PUBLIC POWER -- ITS FINANCING AND ITS ADVANTAGES

by

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In presenting to you the subject of public power, or in fact any subject relating to power, it is natural to suppose that you will be interested in it from the standpoint of financing as well as from the standpoint of your interest as a citizen. In the field of finance you are interested in the stability of public power bonds and the security that is back of them, but besides this there is an opportunity in the field of finance that is far-reaching. Wherever there is expansion of the use of electricity, that expansion will bring to you a vastly greater opportunity for financing. If you will make that business mutual between yourselves and your customers you will give the best interest rate that you can and that very act will make still greater expansion of the use of electricity possible.

On account of these facts the rates charged for light and power throughout the nation become of tremendous interest to you because the lower the rates, the greater will be the use, and this will result in a tremendous extension of financing for the generation, transmission and distribution. But the need for financing does not end here.

Every additional kilowatt-hour put into industry means a greater volume of industry requiring further financing. Every additional kilowatt-hour put into the home requires further manufacturing of lamps, ranges, refrigerators and all the appliances that go to make the home more comfortable. This manufacturing requires further financing, and so, the cheaper manufacturing and lower rates go for a still greater volume of electricity. The question then becomes: "What is the best way to lower the price of electricity in the homes and factories and business houses of the United States?" not to mention better lighted streets and electrified railways. On this question you will hear from both public power and private power.

Your convention has assigned to me the task of discussing Public Power upon which subject my views are well-known because of my over thirty years experience in connection with public power projects. I wish to make it clear that in speaking upon this subject that I am reflecting my own views and not necessarily those of the Securities and Exchange Commission, which body you well know has no function that is in any way related to the administration of public power projects that have been or are being developed by the Federal Government. As you know, the functions of the Securities and Exchange Commission are confined primarily to the protection of the investor so as to assure the safety of every dollar that he invests in securities. As a member of the Securities and Exchange Commission it is my wish to aid my associates in the impartial administration of those Acts of the Congress over which we have been given jurisdiction and thereby render a service of value to the people of our country.

Public power advocates believe that the yardstick, the public plant, is the only method by which rates can be reduced to the point where they should be.

State regulation has brought to its banner throughout the country a number of very excellent, honest men. Sometimes they have fought the battle hard and made good, only to be held up for years in the courts. The regulatory bodies have thus done a tremendous amount of good in some states, especially in the control of issuing of bonds and stocks, but all in all, state regulation has not been a complete success.

Public power has a tremendous influence in the reduction of rates of private power. Let me call to your attention the great and fundamental difference between private power company financing under our existing methods of regulation and public power methods of accounting as used by municipal plants and the plants of the Federal Government.

Under state regulation a power company is not usually required to amortize its bonds, and so goes along through the years refunding its bonds as they come due from new bond issues.

The company is allowed often up to 3 percent depreciation. The theory of an annual depreciation allowance is that it will go into a fund that at the end of the useful life of the plant will build a new one, or under a better system the company may be allowed to put it into new construction. The history of regulation, however, has shown us that these depreciation allowances have been largely used for purposes other than replacement of property.

On the other hand, a municipal plant or a federal plant has a financial structure based on the idea of paying off and thus cancelling its indebtedness as its bonds come due. It usually charges off on its books depreciation from about 1-1/2 percent in federal plants to about 3 percent in municipal plants, but actually uses an amount about equal to this depreciation for the amortizing of its bonds, an amount that a private company does not use for the purpose of reducing its debt.

Thus, the capital cost of a public power system keeps slipping away year by year. If the system is growing rapidly, its bonds outstanding may be greater in total amount year by year, but the capital cost back of every kilowatt-hour output is getting less and less. Since the ideal of the public plant is for service instead of profit, the declining capital cost per kilowatt of output is soon reflected in lowering of rates.

One fact here that is interesting to financiers and to the manufacturer is that as these rates are reduced a greater amount of electricity is required and this in turn requires greater manufacturing and greater financing for both power plant and system and for the manufacturer, as well as for every business that the greater use of electricity promotes.

Those in public power believe that the handling of this great utility is a public function, being in a class with streets, sewers, roads and water systems, necessities that are the life-blood of the nation, natural monopolies totally distinct from our great competitive system of ordinary business.

Electrical power has become a necessity. The rivalry of cities in the inducing of industry to come within their limits has become of greater importance to those cities than the competition between private and public power. The hand that controls the electric switch today dominates civilization. We have passed from the iron age and the machine age into the electrical age and our industries and manufactured products depend on electricity.

