

HOW LONG IS THE YARDSTICK?

A paper delivered at the Washington Convention of the Public Ownership League of America, February 25, 1935.

By

SUMMARY

The President's great program of building huge power plants, together with the years of labor of municipal plants, has made a very great reduction in rates all over America.

yardstick represented by these generating plants is only four or five inches long, the other thirty one or thirty two inches being the price that the customer must pay to have the current transmitted from the generating plant and distributed to his home. This fact is not generally realized, and comes as a shock to the uninformed.

The public are largely asleep to
the great work which they can do in improving
the field of distribution. They do not yet
realize the great expansion which has occurred
in the use of electricity and the low rates
that may be easily attained under public operation.

The day has come when the people should do their part; should buy their distributing systems, and by efficient supervision cut the remaining thirty two inches of the yardstick to ten or twelve inches. The proper development and distribution of electric power never was, and never can be, a private function, any more than the building and management of our roads, streets, sewers or parks can be a private function.

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The handwriting on the wall tells us that public power is coming fast -- coming into its own.

Every forward-looking private power company should now be willing to sell to the public for a fair price.

The private power company now owns only the right to stay on the job and manage the property. The bond holders and stock holders are the real owners of the property.

The quarrels we have had with power companies, because of the crashes of over-capitalized concerns, do not extend to the investors, the bond holders and stock holders who own the securities.

The business can well afford to pay these investors a fair depreciated value for their investment.

In the hands of the public there cannot be a repetition of disasters like the Insull
crash. If the industry is left to private
hands, history will only repeat itself in
future crashes.

The plan that seems fair, workable and practical is for a strong financial house or syndicate to go direct to the bond holders and stock holders, and to offer each of these so much on the dollar, and to offer the management a fair amount to deliver the company with all its rights and franchises.

Payment would be made by the exchange of revenue bonds, municipal or district, for the existing bonds and stock of the company.

It would not cost the taxpayer a single cent but, on the other hand, would pay taxes to him.

If the people wish to avail themmelves of the power to be generated from the
great plants now being built under the President's
power program, their best interests will be
served by doing their part of the job -- the
taking over of the distribution systems.

The total cost of these systems is vast; and we should not expect the Federal Government to loan the money except where it may be advisable, in the vicinity of the great Federal plants, in order to assure the financial success of these plants.

This is a job for the people; to make the yardstick thirty six inches long, as Seattle, Tacoma, Los Angeles and many other cities and districts are doing.

Perhaps one of the government commissions, the Federal Power Commission or the Federal Trade Commission, would be willing to approve and assist the City or district to set the fair depreciated value of the property to be taken over.

With all factions united, we can go forward to a tremondous expansion of the use of electricity.

America uses an average of about 500 to 600 kilowatt hours per year in the home; but

some cities, with municipal power, use seven times this amount. Let us expect an expansion, under public ownership, to at least seven or eight fold in the not distant future.

Municipal competition has brought rates down an enormous extent, and really works wonders; but a municipal power monopoly puts even these results far, far in the shade.

The cost of competition, if saved by creating a monopoly, would alone retire the whole cost of the plant.

The municipal, city and district, plan is the only possible method of public power where a normal tax can be collected from the power sold. You cannot tax Uncle Sam or the

State, but you can tax yourself, and can be the tax receiver instead of the tax payer.

It is the only system whereby a community can put its own men to work, and can fire them if they are not right.

It is the only way that the community can control its rate schedules.

It is the plan by which the lowest rates can be got, for no one can handle your own business as cheaply as you can yourself.

It is the only plan that leaves all your profits and ownership with you.

You may not be financially able to build a generating plant, but you are quite able to distribute your power better than any

other agency can do it for you.

If you have a complaint to make on your power bill, stop to think whether you would sooner take it to your State or National Capitol rather than to your own community leaders.

State regulation of Light and Power has miserably failed. You cannot regulate by remote control.

Competition from public power has brought tremendous results to the people.

Municipal monopoly will be vastly more effective still; the one way to reach the lowest costs and the lowest rates.

Seattle's City Light has recently cut the onecent rate block of its residence schedule to threequarters of a cent. The next reduction will be to
cut the first, or five-and-one-half cent, block of
this schedule to five cents per kilowatt hour. This
will then be followed by successive half-cent cuts in
this first block, as soon as the load increases after
each cut to justify a further reduction without revenue
loss.

