

ALASKA LEGISLATURE COMMITTEE FILES 1983 - 1984 8672

2589 HLC HB 684 - HB 704 259

Representative Wendte  
May 26, 1983  
Page 3

because of the low (26 percent) level of utilization for this project in the early years of operation. Swan Lake rates would also decrease substantially. Power rates for Terror Lake would decrease by a lesser amount, because it is already expected to be 68 percent utilized in its first year of operation. Solomon Gulch is essentially fully utilized now, and so would not have any rate decrease under this scenario.

I hope this information is helpful. If you have any questions or would like additional research, please let us know.

JK

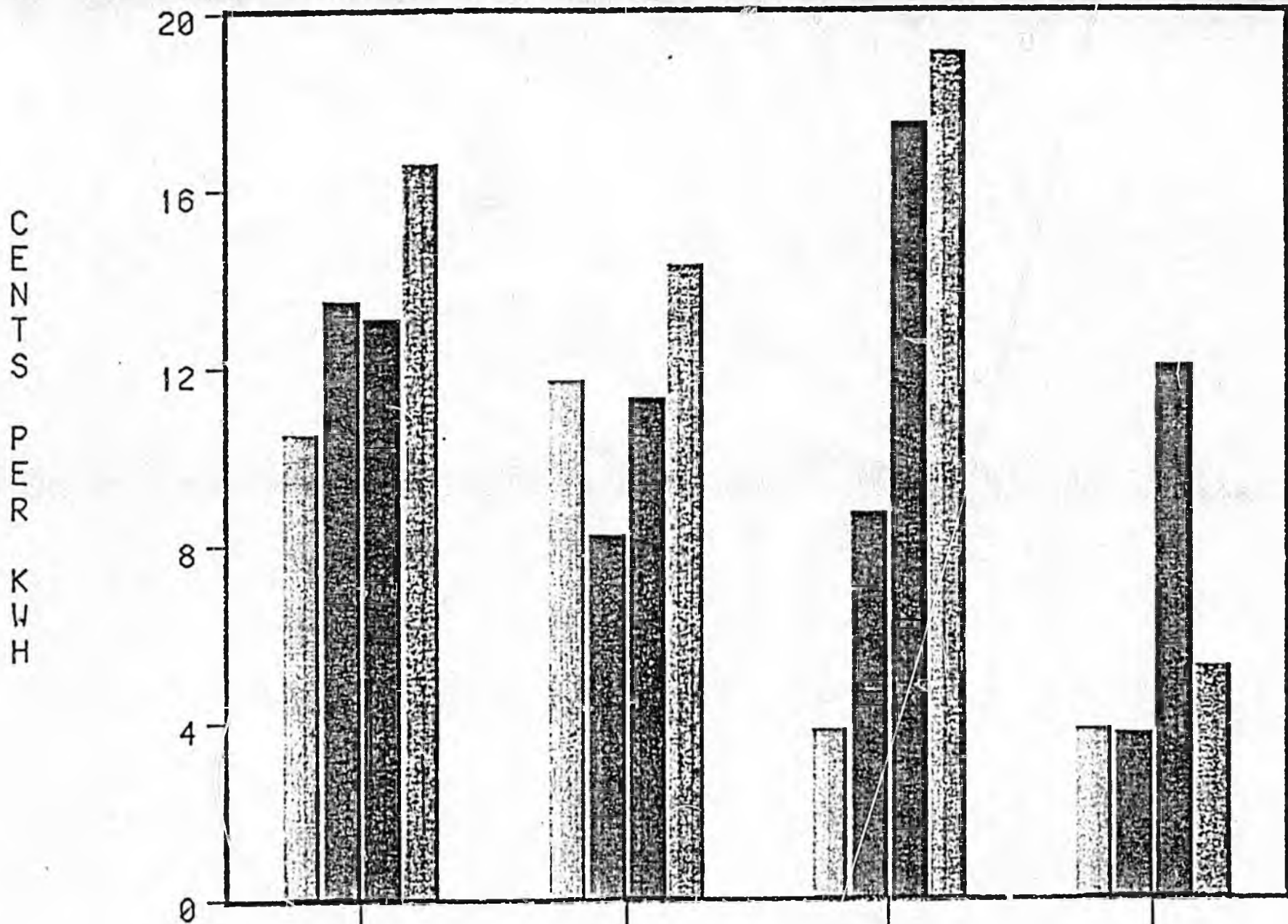
Attachments

COMPARISON OF ALASKA POWER AUTHORITY WHOLESALe RATES  
 FY 1986 -- Four Scenarios  
 (Cents Per Kilowatt Hour)

Project	Current System	90 Percent usage of Swan Lake	Stand Alone Case	Stand Alone Case High Usage
Solomon Gulch	10.5	11.7	3.8	3.8
Swan Lake	13.5	8.2	8.7	3.7
Terror Lake	13.1	11.3	17.5	12.0
Tyee Lake	16.6	14.3	19.1	5.2

Source: Alaska Power Authority, 5/83  
 House Research Agency 5/26/83

1986 - Four Scenarios

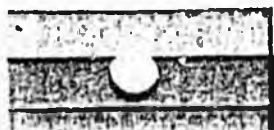


CURRENT SYSTEM

90% SWAN USAGE

STAND ALONE CASE

ST. ALONE-HIGHUSE



SOLOMON GULCH  
SWAN LAKE  
TABOR LAKE

SCENARIO

TYEE LAKE

Prepared by: House Research Agency, 5/83  
See text for further explanation.



ALASKA STATE LEGISLATURE  
HOUSE OF REPRESENTATIVES  
RESEARCH AGENCY

Pouch Y, State Capitol  
Juneau, Alaska 99811  
(907) 465-3991

May 27, 1983

MEMORANDUM

TO: Representative Ron Wendte

FROM: Jack Kreinheder  
Research Staff

RE: Power Rates for APA Projects  
Research Request 83-182 (Additional Information)

Suzanne Mullen of your staff provided a set of additional rate projections made by the Alaska Power Authority and asked that we prepare a comparative graph and table similar to that which was included in my memo of May 26. The graph and table are attached, and a brief explanation of the rate comparison follows.