May I tell you some facts from my own work in the Seattle Municipal Plant, which it has been my privilege to direct and with which I have been connected for over 30 years. The gross revenues of that plant are around 5 million dollars per year. It serves close to 100,000 customers in all classes of light and power. Every year about 1-1/2 million dollars of bonds are paid off; that is about 30 per cent of the gross revenues. Contrast this with a private power system which does not amortize any bonds. Suppose that a power company used this 30 per cent of its gross revenue for dividends; 1-1/2 million dollars would pay 5 per cent on 30 million dollars of stock. In the Seattle plant, in addition to amortizing this 1-1/2 million dollars a year, the interest on outstanding bonds, amounting to about another one and one-third million, is also paid and in addition, the system pays about $500,000, in state and city taxes and donations to the general tax fund of the city.

Surely, since a private power system does not redeem its bonds, it should not object to the competition from a public plant that is not only self-supporting but pays a fair tax. One thing that this convention as bankers should appreciate is the fact that by paying off its bonds regularly a public plant keeps its value greater than its indebtedness and this keeps a conservative sound value back of its bonds. Contrast this with the pyramiding of stock of the last decade that has brought so much disaster.

Compared with some of the cities and rural districts of our Canadian friends across the line and with some of our own public plants, the United States is overcharged millions of dollars every year.

But there is another question far more reaching that concerns us now. It is the fact that the use of electricity is only a small fraction of what it can easily be. The whole industrial structure of our nation is cramped from the lack of power. The work in the home is vastly greater than it should be. There are 6 million farm houses in the nation that are without the advantage of electricity. The average number of kilowatt-hours used in the home per annum is only 673, yet the use in some public systems rises from 1000 kilowatts up above 4000 per annum, or over six times the national average. By the time the national average rises six times, those plants will probably be still just as far ahead. The market is about what we make it. Next year will show a tremendous increase.

The simplest plan of the sale and distribution of public power is naturally the most economical and, therefore, the one safest for the financier. The building of a power system may be divided physically into three parts: the generating plants, transmission lines, and the distribution system. When a city or district undertakes the building of a public power system for its own use, the simplest method is for it to handle the whole system itself.

In the case of the federal generating plants, the simplest system and the one preeminently better than all others is for the Federal Government to have complete ownership and operation of each plant and to build the main transmission lines. The government would sell wholesale to the cities, districts or companies to be served, delivering the current at their gates or at such points as the corporation or company can conveniently reach with its own lines. The system is then simplified to two parties, the government and the wholesale customer. This system of distribution is by far the most successful because no one can handle such a service as well as the one that pays for it.

The local handling of distribution allows for the satisfactory adjustment of complaints. It molds the handling of the electricity supply to the local needs of the community. It allows the work to be done by local people, and it allows the profits to remain at home.

Another important fact is that each city and district can pay taxes to itself, whereas taxes cannot be derived from a state or national distribution even if the Government wished to distribute direct.

On the Canadian side the Provincial Government distributes direct to rural homes in many cases, but in this country this work is being handled by the Rural Electrification Administration through cooperatives, a system which gives governmental help in the promotion of rural electrification but still leaves the distribution in the hands of the local people interested.

Power should be sold as far as possible wholesale to districts and companies at a uniform rate throughout the district served. Both public and private distribution systems should be given the same rate. Wherever a public power system sells current, though the wholesale rate charged is the same, preference should be given in priority of contracts to the public systems, but the companies should be allowed to contract for power, with the government holding the right to cancel the contract in favor of a public, city or district system, giving the company a reasonable time to get another source of supply, say two or three years.

Whenever a private power company sells wholesale to public and private concerns they too should be willing to give the same wholesale rate.

Any attempt at a partnership, it is safe to say, has never been a success, and never can be a success. You cannot make a partnership between a concern that carries its indebtedness forever when its structures have rotted into the earth, and whose ideal is to make dividends on that perpetual capital cost, and a concern that rapidly pays out its debt and whose ideals are for service instead of profit. Any compromise of a rate between these two would be injurious to the public when their proper right is a lower rate.

Cities and districts are best inter-tied to federal plants where there are economic benefits on one or both sides, because their ideals and their system of operation are the same.

Both municipal and federal systems may be inter-tied with private power concerns, but only for the interchange or sale of power and not in any way with a partnership of management. On this account, and for other reasons, it is very doubtful if it is strictly fair to compel a company to give a certain retail rate prescribed by a federal or a city plant from which a company must of necessity buy. In fact, it is doubtful if cities or districts to which power is sold should be compelled to give a certain retail rate.

A uniform residence retail rate might have considerable justification, but the needs of each district are subject to considerable variance. One may wish to promote irrigation and another close by to promote manufacturing. However, the question of uniform retail rates is only a matter of secondary importance.