The State or Federal Governments cannot tax themselves or be taxed. 'On the other hand, municipalities can tax themselves.

If the Federal or State Government owned the electrical business in the State of Washington, \$2,900,000 a year in taxes would have had to be met from other sources in the year 1934.

Municipal ownership or Home Rule of power could have returned this amount of taxes by means of a 10% gross revenue tax in 1934, and will probably return \$4,500,000 in 1940 through the same method of taxation.

HOW LONG IS THE YARDSTICK?

How long is the electrical yardstick?

To be most effective, it should be thirty-six inches. We may divide the yardstick according to the cost of electricity; but, since the public pays the sales price, the preferable method will be to divide it according to that selling price. We may divide the yardstick into two important subdivisions: 1, the price at which power is sold at the generating plant; and, 2, the price that is required to distribute it from the plant to the customer. These two make up the real thirty-six inch

yardstick.

As an alternative, if selling prices cannot be had, we may divide cost prices into the cost of generation and the cost of distribution. When we do this, we show one of the fundamental facts of the electric power business, that all power men know, but the layman generally does not appear to realize, namely, that the generation of power on the yardstick is very small, a few inches only out of the total of thirty-six. The realization of this fact leads us to a second one, namely, that the yardstick can never be widely reliable and effective until we have justly handled the question of power distribution.

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The distribution of power is now being handled by private agencies and by public agencies. But the handwriting is plainly on the wall for public management; and, when the yardstick shows more reasonable measurement, and less excess profits and over-capitalization, the handwriting for public power will be all the more certain.

There are four ways in which current can be distributed: by a private company, by the Federal Government, by State Governments, and by districts handled by the people themselves. If the private power company passes, we must turn our attention to the other three. The Federal Government should not be expected to expend billions of dollars for distribution systems. The State also should not be expected to do this. Cities or districts cannot tax either the Nation or the State; and, if you expect taxes from public light and power, there is only one real way to get it, namely, by distributing it yourselves in your own district. And, this does not demand any particular system of generation or transmission.

Several great plants are being built by the Federal Government. A great many have been built by private companies and a great many by municipalities or districts. If the State goes into the power business, its work should end at the gates of the city or districts; that is, it should sell the power wholesale to these cities.

Where the municipal plant generates its own current, transmits it and distributes it, we then have the complete yardstick of thirty-six inches.

It is the purpose of this article to show that the distribution end of the work is by far the greater; and that, if we wish to assist the work of the President and the great Federal plants, we must ourselves complete the yardstick by municipal and district distribution.

In the case of a private power system, the yardstick must include the profit that the company exacts. It must also include the continuing interest on the total cost that State regulation does not require to be diminished by redemption of bonds.

TAXES

In the year 1934, all utilities, public and private, in the State of Washington, paid \$2,900,000 to the State, counties and cities in both property taxes and gross revenue taxes.

Should the State or Federal Government take over the electrical business in the State, these taxes, then lost, would have to be made up by increased taxation in some other form.

On the other hand, if municipal cities or districts owned their own electrical business, they could tax themselves as they might see fit. This right of municipalities has recently been upheld in the Supreme Court of the United States.

Assuming that a 10% gross revenue tax had been imposed since 1925 and continued on into the future, the taxes that would have been paid, as compared to those actually paid, are as follows:

Year	Gross Revenue	Taxes under a 10% Gross Revenue Tax	Taxes Actually Paid
1925	\$21,020,575.20	\$2,102,057.52	\$1,279,157.47
1929	31,833,164.74	3,183,316.47	1,639,129.20
1930	34,086,166.31	3,408,616.63	1,760,721.54
1931	32,528,914.16	3,252,891.41	1,921,739.12
1932	30,664,838.95	3,066,483.89	1,780,154.31
1933	28,423,848,51	2,842,384.85	2,595,034.09
1934-Est.	29,000,000.00	2,900,000.00	2,900,000.00
1935-Est.	30,000,000.00	3,000,000.00	
1940-Est.	45,000,000.00	4.500.000.00	

While it is difficult, and often unsafe, to forecast the future, it is safe in this case to assume that 1940
revenues must rise at least 50% above those in 1935, if the
fixed charges of the present great investments in the power
business in the State of Washington are to be met.

