

# MAINE STATE LEGISLATURE

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STATE OF MAINE  
LEGISLATIVE RESEARCH COMMITTEE

REPORT ON ELECTRIC POWER RATES  
to  
SECOND SPECIAL SESSION  
of the  
ONE HUNDRED AND THIRD LEGISLATURE

JANUARY, 1968

Legislative Research Committee  
Publication 103-16

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**LETTER OF TRANSMITTAL**

January, 1968

To the Members of the Second Special Session of the 103rd Legislature:

The Legislative Research Committee is pleased to submit a report of activities regarding Electric Power Rates as directed by order of the 103rd Legislature at its regular session.

This report, marked as Committee Publication 103-16, was contractually studied for the Public Utilities Commission, at the request of the Governor, and contains basic data and conclusions of the Commission as developed by the consultant firm Kosh - Glassman Associates, Inc., Public Utility Consultants of Washington, D. C.

The Committee sincerely hopes that the information herein contained will prove of benefit to the members of the Legislature and the people of the State of Maine.

Respectfully submitted,



HORACE A. HILDRETH, JR., Chairman  
Legislative Research Committee

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The Legislative Research Committee of the 103rd Legislature was directed to study electric rates in Maine pursuant to the following order:

ORDERED, the Senate concurring, that the Legislative Research Committee is directed to study, with the cooperation of the Public Utilities Commission, Maine's electric power rates; and be it further

ORDERED, that the Committee report its findings, together with any necessary recommendations or implementing legislation, at the next regular or special session of the Legislature.

Acting under this authority the Committee consulted with the Maine Public Utilities Commission with regard to the situation and learned that the commission had, in August, 1967, retained the services of Kosh-Glassman Associates of Washington, D. C., who are Public Utilities Consultants, to study the adequacy or inadequacy of the rate of return of the State's two largest electric utilities. The purpose of retaining these consultants was to supplement the Public Utilities Commission's continuing monthly and yearly review of the rates of returns or earnings of these two companies. This practice of monthly and year-end review is a standard practice or procedure of the commission and its staff with regard to all utilities under the jurisdiction of the commission.

The Kosh-Glassman reports have been filed (copies filed herewith) giving their expert opinion (which we point out is their personal expert opinion which has not been tested in any hearings) that a fair rate of return for Central Maine Power Company and Bangor Hydro-Electric Company would be 6.25% to 6.50%. Through negotiations with these companies, the commission has accomplished rate reductions that have brought the rate of return of Central Maine Power Company to 6.49% and Bangor Hydro-Electric Company to 6.38%, avoiding, at least at this time, protracted and expensive (both for the State and the rate payers) public hearings, which could have delayed the present reductions and the immediate benefits to the inhabitants and the business community of our State.

The rate making process to determine fair and equitable rates for the customers and the requisite rate of return for utilities is not an exact science. Many factors are considered, such as, the size of the company, its geographical location, the growth of the use of electric service in that area, the growth of population in the area, cost of fuel, taxes, (real, personal and income), and perhaps the most important of all, the cost of money, whether debt or equity.

Rate making is essentially a legislative function and the technicalities of rate making require a certain amount of expertise. The Legislature created in 1913 and still maintains, an expert body (the Maine Public Utilities Commission) to perform this function. Acting under legislative authority, properly delegated, this body has performed and in our opinion will continue to properly perform, its statutory duty. That a difference of opinion may arise as to whether the result of any particular decision of the commission is proper or not, is understandable when one considers the technicalities and factors involved.

At this time, we find and report as follows:

1. That the Public Utilities Commission of Maine has done and is continuing to carry out the duties assigned to it by the Legislature in a deliberate and proper manner commensurate with the public interest.
2. That electric power rates in this State are under constant, consistent and proper review by the Public Utilities Commission and its staff, assisted by outside experts where necessary.
3. That as of the date of this report, the rates of return of Central Maine Power Company and Bangor Hydro-Electric Company are within the appropriate range of an allowable rate of return, as expressed by Messrs. Kosh and Glassman.
4. That the Maine Public Utilities Commission's practice of negotiating rate reductions to bring the company's rates of return within proper limits is in the public interest, is consistent with their statutory duty and benefits the public by bringing the immediate benefits to the public without costly and protracted public hearings with the necessary costs of delays.
5. That to the extent that the Maine Public Utilities Commission cannot negotiate the filing of proper rates consistent with an adequate rate of return, we are satisfied that the commission is prepared to exercise its statutory powers and to set in motion the necessary machinery to require appropriate hearings and decisions as is required by law.
6. That since the question of the proper rate of return is important to a final determination of what just and equitable rates should be, we recommend that the 104th Legislature consider making more moneys available to the Maine Public Utilities Commission to continue to hire outside experts to assist them in these determinations or if the commission should deem it more appropriate, they should request additional appropriations to place a rate expert as a permanent professional member of the commission's staff, whose duty would

be to constantly review the rate structures and rate of return of all companies subject to the jurisdiction of the commission and make requisite recommendations to the commission with regard to same.

7. That this committee intends to continue to cooperate with the Maine Public Utilities Commission in accordance with the foregoing legislative order and may make such supplemental and further recommendations or findings in the future as conditions may warrant.

8. That the following events were reported to the committee in the sequence of their occurrence:

**April 18, 1967**

The Governor requested the Maine Public Utilities Commission to make a power rate reduction study.

**August 22, 1967**

The Public Utilities Commission acted upon the Governor's request and retained a consulting firm in Washington, D.C., namely Kosh-Glassman Associates, Inc., to do a rate return study of Central Maine Power Company and Bangor Hydro-Electric Company.

**September 1, 1967**

Both the Central Maine Power Company and the Bangor Hydro-Electric Company filed small rate reductions with the Public Utilities Commission to be applied as of September 1, 1967.

**September 20, 1967**

The consultant firm of Kosh-Glassman Associates, Inc., upon completion of its initial work, September 20, 1967, forwarded two individual reports dealing with the reasonableness of rates of Central Maine Power Company and Bangor Hydro-Electric Company to the Public Utilities Commission.

**November 1, 1967**

The Central Maine Power Company and the Bangor Hydro-Electric Company applied a substantial reduction indicating that such action had been deferred earlier principally because of the uncertainties over a proposed plan for a 10% federal tax increase.

**November 15, 1967**

The Public Utilities Commission delivered the Kosh-Glassman Reports and other supporting correspondence to the Governor.



KOSH-GLASSMAN ASSOCIATES, INC.  
Public Utility Consultants  
1145 Nineteenth Street, N.W.  
Washington, D. C. 20036

David A. Kosh  
Gerald J. Glassman  
Dennis R. Bolster

338-3444

September 20, 1967

MR. DAVID K. MARSHALL  
Chairman  
Public Utilities Commission  
State of Maine  
Augusta, Maine 04330

Re: Electric Rates

Dear Mr. Marshall:

Enclosed herewith are four [4] copies of each of two reports which you requested. One report deals with the propriety of the level of the rates of Central Maine Power Company and the other concerns itself with Bangor Hydro-Electric Company.

And while the reports are self-explanatory, it would not be amiss to make the following comments. We have not pin-pointed a specific number of dollars as THE required rate reduction. We have, in each case, shown several indicated rate reductions, based on different hypotheses. For example; there is a chance of an increase in Federal Income Taxes. However such an increase is not at all certain, and neither is its size or timing. We have therefore shown in the reports, the indicated rate reductions, with and without an adjustment for possible increases in such a tax. Another example; we have indicated a range of fair rate of return. In a contested, adversary rate proceeding we would support the lower of our two estimates of fair rate of return, because while it is lower, it still is a perfectly adequate rate of return.

However in negotiation one cannot reasonably expect to gain every contested point. It is in the very nature of a negotiation to accept a lesser rate adjustment in exchange for a quicker adjustment. A rate reduction now is worth more than a rate reduction possibly to be obtained after a full fledged hearing, and a potential court review, other things remaining the same.