The first scenario shown in the graph and table is identical to the second scenario included in my previous memo, and is repeated here as a basis for comparison with the other cases. The power rates shown for this first scenario are based on the current four-project APA system in FY 1986, with Swan Lake power sales at 90 percent of project capacity.

The second scenario shows the effect on power rates of excluding the Tye Lake project from the APA system, with the other three projects remaining in the system. The power rates for Tye would increase from 14.3 cents to 19.1 cents in 1986 if it were separated from the system, unless additional power from the project could be sold or some other action was taken to reduce rates. The rates for the other three projects would all decline if Tye were removed from the APA system, because they would not have to share the higher cost of Tye power.

Swan Lake is excluded from the APA system under the third scenario, with Tye, Solomon Gulch, and Terror Lake remaining in the system. The power rates for Swan Lake would decline by more than 50 percent, from 8.2 cents to 3.7 cents, if this separation occurred, and if 90 percent of the power from the project can be sold in 1986. The rates for Tye and Terror Lake would increase substantially if Swan Lake were removed from the power system, because of the loss of Swan Lake's relatively low cost power to share the system debt service. Solomon Gulch would have a minor rate increase.

Representative Wendte  
May 27, 1983  
Page 2

Under the fourth scenario, Tyee and Swan Lake are both removed from the APA system, leaving only Solomon Gulch and Terror Lake. Tyee and Swan would both have the same power rates as if they had independently been excluded from the system. Terror Lake rates would increase from 11.3 cents in the base case to 13.7 cents under this scenario, while Solomon Gulch rates would stay about the same.

Please contact me if you have any questions or would like additional information.