GRAPHIC ILLUSTRATIONS OF RELATIVE COSTS

The relation of the cost of generation of power to the cost of the rest of the service becomes strikingly apparent when shown graphically.

Chart A2 shows this relation in several large systems.

On the left side of the chart is shown the cost of generating power, in mills per kilowatt hour, in six well known public systems.

Seattle's Gorge Plant of 75,000 horsepower on the Skagit River is the first in a system that will total 1,250,000 horsepower. A second plant of 190,000 horsepower is now being completed at a cost of \$70.00 per kilowatt. The Gorge Plant operates at a load factor of about 40%, and delivers current to the high tension lines at 4.36 mills. Depreciation is taken at 3%.

Tacoma's plant, with its debt largely paid off, delivers current at the generating plant for 2.91 mills.

Pasadena generation costs 4.86 mills per Kw.Hr.

Los Angeles " 4.28 " " " "

The New York Power Authority estimates for St. Lawrence River power a cost of 3.91 mills. They place fixed charges at 11.5%, including a "fair return" of 6%, Depreciation 3%, Insurance and Taxes, 2.5%.

Winnipeg, Manitoba, generation costs 4.7 mills per kilowatt hour.

All this refers only to the cost of the generation of power at the generating plant. Here our troubles have only begun.

These plants are typical, but they vary widely in a number of ways. They range in cost from 4.86 mills to 2.91 mills per kilowatt hour, a difference of less than 2 mills.

Some large steam plants show quite as low a generating cost, going in one or two cases as low as 2 mills per kilowatt hour. The advisability of generating by water power instead of steam is not a question of initial cost of producing power, but is governed by the unanswerable fact that the cost of construction can be written off by bond redemption while the cost of fuel must continue year after year. The steam plant must eventually lose out in the race, as far as low-cost generation is concerned.

LESSENING GENERATING COSTS

As the fixed costà of a hydro plant are paid off, the cost of generation per kilowatt hour will be reduced, and, because these six plants are largely hydro, their cost of generation will continually drop.

For instance, in the Seattle system, the cost at the Gorge Plant will drop in the next ten years to 2.5 mills per kilowatt hour, and the debt still to be retired will have dropped from \$88.00 per kilowatt to \$29.33. In 16 years, the power will be produced for only .774 mills, or about three-quarters of one mill.

Retirement of bonded debt is the one sure and effective way to reduce generating costs, but there are other methods that will help.

The load factor may be increased. The generating plants may be built of durable materials, making depreciation very low. Large generators may be used. Four generators in a plant are enough if the head on the wheels is enough to permit units that large.

The initial cost depends largely on the conditions under which the plant must be built.

A plant built all in rock may be computed as having a 30-year life; the depreciation may be marked accordingly, and the plant indebtedness may be all paid off; but the plant itself may function as well or better then, than it did at the start.

On the other hand, a plant may be built all or

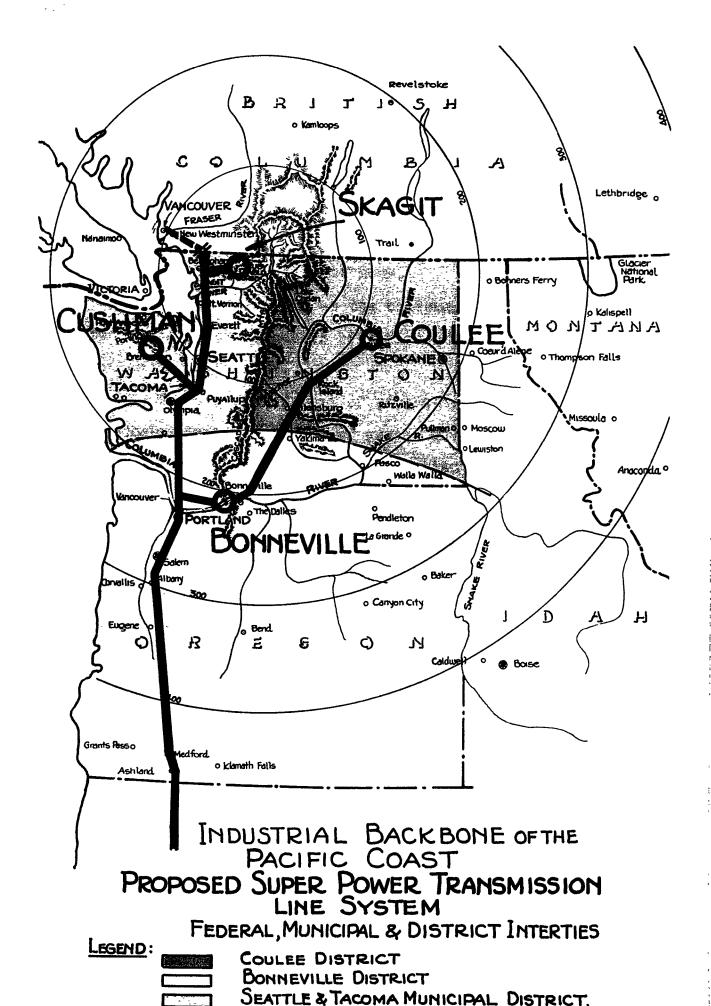
part under more adverse conditions, and so may require heavy maintenance and repair.