It was our objective to present the Commission with various options, which the Commission can then use as a guide in its negotiations. In short our reports are technical and not tactical.

The reports are in summary form, and are supported by extensive work-sheets. These are of course available to the Commission at any time, upon request.

I cannot close this letter without expressing my appreciation for the help I received from both the Commissioners and the Staff in the discussions we had in Bangor last week.

If we can be of further assistance please feel free to call on us.

As usual, it was a pleasure to work with you, your fellow Commissioners, and your very capable staff. I look forward to future opportunities of being of service to you.

Cordially,

/s/ David A. Kosh

DAVID A. KOSH

DAK:rcs

Enclosures

THE REASONABLENESS OF THE RATES  
of  
CENTRAL MAINE POWER COMPANY

## THE REASONABLENESS OF THE RATES

of

### CENTRAL MAINE POWER COMPANY

#### I) INTRODUCTION

To reach a valid conclusion as to whether the rates of Central Maine Power Company are reasonable or not, and if the latter how much of an adjustment needs to be made, one must first determine, -

- 1) What are the present and prospective earnings of the company, and
- 2) What constitutes a reasonable level of earnings?

The first involves the selection of a recent, representative test period; one during which the revenues, expenses, and plant were in reasonable balance, - and then the determination of what earnings were realized during this period.

The second involves arriving at a reasonably accurate estimate of what constitutes a fair rate of return; this providing the measure of whether the company is earning too little, too much, or just the right amount.

#### II) PRESENT AND PROSPECTIVE EARNINGS

In principle we are concerned with rates for the future, and hence with the level of earnings that may reasonably be expected in the future. And while on occasion the level of future earnings has been determined by making estimates of revenues, expenses, and rate base, a far more desirable and objective basis is found in the use of the so-called "Test Year".

The test year is a recent period during which revenues, expenses, and investment are in reasonable balance. To the extent there are factors which tend to upset this balance, - factors such as unusual expenses, increases in costs that were in effect for only part of the period, exceptional plant investment, etc., etc., - adjustments are made. Thus actual results of the test year are modified for known changes; the result is a period during which

revenues, expenses and investment are in balance. Then, as revenues increase, expenses and investment keep pace, but the relationships of the adjusted test year continue. Consequently the test year results provide a good, unbiased, objective basis for determining the rate of return that may be expected to materialize in the future.

Carefully handled there is little question but that the use of a test year is superior to estimating future earnings levels. Therefore for purposes of estimating the level of earnings Central Maine Power Company is now realizing, and may be expected to realize in the future, at existing rates, the 12 month period ending July 31, 1967 was selected as a test year.

The next question that arises is whether the earnings of that period may be accepted, or whether certain adjustments need to be made.

There are adjustments for wages in effect part of the year, and increased local taxes, that should be made, and they are made in the computations included herewith.

A more troublesome adjustment is that for the proposed surcharge in Federal Income Taxes. Congress has before it a proposal that income taxes be increased by 10%, on a temporary basis. Considerable opposition to that proposal has arisen. It is doubtful whether the full 10% will be accepted, and if accepted when it will be effective. There is considerable discussion of a 6% surcharge as a more likely tax surcharge. The effective date, assuming an increase is adopted, is subject to all sorts of uncertainty.

One thing is evident; the tax surcharge hardly qualifies as a "known" change, clearly to be applied to the test year results.

In view of this uncertain situation two alternative approaches suggest themselves.

- 1) Assume a 6% tax surcharge as a likely compromise, and adjust the test year results accordingly, or
- 2) Make no adjustment to the test year results for the possible increase in Federal income taxes, but have it understood that should a tax surcharge be placed into effect, the Commission will be ready to re-view the situation at that time, and promptly make such rate adjustments as may be indicated by the new conditions.

The figures presented later will be based on each of these two alternatives; either of which may be considered as reasonable.

Before turning to the computation of the actual results, one more matter must be resolved. In order to test the reasonableness of the realized level of earnings, these earnings [the "RETURN"] must be related to a "RATE BASE"; the resulting quotient is the "REALIZED RATE OF RETURN", and is expressed as a percentage. If this REALIZED

rate of return exceeds the "FAIR RATE OF RETURN", then earnings, and rates are excessive, and should be reduced. It goes without saying that if the reverse is the case, i.e., the realized rate of return is below the fair rate of return, rates should be increased.

What is a fair rate of return will be developed in a subsequent section. The immediate problem is to develop a rate base. This is a straight-forward procedure. What is not so obvious is the timing; should we relate earnings of the test year to the rate base as of the end of the year, or to the average for the year?

The logic is all in favor of an average rate base, since this reflects the investment which gave rise to the year's earnings.

The use of a year-end rate base became popular during the post-war years, when, because of rising investment costs, a set of rates designed to produce a pre-determined rate of return, failed to do so; this is the "attrition" effect. The use of a year-end [i.e., end-of-period] rate base, tended to minimize, or at least partially offset the effect of "attrition". However, during the past four or five years, the "attrition" effect has disappeared; to be replaced in fact by negative attrition; i.e., realized rates of return instead of declining have been increasing. Thus the practical [as contrasted with the theoretical] justification for an end-of-period rate base, no longer exists. It is therefore suggested that the earnings for the period be related to the investment during the period; i.e., the investment which produced the earnings.

With the above comments in mind, we now turn to the data.

The latest available earnings data for Central Maine are the 12 month period ending July 31, 1967. The average rate base for that period is well approximated by the rate base as of December 31, 1966, that being within one month of the exact midpoint of the twelve month period. For purposes such as this, i.e., ascertaining whether the company's rates are generally reasonable, such a rate base is acceptable.

As is indicated on Table I, the company earned \$15,817,000 which on a rate base of \$222,232,000 produces a realized rate of return of 7.12%.

On Table II there are derived various possible adjustments to the reported earnings figures. We first see the unadjusted figures of \$15,817,000. If we assume that Federal Income Taxes had been surcharged by 6%, and that surcharge had been in effect for the entire twelve months, then income would have been \$15,236,000.

In a letter dated July 31, 1967, Central Maine indicated that it might be faced with further increases in local taxes as well as in wages, and that the effect of such increases would reduce net income by \$461,000 per year. Were we to reduce reported income by this amount, the adjusted income would be \$15,356,000 as shown in Line (2b) of Table II.

Were we to make both adjustments, i.e., for the 6% surtax in Federal Income Tax as well as the local tax and wage increases, the adjusted income comes to \$14,775,000 as shown in Line (2c) of Table II.

Here then we have summarized four estimates of test year income. What do these indicate as to whether the company's earnings are excessive, and if so by how much?

Before we may answer that question we must arrive at an estimate of what is a fair rate of return for Central Maine Power Company.

### III) FAIR RATE OF RETURN

While we did not make a full-blown study of the fair rate of return, we did make analyses of the critical elements of such a study; sufficient to allow us to arrive at a conclusion accurate enough for the instant purpose.

As will be developed subsequently, it is the writer's opinion that a fair rate of return to Central Maine is in the vicinity of 6.25%, and that 6.5% is beyond the upper limit of the range of fair rate of return.

However, it is recognized that for purposes of negotiation it may be proper to go somewhat higher as to fair rate of return than would be appropriate in a formal rate proceedings.

Consequently the reasonableness of Central Maine's earnings will be tested against both a 6.25% and a 6.5% fair rate of return.

Before presenting such test results, it may be well to outline briefly how we arrived at our estimates of the fair rate of return.

The capital structure of the company is acceptable, and quite in line with electric utility practice, approaching quite closely the now almost classic 50% debt - 15% preferred, 35% common equity ratio. The costs of debt and preferred now outstanding are a matter of record. The costs of additional debt and preferred pose no great problem,

particularly in view of our continuous surveillance of utility financing. We decided to use 6.2% as the cost of additional debt to be raised by Central Maine, with additional preferred costing 6.5%. The major problem as usual, is the determination of the cost of common stock equity.