JK

Attachments as stated

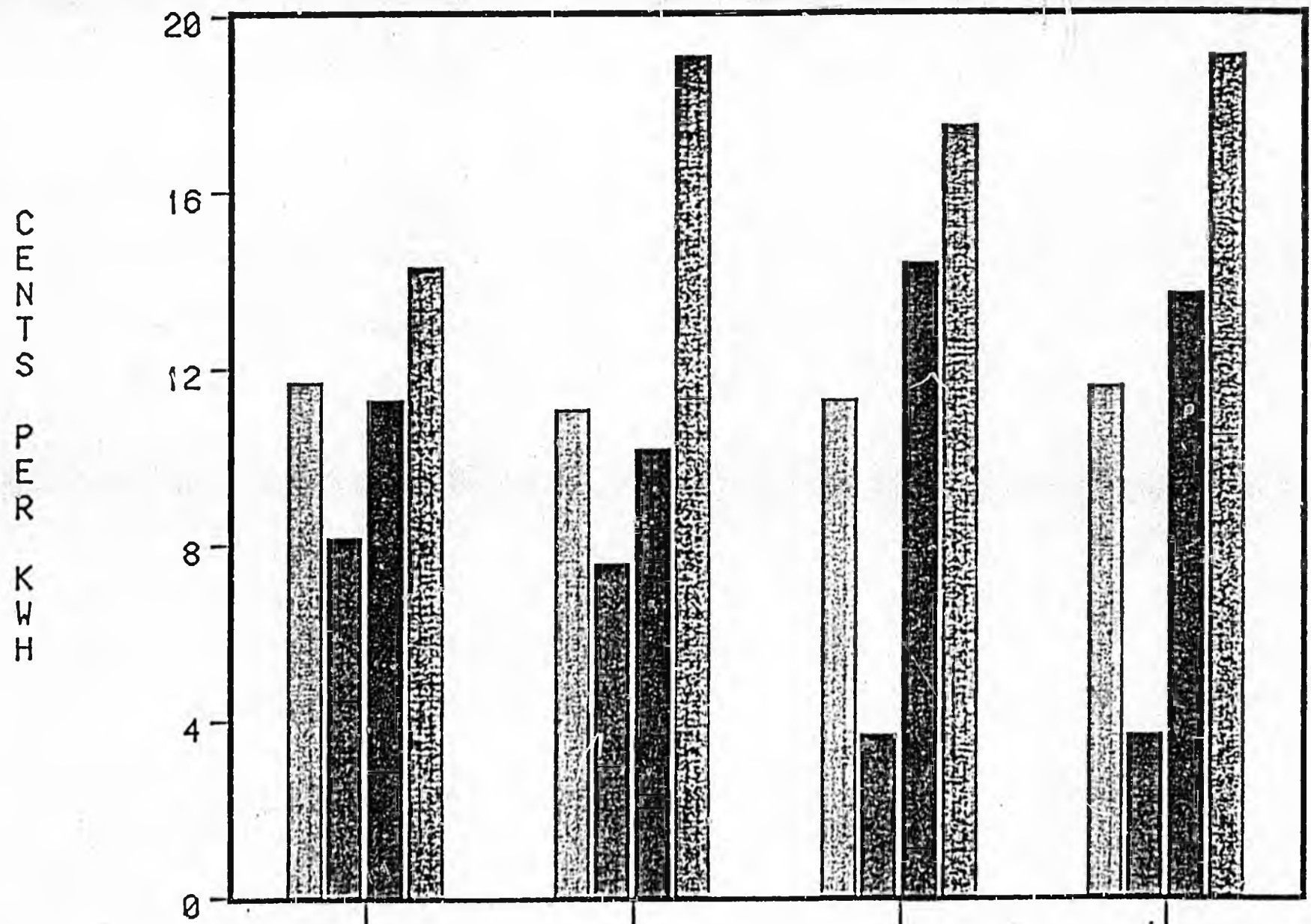
COMPARISON OF POWER RATES FOR ALASKA POWER AUTHORITY PROJECTS

FY 1986 -- Four Scenarios  
(Cents Per Kilowatt Hour)