All of these conditions determine the cost per kilowatt hour at the plant from year to year. When the dept is paid off, the cost per kilowatt hour becomes practically constant. It has reached the ideal condition, being merely the cost of labor and maintenance.

Though it may mean a greater strain in the early years, it is apparent that short term bonds reduce the cost per kilowatt hour faster than long term bonds do. But the long term bonds are considered more fair, and they require the next generation to pay part of a permanent asset which they will benefit from. A municipal plant usually issues 20-year and 30-year bonds; a federal project, 50-year bonds.

It is impossible to include in this costcomparison some of our largest federal undertakings, because they either do produce or will produce, electric
power in conjunction with irrigation, or navigation, or
flood control; and, until the proper portion of the total
cost is allocated to each of these uses, there is no way
to arrive at a rational estimate for the cost per kilowatt
hour of power sold.

These federal undertakings include the Boulder Plant on the Colorado, the Bonneville and Coulce projects on the Columbia, and the Muscle Shoals Plant on the Tennessee.



The Coulee project has had years of study by the Federal Engineers, and the sale price at the plant at 50% load factor, and with the entire power from the ultimate dam sold or contracted, has been estimated by them at 2.25 mills per kilowatt hour.

The average rate at the customer's meter of the two large power companies of Eastern Washington around the Coulee is 15.4 mills.

The segregated cost of generation for the Ontario Hydro System would be of great value, but apparently is not given out or is not segregated from other costs.

The above figures for generation relate only to the generating station. If transmission distance is long or hazardous, and a steam standby is built, it is necessary to add the fixed costs, operation and maintenance, and fuel of a steam plant - costs of construction of such steam stand-by plants are about \$75.00 per kilowatt.

Interties with other plants may lessen or possibly obviate the necessity of steam power.

The size of the necessary steam auxiliaries can be lessened by intertying hydro plants.

For instance, the State of Washington will have four great hydro-generating plants, namely; Skagit, Cushman, Bonneville and Coulee. The first two are the municipal plants supplying the cities of Seattle and Tacoma;

the other two are the great federal plants now under construction.

Seattle and Tacoma are closer and more accessible to Bonneville and no doubt will intertie with this plant along level ground through populated territory.

Bonneville must drop 150,000 kilowatts because of backwater during periods of high water. Skagit, which is all storage, can supply to Bonneville this deficiency and have it returned to Seattle later. Coulee can tie to Bonneville over level ground east of the mountains. This intertie plan has been in effect for years between the systems of Seattle and Tacoma with splendid results.

All questions in dispute as to where current can come from most economically will then be automatically settled by such an intertied superpower system.

THE YARDSTICK:

The 36" yardstick may be divided into two parts: the cost of generation at the plant, and the cost from the generating plant to the customer's meter; the sum of these two being the total cost at the customer's meter. This is shown on Charts "A2" and "B2".

Since public plants operate for service and not for profit, the cost and selling price per kilowatt hour are nearly the same. For this reason, we may get fairly close results whether both parts of the yardstick represent cost, or both parts represent selling price.

The division of the 36" yardstick is given on the right side of Charts "A2" and "B2".

The remarkable fact evident at a glance is that generating cost is only about 8.8 inches out of the 36 inches, where the 36 inches represents the cost per kilowatt hour for the average of all classes of business, or 24%; while the generating cost on the 36" yardstick for residence service is only 4.5 or 5 inches, or only 12.5 to 14 per cent.