We approached this problem via the so-called "Discounted Cash Flow" method. There is no need to go into a lengthy explanation or derivation of the basic elements that enter into this method of estimating the cost of common equity. Suffice it to say that the end result is the relationship -

"Cost of Equity equals the anticipated growth in dividends per share plus the current dividend yield on the common stock"

For example, if it is anticipated that dividends per share will grow at 6% per year, and the common stock is currently selling on a 4% dividend yield basis, the cost of equity is 10%.

Obviously the crucial factor is the anticipated growth in dividends per share. We studied and analyzed the historical growth of Central Maine, as well as the growths of a group of eleven selected electric utilities, utilities similar to Central Maine.

On the basis of these studies, it is our opinion that the cost of equity to Central Maine is about 9.5% to 10%.

On Table III, there are developed two estimates of the fair rate of return. One is based on the assumption that Central Maine will issue \$20,000,000 of additional debt, and that the cost of common equity is 9.5%. On this basis the cost of capital computes to 6.0%. The second estimate is based on the assumption that Central Maine will issue \$40,000,000 of additional debt, and that equity will cost 10%. On that basis the cost of capital computes to 6.3%.

These then are the basis for the opinion that the fair rate of return to Central Maine is in the vicinity of 6.25%, but that 6.5% would be at the top of the range of fair rate of return for the instant purpose.

It would seem clear from the data shown on Tables I, II, and III that the earnings of Central Maine, no matter how adjusted, are in excess of a fair rate of return. The next question to consider is, "How much?"



#### IV) EXCESS EARNINGS

It is not the purpose of this report to pin-point a specific amount as being the excess earnings. We have already indicated our views on the several constituent factors, such as (a) the use of an average rather than a year-end rate base; (b) that the fair rate of return is in the vicinity of 6.25% but no more than 6.5%; (c) the method of handling the possibility of a surcharge in Federal Income Tax; etc., etc.

Which of these alternatives should be used as a basis for negotiation; which is the minimum acceptable short of a full-fledged rate case; which assumptions are negotiable; - all these are matters of judgment for the Commission to exercise in preparing for and in handling the negotiations. In short this report is technical; not tactical. Consequently all the alternative, indicated rate reductions are set forth in Table IV, as a guide to negotiation. It is to be noted that the indicated amounts DO NOT REFLECT THE \$200,000 RATE REDUCTION EFFECTIVE SEPTEMBER 1, 1967.

It will be noted that the last column on Table IV, indicates the reduction in earnings per share that would come about from each corresponding rate reduction. This per-share effect is shown because of the interest that was evinced by several people who attended the conferences in which the Commission, its staff, and the writer participated.

The fear was expressed that certain of the larger rate reductions would so reduce per-share earnings, that in order to continue the existing per-share dividends, the company would be paying out a very large part of its reported earnings. Before discussing the pertinent numbers it might be well to set the "doctrine" of the maintenance of dividends in its proper perspective. Management has the broadest powers to establish dividends; it certainly does not have to obtain the Commission's approval to increase [or decrease] dividends.

Were a regulatory commission to obligate itself to see to it that whatever dividends management established, regulation would provide the requisite earnings, not only to cover the dividend, but also to do so at a low dividend payout, - then obviously regulation would have passed out of the hands of the Commission, into the hands of management. All that a management would need to do to get an increase in rates, [or to prevent a decrease], would be to raise the dividend!

Dividends should be based on, and flow from reasonable earnings. The reasonableness of earnings cannot therefore be determined by the need to cover, at a conservative payout ratio, dividends established by management.

With the basic principle outlined, we turn to the "numbers" in the last column of Table IV.

During the 12 months ending July 31, 1967, i.e., the "test year", Central Maine earned \$1.52 per share. Its current dividend is at the rate of \$1 per share. If earnings were reduced by the maximum amount indicating the last column of Table IV, they would still produce \$1.24 per share. A \$1 dividend produces a dividend payout ratio of 81%. For a company whose per share earnings have, during the past 9 years, increased at the compound rate of 6.5% per year, and whose dividends per share have increased at the rate of over 4% per year, - an 81% payout ratio is certainly not excessive. For example, assume that rates are reduced so that earnings per share during the past test period, would have been \$1.24 rather than \$1.52. [This assumes a rate reduction of \$3,700,000]. Even a 5% increase in earnings per share, would bring those earnings to \$1.30, and at a \$1 dividend, the payout would be 77%! And it is to be noted that the \$1 dividend was established during 1966, and hence could be expected to "stay put" for a little while.

The above was based on a rate reduction of \$3,700,000. Assume now that rates are reduced by \$1,750,000. This would act to reduce per share earnings by \$0.13, i.e., from \$1.52 to \$1.39. A dividend of \$1 per share would produce a payout of 72%; and were earnings to increase next year by only 5%, then earnings per share would be \$1.46 and at a \$1 dividend the payout would be 68%!

The conclusion must then be that even at the maximum reduction indicated on Table IV [adjusted downward by the \$200,000 rate reduction effective September 1, 1967], the continuation of the recently increased dividend is not endangered, nor would it force an excessive payout. At any lower rate reduction, the maintenance of the current dividend, at a reasonable payout ratio is simply not a problem.

One additional factor should be considered. The merger of Central Maine and Bangor Hydro is in the wind. How will a rate reduction to each of these companies affect such a merger? The short answer is, "Not at all". Let us investigate why not.

The chances are that if there is a merger, Bangor Hydro will be merged into Central Maine, via an exchange of stock, with the exchange ratio based on the market prices of

these two stocks.

Now, it is the writer's opinion that the present level of earnings of each of these two companies; i.e., Central Maine as well as Bangor Hydro, throws an element of uncertainty into the market price. An informed investment analyst would be prone to question just how long these companies could be expected to continue to realize earnings as high as the current ones. As a result some discounting would be invoked in arriving at a stock-exchange ratio.

However with both situations "cleaned up" via a rate adjustment, the earnings level for the next several years could be estimated with reasonable precision. This, it is the writer's opinion, would simplify arriving at merger terms.

In short, with the rate and regulatory aspects clarified, the merger should be facilitated, rather than impeded.

## VI) CONCLUSIONS

- 1) Currently Central Maine is earning at a level of 7.12%
- 2) A fair rate of return is in the neighborhood of 6.25%, but certainly not more than 6.5%.
- 3) Based on various adjustments, the indicated rate reduction range between \$1,800,000 and \$3,700,000 if 6.25% is accepted as a fair rate of return, and between \$670,000 and \$2,640,000 if 6.5% is accepted.
- 4) Rate adjustments will not hamper any contemplated merger of Central Maine and Bangor Hydro; quite the contrary.
- 5) Even the largest of the indicated rate reductions will not impair the ability of Central Maine to continue its recently increased \$1 dividend at a reasonable payout ratio.