In the case of private power companies it is assumed that the large government plants, especially where there are few public district or city systems, would wish such a company to buy current from it on a fair basis. The price would be several mills; say 3-1/2 mills at the power house. Perhaps the company could make the current for 1/2 mill or a mill more. It is the wish of the government that the advantages of public power be passed on to the customer. In the home the customer pays several cents per kilowatt-hour, probably eight or ten times the cost at the power plant, yet there is only one mill differential to pass on to the reduction of bills in the home.

This very fact shows that the other seven-eighths of the cost to reach the home consumer is not in the power plant at all, but in the lines and distribution system. This proves in turn that the power plant is about one-eighth of the yardstick and the other seven-eighths must now be added by some system which will make a reduction in the cost of distribution from the power plant to the customer.

How is this to be done? Evidently not by demanding a reduction of several cents in the consumer's bill for the advantage of a mill at the generating plant. This is the real question now between public and private power systems. There is only one answer to the question. It must be done by the people themselves locally through public power plants or through their insistence that the private companies get the spirit of modern times and make the proper reductions.

The people of America are not asking that their bills for light and power be reduced. They are really asking that they get more current for the same money. This points to the production of greater quantities of energy—two, three, or four or five times as much as today. It can be given to the people at the lowest of rates and yet with still greater profit to the power concern whether it be public or private.

It is a remarkable fact that wherever there is a municipal plant with low rates you can travel radially away from it and find the rates of private companies equally low when you start and rising at more distant points, and yet, the concerns with the low rates are doing better than those further distant.

The great Federal Power Plants at Boulder, Coulee, and Bonneville, and in Tennessee are rapidly proving themselves to be one of the greatest moves ever made in America. It is regretable beyond words that the St. Lawrence at Messina is not now being constructed. It takes time to build these plants and the demand is rising at a tremendous rate, doubling about every 7-1/2 years throughout the country and doubling regularly at Seattle and a number of other municipal plants every 5-1/2 years, up to the time of the depression.

The doubling of all power facilities in this short time is almost beyond the imagination. It means in the case of the doubling of 5-1/2 years that in that time all facilities must be doubled and must be increased four times in eleven years, eight times in 16-1/2 years and must be sixteen times as great 22 years from now. With the reduction of light and power rates throughout the country development would be at least as rapid as in these low rate plants.

With the great federal plants goes the tremendous improvement in irrigation, navigation and flood control--permanent additions to the wealth of the country.

It must be remembered that the great objectives reached by the building of these plants is the prevention of the cornering of electricity by a few individuals, the production of great quantities of electricity, and the building of these great natural resources by the government where no individual or group of individuals is strong enough financially, or perhaps we should say, has the vision and the faith to build them.

Let us hope that the government will also build the main transmission lines for the distribution of this power. The people must now realize that they must bring the current themselves from the present power lines or plants. Electricity will not come to them of itself, and it will not come to them for nothing, and it cannot be operated for nothing.

About seven-eighths of their cost in many places is yet spent in taking the current from the plant to the home and the retailing of it from house to house. Instead of waiting for the government to do anything in this work the people should themselves take hold and form their power districts where the power company is unwilling to serve them at a proper rate.

In forming such a district or in instituting a public plant in a city, I am firmly convinced that every effort should be exhausted first to buy out the power company property.

I have been through a competitive battle at Seattle for over 30 years. About three-fourths of the people will patronize any public plant. I have been misquoted in some of my statements concerning competition so wish to state here that in Seattle we brought down the rate from 20¢ per kilowatt-hour to a maximum 5¢ rate and an average rate of about 2-3/4¢ in the home, with very low industrial rates down as low as 3.4 mills in steel furnaces. This is what public power can do. It has been necessary for the self-protection of the city. The very life-blood of a city is its industries and its homes.

But I also believe that every effort should be exhausted in buying the private company at a fair price. Nothing for over-capitalization, but a fair price that will compensate the bondholders and the stockholders who have made an investment in good faith, and something to the company for quitting the job. My reason for this plan is that I made a careful survey in Seattle and found that for every $3 taken in by the private power concern and ourselves in the public plant $1 was lost to us in duplication and competition and this dollar loss alone would be quite sufficient to retire the bonds issued for the purpose of buying property of the private concern and pay off those bonds as they became due. Serial utility bonds are all that is necessary for such a purchase. The taxpayer would then not have to pay a cent, but gets the property presented to him for nothing. He pays for the property anyway over and over again every 20 years and has purchased it in the past about twice. He might as well own it.

Where those public agencies will buy out the competitor they can again cut their rates in two, for two power systems, on account of duplication and competition, cost the customer twice as much as one, or more than twice as much. This fact is self-evident.