Thus, if Seattle generated its power on the Skagit for nothing, it would only reduce the cost in the home by about 12%.

Industry, for which the generating cost of the power is a large part of the yardstick, fills the dinner pail, and creates wealth. However, it is the cost of current in the home which directly affects most of our prople.

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RATIO OF GENERATING COST TO CHARGE AT CUSTOMERS METER RESIDENCE

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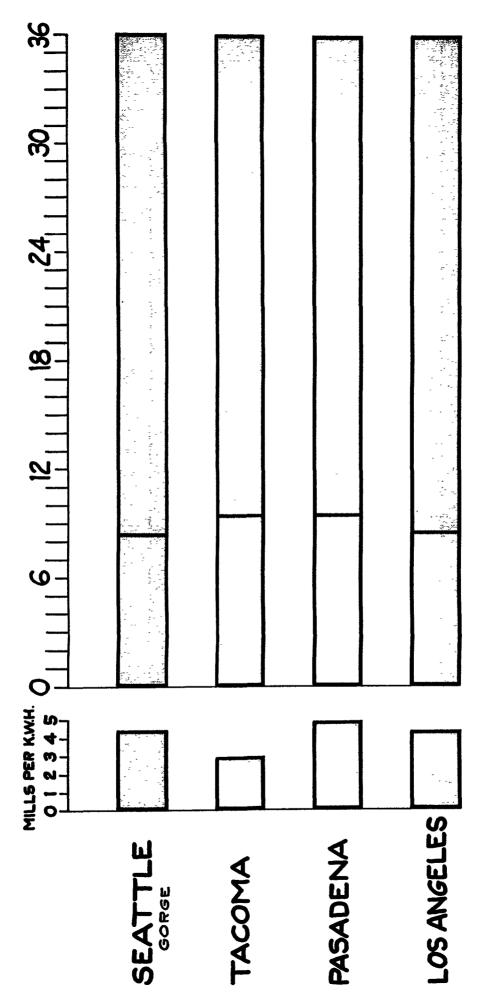
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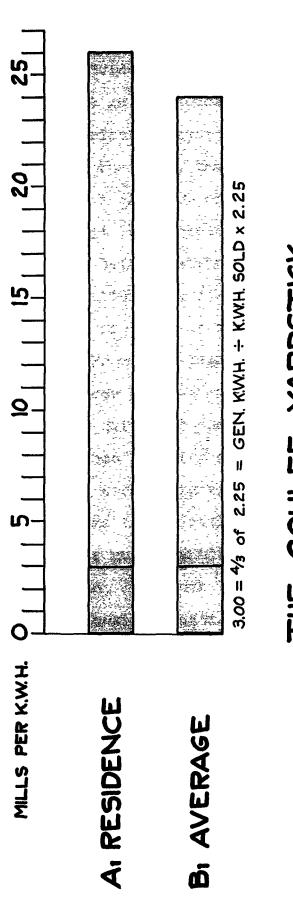
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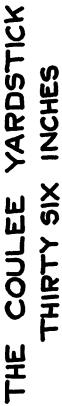
THE YARDSTICK

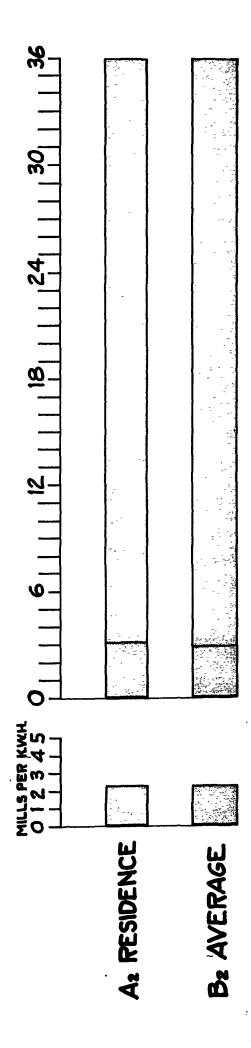


B-2 RATIO OF GENERATING COST TO CHARGE AT CUSTOMERS METER AVERAGE ALL CLASSES

COULEE POWER COSTS







Evidently, it is not to the generating plant that we must go to reduce cost in the home, but rather to the distribution system. The part of the yardstick for cost in the home, that represents generation cost, is only 4 or 5 inches out of 36.