TABLE I

## CENTRAL MAINE POWER COMPANY

## BASIC DATA

		AMOUNT (\$1000)
1) NET OPERATING INCOME [12 months to 7/31/67]		<u>\$ 15,817</u>
2) RATE BASE [As of 12/31/66]		
Electric Operating Property		\$300,894
Reserve for Depreciation & Amortization	\$69,873	
Reserve for Deferred Federal Income Tax	9,713	
Contributions in Aid of Construction	<u>935</u>	<u>80,521</u>
		\$220,373
Materials and Supplies, and Working Capital		<u>1,859</u>
3) RATE BASE		<u>\$222,232</u>
4) REALIZED RATE OF RETURN		
	\$15,817 divided by \$222,232 =	<u>7.12%</u>

TABLE II

## CENTRAL MAINE POWER COMPANY

## INCOME ADJUSTMENTS

(\$1000)

I) REPORTED INCOME [12 months to July 31, 1967]		<u>\$ 15,817</u>
II) ADJUSTMENTS		
a) 6% Federal Income Tax Surcharge <u>only</u>	\$581	<u>\$ 15,236</u>
b) Local Tax and Wage Adjustment <u>only</u> [Letter of July 31, 1967]	\$461	<u>\$ 15,356</u>
c) Income adjusted for both Income Tax as well as local tax and wages	\$1042	<u>\$ 14,775</u>

TABLE III

## CENTRAL MAINE POWER COMPANY

## FAIR RATE OF RETURN

	<u>AMOUNT (\$1000)</u>	<u>COST RATE (%)</u>	<u>COST (\$1000)</u>
I) Cost of Debt			
Outstanding Debt [As of 12/31/66]	\$108,063	3.6%	\$3,890
Additional Debt	<u>20,000</u>	6.2	<u>1,240</u>
Sub-Total	\$128,063		\$5,130
Additional Debt	<u>20,000</u>	6.2	<u>1,240</u>
TOTAL	\$148,063		\$6,370
Costs			
a) <u>\$20,000,000 additional debt</u>			
5,130 divided by 128,063 =		<u>4.0%</u>	
b) <u>\$40,000,000 additional debt</u>			
6,370 divided by 148,063 =		<u>4.3%</u>	
II) Cost of Preferred			
Outstanding Preferred [As of 12/31/66]	\$35,342	4.1%	\$1,449
Additional Preferred	<u>5,000</u>	6.5	<u>325</u>
TOTAL	\$40,342		\$1,774
Cost			
1,774 divided by 40,342 =		<u>4.4%</u>	

- xxxxxx -

## COST OF CAPITAL

Debt	50%	4.0%	2.00%	4.3%	2.15%
Preferred	15	4.4	0.66	4.4	0.66
Common	35	9.5	<u>3.32</u>	10.0	<u>3.50</u>
TOTAL			5.98		6.31%

TABLE IV

**CENTRAL MAINE POWER COMPANY**  
**INDICATED RATE REDUCTIONS**

I) BASED ON 6.25% FAIR RATE OF RETURN 1/

Based On	Reduction	
	Rates	Earnings/Share
A) Reported Earnings for 12 months ending 7/31/67	\$3,700,000	\$0.28
B) Adjusted for 6% Federal Income Tax surcharge	\$2,740,000	0.20
C) Adjusted for increase in local taxes and wages	\$2,820,000	0.21
D) Adjusted for [B] and [C] above	\$1,800,000	0.13

II) BASED ON 6.5% FAIR RATE OF RETURN 1/

A) Reported Earnings for 12 months ending 7/31/67	\$2,640,000	\$0.20
B) Adjusted for 6% Federal Income Tax surcharge	\$1,610,000	0.12
C) Adjusted for increase in local taxes and wages	\$1,750,000	0.13
D) Adjusted for [B] and [C] above	\$ 670,000	0.05

NOTE: 1/ Applied to a 12/31/66 rate base of \$222,232,000

Address all official communications to the Commission

Commissioners

David K. Marshall  
Chairman  
Frederick N. Allen  
Earle M. Hillman

Leona M. Delaware  
Secretary

**PUBLIC UTILITIES COMMISSION**

STATE OF MAINE  
AUGUSTA, MAINE 04330

November 15, 1967

Hon. Kenneth M. Curtis, Governor  
Executive Department  
State House  
Augusta, Maine

Re: Kosh-Glassman Report on  
Central Maine Power Company

Dear Governor:

Enclosed please find a report of Kosh-Glassman Associates relative to their recent study of the level of earnings of Central Maine Power Company, together with related items as follows:

1. Copy of Kosh-Glassman Report dated September 20, 1967, together with covering letter of the same date.
2. Copy of my letter to Kosh-Glassman Associates dated October 26, 1967, together with copies of other items submitted therewith, as follows:
  - a) Central Maine Power Company's computation of rate base computed for actual operations, 9 months through 9/30/67, and 3 months projected through 12/31/67.
  - b) Staff computation of average rate base computed on actual operations, 12 months ending 9/30/67.
  - c) Central Maine Power Company memorandum re the two 345-KV transmission circuits.
3. Copy of letter of Kosh-Glassman Associates to this Commission under date of October 30, 1967, together with computation sheet submitted therewith.

Please note that the data used in the September 20, Kosh-Glassman report was the year-end rate base of December 31, 1966, and actual operations of the Company for the 12 months ending July 31, 1967.



Although such a computation would reasonably reflect the level of earnings for the period in question, in determining the current level of earnings legal precedent would appear to require us to use the latest figures available. It is for this reason that our latest computation recognizes the rate reductions of September 1 and November 1, annualized, as well as the "average" rate base for the year 1967. It must also be recognized that the rate base used is 9 months actual, through September 30, 1967, and the remaining 3 months estimated.

In any rate proceeding the ideal test period is a full calendar year which can be readily adjusted for abnormalities and known changes, thus providing us with the most accurate projection available. Inasmuch as rates are set for the future we can then determine the revenue adjustments required to produce the desired rate of return.

We are now receiving reports from this company on a monthly basis, so that by the middle of January we will have most of the 1967 figures available. Some refinements have to be made to the monthly reports as the same do not conform precisely with the Uniform System of Accounts, but the required information is always available upon request.

Having in mind that if this Commission were to initiate a formal rate proceeding at this time it would probably take from 6 to 9 months to conclude the same, with additional time for court review if required, and in view of the fact that the Kosh report recognizes the instability of the current situation relative to Taxes, Cost of Money, etc., a reasonable approach to the problem would appear to be to wait until the year-end figures are in, at which time we should be able to construct a pro forma operating statement with a much greater degree of accuracy.

We are aware of your continuing interest in the matter of power rates in Maine and you may be assured that we will be reporting to you again on this subject, hopefully in January of 1968.

If further clarification is required, either of the Kosh report or the present position of this Commission, please consider us available at all times.

Respectfully,  
Public Utilities Commission  
By

/s/ David K. Marshall  
Chairman

DKM:D  
Encl.

Oct. 26, 1967

Kosh & Glassman Associates  
1145 19th St., N. W.  
Washington, D. C.

Re: Central Maine Power Company

Gentlemen:

Since the receipt of your initial report dated Sept. 20 re the above, additional information has been developed by the staff of the commission in connection with the rate base and earnings of Central Maine Power Company. In this connection I enclose the following:

1. Central Maine Power Company's computation of rate base computed for actual operations, 9 months through 9/30/67, and 3 months projected through 12/31/67.
2. Staff computation of average rate base computed on actual operations, 12 months ending 9/30/67.
3. Central Maine Power Company letter dated 10/16/67.
4. Central Maine Power Company memorandum re the two 345..KV transmission circuits.

As you know, Central Maine Power Company has filed reduced rates effective November 1st in addition to the reduction which became effective September 1st. The annualized effect of these reductions is reflected in the above listed documents.

It is the intention of this commission to review the earnings position of Central Maine Power Company as soon as the actual 1967 year-end results become available, at which time the uncertainty as to the pending F. I. C. surtax, and its resulting effect on cost of money, will also have been resolved.

## KOSS - GLASSMAN ASSOCIATES

In view of the foregoing would you advise us as soon as possible as to:

1. The propriety of our using the figures for 9 months actual (1967) and 3 months projected, as reflected in the enclosed items.
2. Assuming the propriety of using this data for the instant purpose, whether or not, in your opinion, the resulting rate of return is within the range of reasonableness.

Your early response will be appreciated.