Project	Base Case -- Assumes 90% Swan Lake Usage	Tyee Lake Excluded From APA System	Swan Lake Excluded From APA System	Tyee & Swan Excluded From APA System
Solomon Gulch	11.7	11.1	11.3	11.6
Swan Lake	8.2	7.6	3.7	3.7
Terror Lake	11.3	10.2	14.4	13.7
Tyee Lake	14.3	19.1	17.5	19.1

Source: Alaska Power Authority, 5/83  
House Research Agency, 5/27/83

COMPARISON OF APA WHOLESALE POWER RATES  
 1986 - Four Scenarios (Version 2)



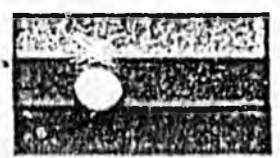
BASE-SWAN @ 90%

TYEE EXCLUDED

SWAN EXCLUDED

TYEE & SWAN EXCL.

TYEE LAKE



SOLOMON GULCH  
 SWAN LAKE  
 TERROR LAKE

Scenario

Prepared by: House Research Agency, 5/27/83  
 See text for further explanation.



ALASKA STATE LEGISLATURE  
HOUSE OF REPRESENTATIVES  
RESEARCH AGENCY

Pouch Y, State Capitol  
Juneau, Alaska 99811  
(907) 465-3991

April 12, 1983

MEMORANDUM

TO: Representative Ron Wendte

FROM: Jack Kreinheder *JK*  
Research Staff

RE: Susitna "Blackmail Clause" [AS 44.83.398(h)(2)]  
Research Request 83-145

Suzanne Mullen of your staff asked that we briefly explain the current effect of [AS 44.83.398(h)(2)], commonly referred to as the Susitna "blackmail clause," on the viability of the Susitna hydroelectric project and on other Alaska Power Authority projects.

As you know, the clause states that if \$5 billion is not appropriated to the power development fund by July 1, 1986, the power rate for each project owned by the Power Authority will increase to a level sufficient to return to the State 10 percent of the State investment in the project each year. There has been some controversy over the definition of the term "State investment" as used in the clause, which has resulted in uncertainty over the power rates that would occur if the clause went into effect. In any case, the clause would result in a substantial increase in power rates, up to 100 percent or more for some projects. The higher rates under the clause would apply not only to current projects, but to Susitna and other future projects, as well.

The "blackmail clause" was enacted as part of SB 25 in 1981, and was intended to provide some assurance that Susitna or another large Rail-belt power project would receive appropriations comparable to those made in 1980 and 1981 for power projects in other regions of the state. At that time, \$5 billion was considered sufficient to pay for almost the full cost of Susitna and the other projects under development.

As a result of the sharp declines in State revenues over the last two years, the blackmail clause is now considered by the Power Authority and other experts to be an obstacle, rather than an aid, to development of Susitna and other projects. As you know, the Power Authority has introduced (through the Governor's Office) legislation to repeal the clause.

Representative Wendte

April 12, 1983

Page 2

The basic problem is that falling State revenues have made it extremely unlikely, barring a complete reversal in oil price trends, that the State can afford to appropriate \$5 billion for power projects by FY 86. Approximately \$500 million has been appropriated for power projects to date, so that an additional \$4.5 billion would have to be appropriated in the next three fiscal years to meet the requirements of the clause. The latest Department of Revenue figures (30th percentile) project about \$8.8 billion in total general fund revenues from FY 84 to FY 86. At current levels, the operating budget alone would require about \$5.8 billion over these three years, leaving only \$3 billion for all loan and capital appropriations. Under more optimistic revenue forecasts, it would be more practical to appropriate the required \$4.5 billion for power projects, but very little money would remain for other capital projects or loans.