It is customary to consider the entire load of a system as being distributed from the bus bars of a main hydro substation or a steam plant. Every kilowatt so distributed is taken as costing the same per year.

From the steam plant, or main receiving substation, power is sent out through various distributing systems for different uses such as manufacture, office lighting, home lighting and domestic appliances, streetrailway and street-lighting. The cost of these distributing systems is radically different in each case. facture uses huge quantities with but very little cost of distribution. The other extreme is the home with its lighting, cooking, heating and other appliance use. power is supplied at retail over a vast network and so the cost of distribution becomes almost the whole cost in many such cases. We talk of generation cost in mills per kilowatt hour, but we talk about current cost in the home in cents per kilowatt hour. To lessen the cost of generation by a mill or two makes little difference in a final cost of several cents per kilowatt hour. Our great opportunity lies in the lessening of the distribution cost per kilowatt hour, not by mills but by cents.

It would be wrong to lower the rate for one class of business by furnishing it below cost to that class at the expense of the others. Industry, to be encouraged, should have its rates near cost. Transportation should also have its rates near cost, as it affects all the people. Business lighting should also get its current near cost to encourage general business. All should start from the main distribution bus bars on the same basis, the same rate per kilowatt year. Each should pay its own cost without penalizing any of the others.

These facts do not minimize, in the least iota, the tremendous value of using the generating cost of the great plants as a yardstick. All these facts do is to emphasize the tremendous and vastly costlier structure which must be added to these great plants. Without the foundation generating plants, the distribution superstructure would be impossible. The granite foundation of a sky-scraper must be built first.

With the foundations built, we must then turn our attention to this very costly superstructure.

This article is a plea for the lowering of rates through the distribution end of the yardstick. As far as residence service is concerned, the foundation of the sky-scraper is only 4 or 5 inches high, and the superstructure is more than 30 inches.

For instance, you can get a whole bucketful of bananas in Cuba for a nickel, but when these are peddled from house to house in America, they cost two or three cents apiece. Everyone understands that, and the reasons why: transportation and retail distribution. Would it help us if Cuba grew twice as many bananas? How much would it help us if we got two bucketfuls there instead of one for a nickel?

How much will it help us if we get a reduction of a mill or two at the power plant to apply on a cost of several tents in the home?

On the other hand, where would we be if these great plants were not built to supply the home and industry? But the fact is that the cost of generated power has been brought down to a very low level, and an abundance has been and is now being produced just like an abundance of bananas in Cuba.

It is now up to the people of every district to cut the cost of transportation and distribution, if we wish to secure a very great reduction in rates for domestic power. The cost of generation in public plants will automatically reduce itself about 10% of the present total cost to the customer, when the bonds which built the plant are paid off. The generating cost cannot reduce further; we cannot do more at that end of the yardstick.

If some genius should come along now, and produce power at a large plant by "cracking the atom", or any other way, and use the new process in place of a great hydro plant; even if the generating cost thus became practically nothing, it would reduce rates in the home by only about 10%.

THE PEOPLE MUST OWN THE DISTRIBUTION SYSTEM:

All companies operate for profit. They fight the reduction of rates. They hide their costs to help in this fight against the lowering of rates, and they fight taxation.

The present theory and practice of State regulation does not require a Company to retire its bonds outstanding, or to place its depreciation allowances in a fund to replace its plant.

Thus, the whole system of a private power company continually carries its entire debt on a distribution system of wires and poles which have a higher depreciation than generating plants, and the bonds for which should be continually retired, but are not retired at all.

The answer is municipal and district ownership of the distribution systems.

Those cities and districts without generating plants can buy from the best source whether this be public or private.

This system of public distribution is the ideal way to make the yardstick 36" long. It would complete the measuring stick for electric rates in the Tennessee Valley, at Coulee and Bonneville, and in the proposed system to be fed by St. Lawrence power. Looking ahead to the coming of St. Lawrence power, the Legislature of the State of New York has passed the necessary municipal and district legislation

for public distribution and for this, thanks are due to the former and present governors of New York State.