Very truly yours,

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Chairman

dm:p  
enc. 4

**CENTRAL MAINE POWER COMPANY  
RATE BASE**

(Thousands of Dollars)

	December More (Less) Than September	Actual September 1967	Estimate December 1967
	<u>          </u>	<u>          </u>	<u>          </u>
Operating property	\$ 2,407	\$308,763	\$311,170
Harris - downstream lands	-	606	606
345 KV transmission lands	1,247	253	1,500
Other transmission lands	(41)	563	522
Acquisition adjustment disallowed, Maine Consolidated Power Co.	-	(100)	(100)
	<u>          </u>	<u>          </u>	<u>          </u>
Gross Plant	3,613	310,085	313,698
Depreciation and amortization excluding amortization of Maine Consolidated acquisition adj.	1,092	76,574	77,666
Deferred investment credit, W. F. Wyman No. 3	(13)	165	152
Earned surplus restricted to future Federal Income Tax	(55)	9,549	9,494
Customers' non-refundable contributions	-	982	982
	<u>          </u>	<u>          </u>	<u>          </u>
Plant deductions	1,024	87,270	88,294
	<u>          </u>	<u>          </u>	<u>          </u>
Net Plant	2,589	222,815	225,404
Inventories:			
Materials and supplies	(37)	2,957	2,920
Fuel	242	979	1,221
	<u>          </u>	<u>          </u>	<u>          </u>
	205	3,936	4,141
1/8 operation and maintenance	192	3,162	3,354
	<u>          </u>	<u>          </u>	<u>          </u>
	397	7,098	7,495
Less accrual - Federal taxes on income	818	2,212	3,030 *
	<u>          </u>	<u>          </u>	<u>          </u>
	(421)	4,886	4,465
	<u>          </u>	<u>          </u>	<u>          </u>
Total rate base	\$2,168	\$227,701	\$229,869

\* - Accrued at 106% of current rates

10/24/67

## CENTRAL MAINE POWER COMPANY

(Figures in Thousands of Dollars)

	<u>Plant in Service</u>	<u>Reserve Depreciation &amp; Amortization</u>	<u>Reserve Deferred Federal Income Tax</u>	<u>Contributions In Aid Of Construction</u>	<u>Materials &amp; Supplies</u>	<u>Rate Base</u>
1967						
January	300,743.4	70,479.0	9,695.0			
February	302,679.1	71,135.0	9,677.0			
March	303,331.9	71,814.0	9,659.0			
April	303,830.3	72,591.0	9,640.0			
May	304,623.8	73,195.0	9,622.0			
June	305,447.0	73,833.0	9,604.0			
July	306,623.1	74,420.0	9,585.0			
August	308,479.0	76,249.0	9,567.0			
September	308,762.9	76,600.0	9,549.0			
1966						
October	300,048.1	69,357.0	9,750.0			
November	300,335.9	69,688.0	9,732.0			
December	300,287.0	69,833.0	9,713.0			
TOTALS	3,645,191.5	869,194.0	115,793.0			
Totals divided by 12 =						
	303,765.9	72,432.8	9,649.4	934.5	2,070.8	222,820.0

Net Operating Income Actual 9/30/67	15,863.0
Less - Adj. 6% Estimated Surcharge Federal Income Tax	581.0
Local Taxes & Wage Adjustment	461.0
9/1/67 Rate Reduction 200.0 x 52%	104.0
11/1/67 Rate Reduction 470.0 x 52%	244.4
	<u>1,390.4</u>

14,472.6 divided by Above Rate Base = Rate of Return of 6.495%  
222,820.0

## CENTRAL MAINE POWER COMPANY

FOR COMPANY USE ONLY

SUBJECT Statement As To Need of 345-KV  
Transmission Lines In Maine

DATE October 24, 1967

LOCATION

TO

First 345-KV Transmission Circuit

The constantly increasing power requirements of the State of Maine will, if they continue at the present growth rate, make it necessary to import a total of 170 MW in 1970 and 203 MW in 1971 from power purchases.

The two 115-KV tie lines to PSCoNH which will exist at that time will not have sufficient reliability to carry this load. Therefore, it is necessary to have a third circuit in service in order to maintain system stability and the degree of reliability needed for continuous and uninterrupted power supply in the State of Maine.

This third circuit will operate at 345-KV, which was determined to be the most feasible voltage level to provide a reliable source to meet the region's load requirements.

Second 345-KV Transmission Circuit

In 1972 the Maine Yankee Atomic Plant is scheduled to be in operation and generating at a power level in excess of the total load of the entire state. The large size of this nuclear plant was chosen in order to obtain the economies that are inherent with increased unit size, and this was possible only by lifetime contracts with other New England utilities.

If the Maine Yankee plant were interconnected to southern New England by a single line, a fault on this circuit would result in a major power interruption because the local systems could not absorb the Maine Yankee block of capacity and a unit tripout would occur. Hence the second 345-KV line is needed for backup and insurance to maintain a continuous and reliable supply.

General

In addition, when Maine Yankee is out of service for refueling or maintenance, the 345-KV system is necessary in order that reliable, replacement capability is available to Maine and the rest of the New England system. Furthermore, from 1975 on, substantial amounts of power will have to be imported from outside the State until such time as the next major unit can be constructed in Maine.

/s/ E. J. Surowiec

E. J. Surowiec

KOSH-GLASSMAN ASSOCIATES, INC.  
Public Utility Consultants  
1145 Nineteenth Street, N. W.  
Washington, D. C. 20036

David A. Kosh  
Gerald J. Glassman  
Dennis R. Bolster

338-3444

October 30, 1967

MR. DAVID K. MARSHALL  
Chairman  
Maine Public Utilities Commission  
State House  
Augusta, Maine 04330

Re: Central Maine Power Company

Dear Mr. Marshall:

This is in reply to your recent letter concerning Central Maine Power Company.

The data you sent me seem entirely reasonable for the purpose of testing whether the reduced rates will produce earnings within the zone of reasonableness.

The fact that the Commission intends to review the earnings position of Central Maine Power Company as soon as the 1967 actual results become available, and in view of the fact that the major uncertainty facing us now, i.e., the level of Federal Income Taxes, and its effect on the cost of money, and hence Fair Rate of Return, should also be resolved by that time, it is my opinion that the two rate reductions will produce a rate of return within the zone of reasonableness.

In this regard please refer to the enclosed tabulation showing that the rate of return will be 6.38%, based on the above data.

With reference to the Item (1) data, and in particular the December 31, 1967 rate base, please note that I have not tested the rate of return against this year end rate base, but rather the lower average rate base for the year; and related that to the 1967 earnings, as adjusted. This estimate of earnings reflects a 6% increase in FIT, rather than the pending request for 10%.

With respect to the other items which in an adversary formal rate proceeding might be considered as controversial, their effect on the 1967 rate of return is so small as not to effect my conclusion that the earnings fall within the zone of reasonableness. For example, were we to eliminate the item most subject to question, the 345 KVA transmission line, i.e., \$1,500,000, the average rate base would be reduced by \$750,000, and the 6.38% rate of return shown on the enclosed table increased by two one-hundredth of 1%.



Please consider this letter and computations in conjunction with our report of September 20, 1967.

Cordially,

/s/ David A. Kosh

DAVID A. KOSH

DAK:rcs

AIR MAIL

Enclosure

**CENTRAL MAINE POWER COMPANY**  
**EFFECT OF PROPOSED RATE ADJUSTMENT**

**RATE BASE**

As of 12/31/66	\$222,232,000	<u>1/</u>	
As of 12/31/67	229,869,000	<u>2/</u>	
Average			<u>\$226,050,000</u>

**RETURN**

Net Operating Income for 12 months to 9/30/67			\$ 15,817,000	<u>1/</u>
Less Adjustment for 6% increase in Federal Income Tax	\$581,000			
Less Local Tax and Wage Adjustment	461,000			
Rate Adjustments				
9/1/67 - \$200,000 X .52 =	104,000			
11/1/67 - \$470,000 X .52 =	<u>244,000</u>		<u>\$ 1,390,000</u>	
			<u>\$ 14,427,000</u>	

**RATE OF RETURN**

\$14,427,000 divided by \$226,050,000 = 6.38%

Notes: 1/ Kosh-Glassman Report - Table I

2/ Estimated by Central Maine Power Company. 9 months actual,  
3 months estimated.