Much has been said about the grid system of inter-tying all lines of all concerns as carried out in England. It must be remembered that England is only about the size of one of our states and that it is very thickly populated. The grid system in England was probably a good move, but in America to carry the idea out completely would be an enormous waste of money. There is one place where private power and public power agree, namely, whatever is best economically for either concern they will naturally carry out. In other words, where an inter-tie is best between public plants or private plants, the necessity and the economy become evident and the work is done. If either the private plant or the public plant wishes to buy from the other, it can easily connect by mutual agreement for either sale or exchange of power and this is done.

In other words, each particular case of interconnection should go on its own merits.

There is also considerable talk in the hope of a new method of direct current transmission. For short distances there is perhaps not much advantage in large transmission lines on account of cost and upkeep of additional appliances, but there is a field in very long distance transmission and with some development by the manufacturer it is now possible to transmit 500 or 600 miles or perhaps 1000 miles over a single cable with a ground return and very high voltage somewhere from 300,000 to 500,000 volts. The question that always confronts long distance transmission is not one of science and engineering, but one of economy. That is, the limit to which we can transmit current is an economical one. We can transmit it almost any distance so far as science goes, but as far as finances go we can only transmit it to a point where it can be bought more cheaply than from some other source. Transmission over one cable in large quantities would materially lower the cost. A 1000-mile radius of distribution is rather startling to say the least. Either the St. Lawrence or Muscle Shoals could furnish Chicago and on beyond in Wisconsin. Every part of the United States would be within transmission distance of one of the new large plants and the St. Lawrence plant when built.

Our trouble is that we think in too narrow a groove. We think of today instead of tomorrow. There have been many criticisms against the new government plants, but the fact is that this generation will see them as small indeed later on. There will be no need of thousand-mile transmission lines from these plants. It will not be more than ten years before the nation will be crying for more of these plants. The Columbia River has considerable more capacity, but unfortunately it is more than 1000 miles from the densely populated regions of America. As there becomes greater and greater difficulty in supplying the nation with power attention can be turned to the great lignite veins that underlie Dakota and across eastern Texas, Louisiana, Mississippi and Arkansas. With a thousand miles transmission the Dakota lignite beds could furnish Chicago, and the Arkansas beds could furnish the districts as far as New York. The better coals could be kept for industrial and domestic use.

It must be remembered that if we consider the short space of 20 or 30 years as the life of bonds issued to build power systems, a city or other public plant can transmit twice as far economically as a private company can and for that matter can pay twice as much per horsepower for the construction of a plant. This is a point that seems to have gone unnoticed. Since the public plant pays off its bonds, say in 30 years, the average life of those bonds would be only 15 years. The total interest would only be one-half as much and at the end of the 30 years there will be no bonds at all. So, after 30 years it does not matter what the cost of the structure was because it is then all paid off. This is the great advantage that hydro power has over steam power. When a city builds a plant it might get current at as low a cost as it could from hydro, but as it retires its bonds its hydro becomes debt free while the steam plant is still paying for fuel and its operation. The government generally makes a financial set-up for 50 years in which the average life of the bonds will then be about 25 years and the average interest will be only half of the initial interest rate.

To those who believe that the handling of light and power is logically a function of private power concerns let me say that the tremendous demand for power that we have seen just before the depression and that we are now to see, will bring a condition of affairs that becomes evident on a little thought, namely, that there will be an increased use for all the facilities of the nation in both public and private power. And there is no private power investment destroyed by the public plants. The yardstick, —a public plant here and there throughout the country owned by the government or city with transmission lines under the same ownership and an area in which distribution is done by the public themselves without restraint, will set the pace for rates in the nation.

The cry against the great public plants has been the fear of the yardstick and not really the fear of any damage to private property, for in only a few years everybody in power must double every facility.

It would be better for both private power and public power if the yardstick were more accurately defined and its length fixed. To do this each of the great federal plants should be given a financial set-up definitely allocating the investment for power purposes.

As to rates in the home, the home owner unconsciously budgets his light bill and so as a general rule he does not wish his bill lessened, but wants his rate lessened so he can get more for his money.

The power concern is, therefore, guaranteed that in three or four months at the most the residence load will come back at least to normal after a cut in rates.

The investment banker can help the situation to a tremendous degree. Just as low rates in current bring greater volume of business and greater profit, so lower rates for money will call for greater volumes of money and greater total profits to the bankers, and build the physical needs of the nation.

You will find about the same cross-section of people in any group whether it be the private utilities or public utilities or any group of people. You will find the same cross-section in the investment bankers. It is in your hands to promote a tremendous business by looking carefully into the merits of every reasonable request that comes to you be it public or private, and try to bring the money to the needs of the people rather than having the needs of the people crying to you for money.

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