The handwriting on the wall tells us that public power is coming. Public power is for service; private power is for profit. This being the case, every forward looking company that is offered a fair price for its property, should be willing to sell out and to invest its money in some other form of business.

Since a Company carries its debts continually, it follows that the management does not own the assets. The bondholder and stockholder are the real owners. The management does retain the right to hold the assets together, and to manage the property.

The bond holder and stockholder did not bring about the wrongs of over-capitalization, nor were they in sympathy with such wrongs.

Whatever quarrel we have with any power company, therefore, does not extend to the stockholder and bond-holder. They invested the money, and the business is able to pay them a fair price for their properties, if this fair price is based on its depreciated value.

The Insull disaster, with all its misery, is still fresh in our minds. Under private hands, such disasters can and will occur again. Under public operation, they can never happen again.

PUBLIC MONOPOLY VERSUS STATE REGULATION

A quarter century has proven that State regulation has failed to bring to the people the results that municipal plants have brought.

The Insull concerns were State regulated, and many thousands suffered.

Some of our best men are members of the State Regulatory Commissions, honestly but vainly struggling to get results.

They order rate reductions and the whole matter is thrown into the courts. Delay follows delay; every obstacle thrown in the way. Private power is very powerful. This generation and others will be long dead before State regulation will ever regulate.

The reason is that the whole theory of State regulation is thoroughly unbusinesslike and unworkable. No business can succeed that carries all its debt and never retires its capital cost while its property crumbles to rust and ruin.

Municipal power retires its bonds. All the Federal undertakings plan to pay off their debt.

So fixed charges of private power must pyramid, and do pyramid, while fixed charges of public power falls to nothing at the end of the life of the bonds.

It is inevitable then that as the years go by, private power rates must hold at a maximum, while public power rates must continually lower.

In competition there can be only one answer.

It is a mathematical certainty.

That is why municipal competition has given magnificent results to the people. A still greater step will result from municipal monopoly.

You cannot regulate an electric business by remote control. It never did work, and it never will. You must do the regulating yourself.

METHOD OF PURCHASE

Since the bondholder and stockholder are the owners, it appears that the fairest, most equitable and most workable method of purchase would be for a strong financial house or syndicate to go to the bondholders, and to the stockholders, and offer them so much on the dollar of so-called book-cost; and then go to the company and offer them a fair price to turn over all their rights and franchises.

No cash would be required, and there would be no property mortgage bonds whatever against the property of the City, or against the property purchased.

Municipal revenue bonds would be exchanged for company bonds and stock. In this way, no taxpayer, as such, would pay anything. The bond and stockholders would then look for their interest return only to the revenues earned by the plant, until the plant's bonds were retired from such earnings.

The President's plan of great generating plants is going forward. Generation is the corner stone of the electrical industry. But the people should not stand idly by and expect the Federal Government to do everything. The cost of the distribution systems is very great. The cities and districts should help with this part. In doing so, they will make the yardstick thirtysix inches long. Not until then will they know or realize what electricity should cost them.

Seattle and Los Angeles are taking steps to eliminate their competitor by purchase. They will then be thirty-six inch yardsticks. Tacoma now enjoys a public power monopoly, and is a complete yardstick. Its exceptionally low rates for light and power show the tremendous advantage of such a public power monopoly.

Seattle's power system has been in competition with a private power plant for thirty-two years. That competition extends to every home and every factory. It has brought Seattle's rates down to among the lowest in the nation, even though the municipal plant has had to share the load with its competitor, making distribution, which is the big end of its yardstick, twice as costly as it ought to be. City Light, as we call it, is a \$54,000,000 concern, with \$25,000,000 of that amount already paid off by bond redemption.

\$4,500,000 in the last three years of this depression, while many concerns in Seattle and elsewhere were going broke. And City Light is on a cash basis. We did not lay off any of our men. We cut their time, and kept them on our payroll. We got a \$5,000,000 bond issue on Wall Street a year ago when no one else, private or public, did so, and we are now building a new 190,000 horse-power hydro plant at the Skagit.

THE SEATTLE RATE SITUATION

In Seattle we have redently reduced the third block of our residence rate from one cent to 3/4 cent per kilowatt hour, in order to promote the use of water heaters.