THE REASONABLENESS OF THE RATES  
of  
BANGOR HYDRO-ELECTRIC COMPANY

THE REASONABLENESS OF THE RATES  
of  
BANGOR HYDRO-ELECTRIC COMPANY

I) INTRODUCTION

To reach a valid conclusion as to whether the rates of Bangor Hydro are reasonable or not, and if the latter, how much of an adjustment needs to be made, one must first determine, -

- 1) What are the present and prospective earnings of the company, and
- 2) What constitutes a reasonable level of earnings?

The first involves the selection of a recent, representative test period; one during which the revenues, expenses, and plant were in reasonable balance, - and then the determination of what earnings were realized during this period.

The second involves arriving at a reasonably accurate estimate of what constitutes a fair rate of return; this providing the measure of whether the company is earning too little, too much, or just the right amount.

II) PRESENT AND PROSPECTIVE EARNINGS

In principle we are concerned with rates for the future, and hence with the level of earnings that may reasonably be expected in the future. And while on occasion the level of future earnings has been determined by making estimates of revenues, expenses, and rate base, a far more desirable and objective basis is found in the use of the so-called "Test Year".

The test year is a recent 12 month period during which revenues, expenses, and investment are in reasonable balance. To the extent there may be factors which tend to upset this balance, - factors such as unusual expenses, increases in costs that were in effect for only part of the period, exceptional plant investment, etc., etc., - adjustments need to be made. Thus actual results of the test year are modified for known changes.

The result is a period during which revenues, expenses and investment are in balance. Then, as revenues increase, expenses and investment keep pace, but the relationships of the adjusted test year continue. Consequently the test year results provide a good, unbiased, objective basis for determining the rate of return that may be expected to materialize in the near term future.

Carefully handled, there is little question but that the use of a test year is superior to estimating future earnings levels. Therefore, for purposes of estimating the level of earnings now being realized by Bangor Hydro and the level that it may be expected to realize in the future at existing rates, the 12 month period ending July 31, 1967 was selected as a test year.

The next question that arises is whether the earnings of that period may be accepted as reported, or whether certain adjustments need to be made.

There is one such adjustment; that for the proposed surcharge in Federal Income Taxes. Congress has before it a proposal that income taxes be increased by 10% on a temporary basis. Considerable opposition to that proposal has arisen, and it is doubtful whether the full 10% will be accepted, and if accepted when it will become effective. There is some advocacy of a 6% surcharge as more reasonable. The effective date, assuming some increase is adopted, is subject to all sorts of uncertainty.

One thing is evident; the tax surcharge hardly qualified as a "known" change, clearly to be applied to the test year results.

In view of this uncertain situation two alternative approaches suggest themselves:

- 1) Assume a 6% tax surcharge as a likely compromise, and adjust the test year results accordingly; or
- 2) Make no adjustment to the test year results for the possible increase in Federal Income Taxes, but have it understood that should a tax surcharge be placed into effect, the Commission will be ready to re-view the situation at that time, and promptly make such rate adjustments as may be indicated by the new conditions.

The figures presented later will be based on each of these two alternatives; either of which may be considered as reasonable.

Before turning to the computations of the actual results, one more matter must be resolved. In order to test the reasonableness of the realized level of earnings, these earnings

[the "RETURN"] must be related to a "RATE BASE"; the resulting quotient is the "REALIZED RATE OF RETURN", and is expressed as a percentage. If this "REALIZED" rate of return exceeds the "FAIR RATE OF RETURN", then earnings and rates are excessive, and should be reduced. It goes without saying that if the reverse is the case, i.e., if the realized rate of return is below the fair rate of return, rates should be increased.

What is a fair rate of return will be developed in a subsequent section. The immediate problem is to develop a rate base. Generally this is a straight-forward procedure. What is not so obvious is the timing. Should we relate earnings of the test year to the rate base as of the end of the year, or to the average for the year?

The logic is all in favor of an average rate base, since such a base reflects the investment which gave rise to the years earnings.

The use of a year-end rate base became popular during the post-war years, when, because of rising investment costs, a set of rates designed to produce a pre-determined rate of return, failed to do so; the "attrition" effect. The use of a year-end [i.e., end-of-period] rate base, tended to minimize, or at least partially offset the effect of "attrition". However, during the past four or five years, the "attrition" effect has disappeared, to be replaced in fact by negative attrition; i.e., realized rates of return, instead of declining, have been increasing. Thus the practical [as contrasted with the theoretical] justification for an end-of-period rate base, no longer exists. It is therefore suggested that the earnings for the period be related to the investment during the period; i.e., the investment which produced the earnings.

With the above comments in mind, we now turn to the data.

The latest available earnings data for Bangor Hydro are for the 12 month period ending July 31, 1967. The average rate base for that period is well approximated by the rate base as of December 31, 1966, that date being within one month of the exact midpoint of the twelve month period. For purposes such as this, i.e., ascertaining whether the company's rates are generally reasonable, such a rate base is acceptable.

As is indicated on Table I, the company earned \$2,605,000 which on a rate base of \$34,961,000 produced a realized rate of return of 7.45%.

On Table II there is derived the previously discussed adjustment. We first see the unadjusted figure of \$2,605,000. If we assume that Federal Income Taxes had been surcharged by 6%, and that surcharge had been in effect for the entire twelve months, then

income would have been \$2,515,000.

Here then we have summarized two estimates of test year income. What do these indicate as to whether the company's earnings are excessive, and if so by how much?

Before we may answer that question we must arrive at an estimate of what is a fair rate of return for Bangor Hydro.

### III) FAIR RATE OF RETURN

While we did not make a full-blown study of the fair rate of return, we did make analyses of the critical elements of such a study; sufficient to allow us to arrive at a conclusion accurate enough for the instant purpose.

As will be developed subsequently, it is the writer's opinion that a fair rate of return for Bangor Hydro may be somewhat in excess of 6.25%, and that 6.5% is at or above the upper limit of the range of fair rate of return.

However it is recognized that for purposes of negotiation it may be proper to go somewhat higher as to fair rate of return than would be appropriate in a formal rate proceedings. Consequently the reasonableness of Bangor Hydro's earnings will be tested against both a 6.25% and a 6.5% fair rate of return.

Before presenting such test results, it may be well to outline briefly how we arrived at our estimates of the fair rate of return.

The capital structure of the company is acceptable, and quite in line with electric utility practice, approaching quite closely the now almost classic 50% debt, 15% preferred, 35% common equity ratio. The cost of debt and preferred now outstanding are a matter of record. The costs of additional debt and preferred pose no great problem, particularly in view of our continuous surveillance of utility financing. We decided to use 6.2% as the cost of additional debt to be raised by Bangor Hydro, with additional preferred costing 6.5%. The major problem, as usual, is the determination of the cost of common stock equity.

We approached this problem via the so-called "Discounted Cash Flow" method. There is no need to go into a lengthy explanation or derivation of the basic elements that enter into this method of estimating the cost of common equity. Suffice it to say that the

end result is the relationship -

“Cost of Equity equals the anticipated growth in dividends per share plus the current dividends yield on the common stock.”

For example, if it is anticipated that dividends per share will grow at 6% per year, and the common stock is currently selling on a 4% dividend yield basis, the cost of equity is 10%.

Obviously the crucial factor is the anticipated growth in dividends per share. We analysed the historical growth of Bangor Hydro as well as the growths of a group of seven selected electric utilities, utilities similar to Bangor Hydro.

On the basis of these studies, it is our opinion that the cost of equity to Bangor Hydro is in the range of 9.5% to 10.0%.

On Table III, there are developed two estimates of the fair rate of return. One is based on the assumption that the cost of equity is 9.5%. On this basis the cost of capital computes to 6.14%. The second estimate is based on the assumption that equity costs 10.0%. On that basis the cost of capital comes to 6.37%. In both cases we have assumed additional financing; \$4,000,000 of debt and \$1,000,000 of preferred.

These then are the bases for the opinion that the fair rate of return to Bangor Hydro is in the range between 6.25% and 6.5%.

It would seem clear from the data shown on Tables I, II, and III that the earnings of Bangor Hydro are in excess of a fair rate of return. The next question to consider is, “How much?”

