputes of a very serious nature were constantly occurring between the Bell Telephone Companies and the Power Companies, the former claiming that the rapid construction of transmission lines by the latter was seriously interfering with telephone service. The Power Companies felt that they also had a duty to serve the public and resented the attempts of the Bell Companies to interfere with the Power Companies' growth and progress. These disputes were so acrimonious and the parties to them so bitterly disposed towards each other that the courts and public service commissions in the various states were more and more frequently called upon to adjudicate the differences.

In the latter part of 1920 it was evident that the situation was becoming a serious menace to both great interests and suggestions were forthcoming from certain individuals representing both interests that attempts should be made to find a solution. Unfortunately, the names of those responsible for this constructive thought are not known and they cannot, therefore, personally be given their due meed of praise, nor assigned their proper places in history. However, as a result, early in 1921 a group of power men met with a group of Bell Telephone men, under the neutral chairmanship of Mr. Owen D. Young and there was then formed a permanent committee which has since been known as the Joint General Committee of the National Electric Light Association and the Bell Telephone System.

* Joint work of the National Electric Light Association and Bell Telephone System. Presented at the Winter Convention of the A. I. E. E., New York, N. Y., January 26-30, 1931.

This General Committee asked Mr. Bancroft Gherardi, Vice President of the American Telephone and Telegraph Company, and myself to select a Subcommittee of Engineers representing both interests, whose duty it should be to classify the types of physical situations in which engineering or technical conflicts were arising between the two interests and to indicate how on the basis of the existing state of the art the electric light and power engineers considered such situations should be met from a physical standpoint and how the telephone engineers considered such situations should be met without regard to the question of division of costs.

We requested this Subcommittee of Engineers to approach the various problems outlined in the broadest possible spirit of cooperation bearing in mind that the object to be attained was the removal of friction and the early development of mutually satisfactory standards.

Nearly a year later, in March 1922, Mr. Gherardi and I made our first report to the Joint General Committee based on the conclusions of the Subcommittee of Engineers.

Certain general statements were agreed to as for instance that the National Electrical Safety Code provided an acceptable guide to practise and that there were substantial advantages to both utilities in the employment of jointly occupied poles where conditions and character of the circuits permitted. It was also recognized that the public's interest was paramount and that both the power and communication utilities must be able to render their respective services to the public in an economical and efficient manner. A few general principles for the solution of inductive interference situations were suggested such as cooperative planning of all new construction and the further recommendation that standards of construction and operation in accord with the general principles outlined should be prepared and agreed to by further cooperative work of the Subcommittee of Engineers, and finally that a cooperative study of the art should be made in order to determine what practicable measures, if any, might be developed and adopted to lessen the contributing characteristics of both systems in this matter of inductive interference.

Mr. Gherardi and I in reporting to the Joint General Committee stated we believed great progress had been made and we urged that the General Committee advise the power companies and the associated companies of the Bell System to use every effort to arrive at a settlement of their differences through negotiations rather than resort to court or commission proceedings. It will be noted here that after one year we had made apparently but little progress in the actual solution of the problems involved. As a matter of fact, we know now that the

foundation stone had then been well and truly laid. It was not so much what had actually been accomplished that mattered but that the whole spirit of the relations between the telephone and power interests had been completely changed from one of friction, distrust, suspicion and even of enmity to one of confidence, good will and a desire on the part of both to cooperate.

From that time the work progressed much more rapidly and in December 1922 a reasonably complete set of principles and practises for the inductive coordination of power and telephone systems had been agreed to and sent to the member companies of the N. E. L. A. and the associated companies of the Bell System over the signature of the Joint General Committee of which, as I have stated, Mr. Owen D. Young is Chairman. Since that time further reports containing principles and practises for the joint use of wood poles and the allocation of costs of coordinative measures have been agreed to and promulgated by the Joint General Committee.

Today inductive coordination as between the Bell Telephone System and the power companies is no longer a problem but only a routine day to day job of cooperatively continuing research work and developing the art of both systems to eliminate as far as possible causes for inductive interference.

I remember Mr. Gherardi once made the statement that the term "problem" is generally applied to a thing where you do not know the answer—"job" where you do know the answer to it and it is just a question of working on it—and it is exactly at that point we have arrived today. I do not mean to say we can remain quiescent as to this work because it is still a big job and will require the attention of the executives of the companies concerned and the constant and concentrated effort of the engineers of both interests who are engaged in research and other necessary work connected with inductive coordination.

To have had some part in bringing about these results has been one of the most satisfactory things I have done in my entire life and I believe Mr. Gherardi will fully coincide with this viewpoint as far as he is concerned. From the time I first met him, we have never departed from our belief that the problem could be solved on the basis of entire confidence, good faith and complete cooperation.

In the first instance we had many disappointments and some difficult situations to combat but I can truly say that we never had a serious disagreement and always were confident that the goal we desired would eventually be reached. I remember making a statement in those early days that I did not believe that each utility had obtained every-

thing that each utility wanted but that I was confident that both utilities had got what both utilities wanted, and that a problem of this kind could not be settled by one party to a dispute getting all its own way because then nothing was settled. The trouble would simply be aggravated, making it more possible for controversies to arise again and again. I added that at no time had there been any question of compromising on principles, nor bargaining across a table,—we have had always before us a clear recognition of the problem of the other side and a mutual admission of the fact that the other system must live and that the primary interest is the public's and that the public must efficiently and economically be served by both utilities.

It may be of interest to you to know that the power companies with the same personnel on a General Committee, also headed by Mr. Owen D. Young, are now carrying on similar cooperative work with the Western Union Telegraph Company and with the Railroads with respect to their signal systems. The result of our cooperative work with the Western Union Telegraph Company will, of course, favorably affect our relations with the other telegraph companies of the country, as our work with the Bell System has affected in a highly satisfactory way our relations with the independent telephone companies of the country.

May I in conclusion thank you for the privilege of making this statement. It has been a particular pleasure to me because I am more and more convinced that this is the sound way to settle such problems and controversies arising between great interests in this country. Courts and regulating authorities approve this method because it promotes harmony and permits them to devote their time and talents to other useful purposes and because it saves the taxpayers the material expense of costly technical hearings in which the interests of the public are in no way jeopardized.