We have also considered a cut of 1/2 cent per kilowatt hour in the first block of the residence rate, cutting this block from 5-1/2 cents to 5 cents.

than the generating cost per kilowatt hour at our Skagit plant as now operating. It is evident, then, that this cut will not be made on account of any change in generating cost, or in anticipation of cheaper power from our own plant or from a Federal plant. It will be put into effect on the assumption that it will be quickly made up by an increased use of current, without a great deal of additional cost of distribution.

It is expected that this reduction will be followed by successive half-cent cuts in this primary or first block rate, as long as increased use assures the maintaining of the same total annual revenue.

Every home budgets its power bill. If it were not so, the customer would not know when to kick that his bill was too high. He is really kicking because his budget allowance has been raised before he knew it.

His monthly light bill is the amount that he feels he can afford to pay. So, if his bill is reduced, he soon brings it up to the old level again by using more current.

He, and not the power concern, is the one that says what the amount of his monthly bill will be. Really, all the power concern is asked to do is to give him more current - not for less money - but for the same money, or a little more if he is pleased. He adds new appliances and uses more light.

With the coming of our new Diablo power plant of 190,000 horsepower, we can give more for the money.

It will be of the greatest interest to both public and private power, to watch the effect of these half-cent cuts being made progressively as the demand increases after each cut, to test the theory that the budget in the home, vague and unconscious though it may be, is nevertheless very real.

We are in competition with a private company which makes the cost of distribution double what it would be under a public monopoly. It is plain that when we succeed in buying out our competitor at a fair depreciated price as low as our own depreciated price, we can cut the cost of distribution in two, and do not forget that the distribution cost is the bulk of the cost that the home must pay.

about 80% of Seattle people and distributes 56% of Seattle's light and power; but if City Light could have enjoyed a public monopoly, it could have accomplished vastly more. Due to competition, a huge sum of about \$30,000,000 has been expended which neither company nor city has profited from, and which, under public monopoly, could have been saved to the City. Under public monopoly, Seattle's plant could now be free of debt, and its rates, low as they are, could have been cut to half of what they are today.

The loss to the City of Seattle due to duplication and competition, is now about \$2,500,000 a year.

Public competition does wonders, but public monopoly puts it in the shade.

The price paid for duplication and competition would retire the whole cost of any power plant and system in a very few years.

Bonds of a competitive public plant must carry a higher interest rate, by one or two per cent, than those of a public monopoly operating under the same general conditions.

The advantages of a city or district owning its own distribution are many and enormous. Some of the principal advantages are the following:

It is the only plan that can give a normal tax on power under public ownership. Cities and districts cannot tax Uncle Sam or the State, and should not expect

Uncle Sam or the State to undertake this detail.

Besides, if they did, you would lose Four Million

Dollars annually in tax revenues.

You can handle your own affairs more cheaply than can anyone from the outside in State or Federal agencies.

You can control your own rates,

You can put your own people to work and fire those that do not prove honest and fit.

Think it over. Can you accomplish these things in any other manner, or by any other agency than yourself?

RELATIONSHIP - FEDERAL, STATE, DISTRICT, CITY

The municipality is the foundation stone upon which the pillars of our nation rest. It is the closest approach to individual expression of the citizen that we know, and bears the same relationship to the Nation as the family does to society.

To the municipality must be preserved the right of self-determination, and any encroachment on that right is a blow at the very roots of our democracy.

The district is designed as a municipality to cover and serve the rural communities and small towns, and falls into the same category as the city.

The state serves in the capacity of co-relator and sponsor of the municipalities just as the national government serves the state. If the Federal government invades and encroaches upon the functions of the state, then state rights are violated; if the state attempts to take unto itself those functions inherent with the city or district, then the great principle of Home Rule is violated. In either case the ideals of American Democracy are scrapped, and one hundred and fifty years of work and sacrifice are in vain.

However, it may well be that some things are too large to be handled successfully by a city, in which case it is the duty of the state to assist; likewise, some things may be too large for the state, in which case the Federal government must assist.

This is the situation regarding the huge Federal Power Plants. If such projects are essential to the well-being of the people, and are too great for the individual city or district or state, it is then incumbent upon the Federal Government to go as far, but no farther, than is necessary to make available, to municipalities and districts, the fullest and greatest benefits to be derived.

For either the state or the national government to attempt to go further, to attempt to do that which the municipality can and should do, is to destroy the fundamentals of our national existence; it destroys self-determination and Home Rule.