#### IV) EXCESS EARNINGS

It is not the purpose of this report to pin-point a specific amount as being the excess earnings. We have already indicated our views on the several constituent factors, such as (a) the use of an average rather than a year-end rate base; (b) that the fair rate of return is in the range of 6.25% to 6.5%; (c) the method of handling the possibility of a surcharge in Federal Income Tax; etc., etc.

Which of these alternatives should be used as a basis for negotiation; which is the minimum acceptable short of a full-fledged rate case; which assumptions are negotiable; - all these are matters of judgment for the Commission to exercise in preparing for and



in handling the negotiations. In short this report is technical, not tactical. Consequently all the alternative, indicated rate reductions are set forth in Table IV, as a guide to negotiation. It is to be noted that the indicated amounts DO NOT REFLECT THE \$211,000 RATE REDUCTION EFFECTIVE SEPTEMBER 1, 1967.

It will be noted that the last column on Table IV, indicates the reduction in earnings per share that would come about from each corresponding rate reduction. This per-share effect is shown because of the interest that was evinced by several people who attended the conferences in which the Commission, its staff, and the writer participated.

The fear was expressed that certain of the larger rate reductions would so reduce per share earnings, that in order to continue the existing per share dividends, the company would be paying out a very large part of its reported earnings. Before discussing the pertinent numbers it might be well to set the "doctrine" of the maintenance of dividends in its proper perspective.

Management has the broadest powers to establish dividends; it certainly does not have to obtain the Commission's approval to increase [or decrease] dividends.

In view of that fact, were a regulatory commission to obligate itself to see to it that whatever dividends management established, regulation would provide the requisite earnings, not only to cover the dividend, but also to do so at a low dividend payout, - then obviously regulation would have passed out of the hands of the Commission, into the hands of management. All that a management would need to do to get an increase in rates, [or to prevent a decrease], would be to raise the dividend!

Dividends should be based on, and flow from reasonable earnings. The reasonableness of earnings cannot therefore be determined by the need to cover, at a conservative payout ratio, dividends established by management.

With the basic principle outlines, we turn to the "numbers" in the last column of Table IV.

During the 12 months ending July 31, 1967, i.e., the test-year, Bangor Hydro earned \$1.61 per share. Its dividend rate was increased recently to \$1.12 per share. The highest of the indicated, rate reductions would decrease earnings per share by \$0.38. If this reduction were applied to the test year results this would have left earnings of \$1.23, which at a \$1.12 dividend would have produced a payout of 91%. That is rather high. But note that during the past 9 years, per share earnings of Bangor Hydro increased at a

compound rate of over 7%, per year. True, the rate of earnings on book equity was also increasing at a rate of 3%; but even so we have a net increase of 4%. And book value per share did increase at 4% per year compounded. Thus if we assume that the "reduced" earnings of \$1.23 per share hypothesized above were to increase at the rate of 4% per year, they would be \$1.28 next year and \$1.33 the year after. If we assume the recently increased dividend to remain at \$1.12, this would produce payouts of 88% next year, and 84% the year after.

The above assumes the maximum rate reduction of \$810,000 shown in Table IV. Were rates reduced by \$500,000, then per share earnings, on a test year basis would be reduced by \$0.22 to \$1.39. This would produce a dividend payout of 81%. And again assuming a 4% annual increase in earnings per share, these future earnings would be \$1.45 and \$1.51, producing payouts of 77% and 74% respectively.

It is thus concluded that at the maximum indicated rate reduction, adjusted downward by the \$211,000 rate reduction effective September 1, 1967, the maintenance of the recently increased dividend would be possible, but at rather a high payout for a while. With the alternative indicated reduction of \$500,000, the maintenance of the current dividend should be no problem.

One additional factor should be considered. The merger of Central Maine and Bangor Hydro is in the wind. How will a rate reduction to each of these companies affect such a merger? The short answer is, "Not at all". Let us see why not.

The chances are that if there is a merger, Bangor Hydro will be merged into Central Maine, via an exchange of stock, with the exchange ratio based on the market prices of these two stocks.

It is the writer's opinion that the present level of earnings of each of these two companies; i.e., Central Maine as well as Bangor, throws an element of uncertainty into the market price. An informed investment analyst would be prone to question just how long these companies could be expected to continue to realize earnings as high as the current ones. As a result some discounting would be invoked in arriving at a stock-exchange ratio.

However with both situations "cleaned up" via a rate adjustment, the earnings level for the next several years could be estimated with reasonable precision. This, it is the writer's opinion, would simplify arriving at merger terms.

In short, with the rate and regulatory aspects clarified, the merger should be facilitated, rather than impeded.

## VI) CONCLUSIONS

- 1) Currently Bangor Hydro is earning at a level of 7.45%.
- 2) A fair rate of return is within the range of 6.25% and 6.5%.
- 3) Assuming 6.25% to be a fair rate of return, the indicated rate adjustment is \$810,000 with no adjustment for a possible increase in Federal Income Taxes, and \$670,000 with a 6% tax surcharge assumed.

If 6.5% is assumed to be a fair rate of return the corresponding rate reductions are \$640,000 and \$500,000 respectively.

- 4) An appropriate rate adjustment will not hamper any contemplated merger of Bangor Hydro and Central Maine Power; quite the contrary.
- 5) The largest of the indicated rate reductions will result in rather high dividend payout ratios for a while, if the recently increased dividend is maintained. The maintenance of this dividend should be no problem at the lower rate adjustments.

TABLE I

## BANGOR HYDRO-ELECTRIC COMPANY

## BASIC DATA

ITEM		<u>AMOUNT</u> <u>(\$1000)</u>
1)	NET OPERATING INCOME [12 months to 7/31/67]	\$ 2,605
2)	RATE BASE [As of 12/31/66]	
	a) Electric Operating Property	\$ 47,945
	Property held for future use	\$ 245
	Materials and Supplies	806
		<u>1,051</u>
		\$ 48,996
	Depreciation Reserve	\$13,897
	Contributions in Aid of Construction	138
		<u>\$ 14,035</u>
3)	RATE BASE	\$34,961
4)	REALIZED RATE OF RETURN	
	\$2,605 divided by \$34,961 =	7.45%

TABLE II

## BANGOR HYDRO-ELECTRIC COMPANY

## INCOME ADJUSTMENTS

(\$1000)

1) REPORTED INCOME [12 months to July 31, 1967]		\$ 2,605
2) ADJUSTMENT		
a) 6% Federal Income Tax Surcharge	\$90	\$ 2,515

TABLE III

BANGOR HYDRO-ELECTRIC COMPANY  
FAIR RATE OF RETURN

	<u>AMOUNT</u> <u>(\$1000)</u>	<u>COST RATE</u> <u>(%)</u>	<u>COST</u> <u>(\$1000)</u>
I) COST OF DEBT			
Outstanding Debt [As of 12/31/66]	\$19,000	3.4%	\$646
Additional Debt	<u>4,000</u>	6.2	<u>248</u>
TOTAL	\$23,000		\$894
Cost			
	\$894 divided by \$23,000 =	3.9%	
II) COST OF PREFERRED			
Outstanding Preferred [As of 12/31/66]	\$ 4,734	5.7%	\$270
Additional Preferred	<u>1,000</u>	6.5	<u>65</u>
TOTAL	\$ 5,734		\$335
Cost			
	\$335 divided by \$5,734 =	5.8%	

- xxxxxx -

COST OF CAPITAL

Debt	50%	3.9%	1.95	4.0%	2.00
Preferred	15	5.8	.87	5.8	.87
Common	35	9.5	<u>3.32</u>	10.0	<u>3.50</u>
TOTAL			6.14%		6.37%

TABLE IV

BANGOR HYDRO-ELECTRIC COMPANY  
INDICATED RATE REDUCTIONS

I) BASED ON 6.25% FAIR RATE OF RETURN 1/

Based On	Reduction	
	Rates	Earnings/Share
A) Reported Earnings for 12 months ending 7/31/67	\$810,000	\$0.38
B) Adjusted for 6% Federal Income Tax Surcharge	670,000	0.30