Because it appears almost certain that the "blackmail clause" would take effect if it remains law,\* the electric utilities in the Railbelt and other areas of the state have become concerned about the effect of the clause on them. The clause, as part of the Power Authority's rate statutes, must be included in every power sales contract negotiated by the Authority. Although the Authority has obtained power sales contracts for the Solomon Gulch, Terror Lake, and Swan Lake projects, the utilities involved are very concerned about the prospect that their rates for purchased power could double in three years.

The Power Authority's financial advisors also fear that the clause could affect the issuance of revenue bonds for existing and future power projects, because the bond markets could be concerned about the ability and willingness of utilities to pay the higher rates under the clause. The financial advisors have stressed the importance of having the Power Authority's first bond issues be as straightforward and risk-free as possible in order to establish a sound credit rating.

With respect to Susitna, both the Governor and the Federal Energy Regulatory Commission (FERC) have stated that construction cannot begin, nor will a FERC license be issued, until power sales agreements for Susitna power have been signed by Railbelt utilities. As mentioned earlier, the "blackmail clause" applies to future power projects, not just projects now under construction or in operation. One of the

---

\* There have been questions raised about the constitutionality of the clause, and it is possible that the clause would be struck down in court. The clause is currently the subject of a lawsuit by the Trustees for Alaska; however, the suit has been stayed pending legislative action on the measures to repeal the clause.

Representative Wendte  
April 12, 1983  
Page 3

largest obstacles to the successful negotiation of the Susitna power sales agreements is that the power rates for Susitna depend heavily on the level of State funding for the project, which is uncertain at this time. The clause accentuates this problem by creating the prospect that Susitna power rates could be considerably higher than estimated by recent studies.

I hope this information is useful. If you have any questions or would like additional research, please let us know.



ALASKA STATE LEGISLATURE  
HOUSE OF REPRESENTATIVES  
RESEARCH AGENCY

Pouch Y, State Capitol  
Juneau, Alaska 99817  
(907) 465-3991

April 15, 1983

MEMORANDUM

TO: Representative Jack McBride

FROM: Jack Kreinheder  
Research Staff *JK*

RE: Swan Lake Hydroelectric Project  
Research Request 83-89

In response to a request made by Rena Bukovich of your staff, this memorandum provides the following information on the Swan Lake hydro project near Ketchikan:

- (1) the expected construction cost and completion date of the project;
- (2) a comparison of the projected cost of power from the project and current power rates in Ketchikan; and
- (3) the status of the power sales agreement between Ketchikan and the Alaska Power Authority.

PROJECT STATUS

The Swan Lake hydro project is expected to be completed and begin operation by January 1984. According to John Ferguson, the Swan Lake project manager for the Alaska Power Authority, the project was 84 percent complete as of March 31, 1983. The project will have an installed generating capacity of 22.5 megawatts and an annual firm energy production of about 70 million kilowatt hours per year.

The total completed cost of the project was estimated at \$99.2 million as of February 1, 1983, including about \$2 million in contingencies. At that time, \$72.4 million had been spent by the Power Authority on the project. The financing for the project consists of \$69 million in State appropriations and \$35 million in short-term interim financing obtained by the Power Authority. The interim financing comes due in March 1984, and will have to be refinanced at that time, probably through the issuance of long-term revenue bonds.

### CURRENT AND PROJECTED POWER RATES

As you know, concerns have developed in recent months about the high projected cost of power from the APA hydro projects now under construction, primarily in regard to the Tye Lake project.\* Initial rate projections done by the Power Authority early this year indicated that power rates from the Swan Lake project might also exceed the cost of diesel generation in the first years of project operation. However, current rate analyses conclude that the cost of power from Swan Lake will be competitive with diesel generation from the beginning of project operation, even without any additional State funding or other legislative action. In addition, there appears to be a good chance of marketing surplus power from the project to industrial users, thus reducing power rates substantially.