II) BASED ON 6.5% FAIR RATE OF RETURN 1/

A) Reported Earnings for 12 months ending 7/31/67	\$640,000	\$0.30
B) Adjusted for 6% Federal Income Tax Surcharge	500,000	0.22

Note: 1/ Applied to a 12/31/66 rate base of \$34,961,000

Address All Official Communication To The Commission

Commissioners

David K. Marshall  
Chairman  
Frederick N. Allen  
Earle M. Hillman

Leona M. Delaware  
Secretary

**PUBLIC UTILITIES COMMISSION**

STATE OF MAINE  
AUGUSTA, MAINE 04330

November 15, 1967

Hon. Kenneth M. Curtis, Governor  
Executive Department  
State House  
Augusta, Maine

Re: Kosh-Glassman Report on  
Bangor Hydro-Electric Company

Dear Governor:

Enclosed please find a report of Kosh-Glassman Associates relative to their recent study of the level of earnings of Bangor Hydro-Electric Company, together with related items as follows:

1. Copy of Kosh-Glassman Report dated September 20, 1967, together with covering letter of the same date.
2. Copy of my letter to Kosh-Glassman Associates dated October 26, 1967, together with photocopy of our staff computation of average rate base computed on actual operations of the Company for the 12 months ended 9/30/67.
3. Copy of letter of Kosh-Glassman to this Commission under date of October 30, 1967, together with computation sheets submitted therewith.

Please note that the data used in the September 20 Kosh-Glassman report was the year-end rate base of December 31, 1966, and actual operations of the Company for the 12 months ended July 31, 1967.

Although such a computation would reasonably reflect the level of earnings for the period in question, in determining the current level of earnings legal precedent would appear to require us to use the latest figures available. It is for this reason that our latest computation recognizes the rate reductions of September 1, and November 1, annualized, as well as the average rate base and the actual operating revenues for



the 12 months period ended September 30, 1967.

In any rate proceeding the ideal test period is a full calendar year which can be readily adjusted for abnormalities and known changes, thus providing us with the most accurate projection available. Inasmuch as rates are set for the future we can then determine the revenue adjustments required to produce the desired rate of return.

We are now receiving reports from this company on a monthly basis, so that by the middle of January we will have most of the 1967 figures available. Some refinements have to be made to the monthly reports as the same do not conform precisely with the Uniform System of Accounts, but the required information is always available upon request.

Having in mind that if this Commission were to initiate a formal rate proceeding at this time it would probably take from 6 to 9 months to conclude the same, with additional time for court review if required, and in view of the fact that the Kosh report recognizes the instability of the current situation relative to Taxes, Cost of Money, etc., a reasonable approach to the problem would appear to be to wait until the year-end figures are in, at which time we should be able to construct a pro forma operating statement with a much greater degree of accuracy.

We are aware of your continuing interest in the matter of power rates in Maine and you may be assured that we will be reporting to you again on this subject, hopefully in January of 1968.

If further clarification is required, either of the Kosh report or the present position of this Commission, please consider us available at all times.

Respectfully,

Public Utilities Commission  
By

/s/ David K. Marshall  
Chairman

DKM:D  
Encl.

October 30, 1967

MR. DAVID K. MARSHALL  
Chairman  
Maine Public Utilities Commission  
State House  
Augusta, Maine 04330

Re: Bangor Hydro Electric Company

Dear Mr. Marshall:

This is in reply to your recent letter concerning Bangor Hydro Electric Company.

The data you sent me seem entirely reasonable for the purpose of testing whether the reduced rates will produce earnings within the zone of reasonableness.

The fact that the Commission intends to review the earnings position of Bangor Hydro as soon as the 1967 actual results become available, and in view of the fact that the major uncertainty facing us now, i.e., the level of Federal Income Taxes, and their affect on the cost of money, and hence Fair Rate of Return, should also be resolved by that time, it is my opinion that the two rate reductions will produce a rate of return within the zone of reasonableness.

In this regard please refer to the enclosed tabulation showing that the rate of return will be 6.30%, based on the above data.

Please consider this letter and computations in conjunction with our report of September 20, 1967.

Cordially,

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DAVID A. KOSH

DAK:res

AIR MAIL

Enclosure

## CENTRAL MAINE POWER COMPANY

(Figures in Thousands of Dollars)

	<u>Plant in Service</u>	<u>Reserve for Depreciation</u>	<u>Contributions In Aid Of Construction</u>	<u>Materials &amp; Supplies</u>	<u>Unfinished Construction</u>	<u>Rate Base</u>
1967						
January	47,959.6	14,013.3	138.5	741.4	302.5	
February	47,975.7	14,133.0	138.5	713.8	936.2	
March	47,985.8	14,250.2	138.5	762.9	1,081.2	
April	47,998.0	14,364.5	138.5	731.3	1,303.2	
May	47,991.0	14,466.6	138.5	774.9	1,550.2	
June	47,997.3	14,583.0	138.5	766.1	1,908.4	
July	48,000.5	14,702.3	138.5	755.5	2,107.9	
August	48,004.6	14,940.9	145.5	806.9	2,666.6	
Sept.	48,014.0	15,059.2	145.5	827.4	2,859.5	
1966						
October	47,494.0	13,902.1	133.4	757.8	698.9	
Nov.	47,520.0	13,999.2	133.6	735.6	750.9	
Dec.	47,944.5	13,897.5	138.4	805.8	266.4	
Totals	574,885.0	172,311.8	1,665.9	9,179.4	16,431.9	
Totals divided by 12 =						
	47,907.1	14,359.3	138.8	764.9	1,369.3	35,543.2

Net Operating Income Actual 9/30/67	2,614.8
Less - Adjustment for Estimated 6% FIT surcharge	90.0
9/1/67 Rate Reduction 211,209 x 52%	109.8
11/1/67 Rate Reduction 281,668 x 52%	146.5
	<u>2,268.5</u>

2,268.5 divided by Rate Base of 35,543.2 = Rate of Return of 6.38%

October 26, 1967

Kosh-Glassman Associates  
1145 19th Street, N. W.  
Washington, D. C.

Re: Bangor Hydro Electric Company

Gentlemen:

Since the receipt of your initial report dated September 20, re the above, additional information has been developed by the staff of the commission in connection with the rate base and earnings of Bangor Hydro. In accordance therewith I enclose herewith a commission staff computation using an average rate base for the twelve months ending September 30, 1967.

As you know, Bangor Hydro has filed reduced rates effective November 1st in addition to the reduction which became effective September 1st. The annualized effect of these reductions is reflected in the document above referred to.

In view of the foregoing would you advise us as soon as possible as to:

1. The propriety of using the updated figures as shown on the staff computation, and
2. Assuming the propriety of using this data for the instant purpose, whether or not, in your opinion, the resulting rate of return is within the range of reasonableness.

Your early response will be appreciated.

Very truly yours,

---

Chairman

dm:p  
enc.

BANGOR HYDRO-ELECTRIC COMPANY  
EFFECT OF PROPOSED RATE ADJUSTMENTS

RATE BASE <u>1/</u>		\$35,543,000
RETURN		
Net Operating Income for 12 months to 9/30/67		\$ 2,614,800
Less - Adjustment of 6% increase in Federal Income Tax	\$90,000	
Rate Adjustments -		
9/1/67 - \$211,200 x .52% =	109,800	
11/1/67 - \$281,668 x .52% =	146,500	
	346,300	346,300
		\$ 2,268,500

RATE OF RETURN

\$2,268,500 divided by \$35,543,000 = 6.38%

Note: 1/ Average 12 monthly values, October 1966 to September 1967 inclusive. Based on the sum of Accounts 101 and 102; plus materials and supplies, less the depreciation reserve and contributions in aid of construction.