### Current Diesel Generation Costs

Bob Arnold, General Manager of the Ketchikan electric utility, stated that the current cost of diesel power generation for the utility is about 13 cents per kilowatt hour. This cost is up from 12 cents per kilowatt hour (KWH) in 1982, despite the decline in world oil prices. Mr. Arnold said that there has been only a small drop in diesel fuel prices in Ketchikan (about five cents per gallon) and that this drop was offset by increased operation and maintenance costs for the diesel generating units.

Ketchikan also generates about 45 percent of its power requirements from three hydro plants. The average cost of power from these plants is only about 4 cents per KWH. These existing hydro facilities will continue to be operated after Swan Lake begins operation, unless increased utilization of the project makes it economic to shut the smaller plants down.

### Swan Lake Power Rates

The current "base case" power rate for Swan Lake is expected to be about 12.5 cents per KWH in FY 86, according to Mike Yerkes, Director of Operations for the Power Authority. This base case rate forecast assumes no additional State appropriations to the energy program and no sale of surplus power from Swan Lake. FY 86 is the critical year for power rates, because that is when the Terror Lake project would begin operation. Under the rate structure established last year by

---

\* For a more detailed discussion of the Tye Lake rate situation, see my memo of 2/11/83 to Representative Clocksin (Request No. 83-39).

Representative McBride  
April 15, 1983  
Page 3

HB 9, each power project has a separate rate, but the debt service is pooled for all of the projects under the energy program for Alaska. Therefore, the addition of new projects to the system can affect the rates for earlier projects such as Swan Lake.

The higher ratio of debt to equity for Terror Lake and the way in which debt is pooled among the four projects -- Swan, Tyee, Terror, and Solomon Gulch -- results in power rates for all of the projects peaking when Terror Lake is added to the system in FY 86.

As noted earlier, Swan Lake is expected to begin operation in January 1983. During the first few months of operation, until long-term debt is issued, the power rate will be set at a level to cover only operation and maintenance costs. This rate will probably be in the range of 4 to 5 cents per KWH. As of July 1, 1985, the power rate is projected to increase to about 9 cents per KWH, with a further increase in July 1986 to the 12.5 cents per KWH rate cited above. The rate is then expected to decline slowly to 11 cents in FY 90, 8.5 cents in 1995, and just over 6 cents in the year 2000. See attachment A for a chart of this rate trend.

It should be noted that these rate projections are somewhat arbitrary in that they do not account for the addition of other power projects such as Bradley Lake or Susitna. However, the future of these projects is still uncertain and their impact on power rates depends largely on the financing used to build them.

If these rate estimates are accurate, there should be no difficulty in marketing power from the Swan Lake project. The highest power rate would be in FY 86 at 12.5 cents per KWH, less than the 13 cents per KWH which it now costs Ketchikan to generate diesel power. If oil prices drop substantially or revenue bond interest rates are higher than expected by the Power Authority, a rate problem could develop for Swan Lake; however, this appears unlikely.

#### Sale of Surplus Power

About 40 percent of the generation capacity of the Swan Lake project would be used in the first years of project operation, based on current Ketchikan power demand and growth rates. Mr. Arnold has had discussions with the managers of industrial plants in Ketchikan who now generate their own power about the possibility of purchasing Swan Lake power. He believes it is likely that agreements to market surplus Swan Lake power can be negotiated and that the power output of the project can be fully utilized from its first year of operation.

Full utilization of Swan Lake's capacity would decrease the power rate from 12.5 cents to about 8 cents per KWH in FY 86. Under this arrangement, power sales to industrial users would be made on an interruptible basis, meaning that sales to industrial users would be reduced as the power demand of residential and commercial users increased in future years.

Full or increased utilization of the Swan Lake project would also reduce power rates for the other three projects under the energy program, because of the pooling of debt service among the projects. With higher utilization, Swan Lake would pay for a larger percentage of the debt service for all the projects. This effect is most important for the Tyee project because it has the highest power cost of the four projects. For Tyee, full utilization of Swan Lake would reduce the power rate from 16 cents per KWH to about 13.5 cents.

This lower rate would substantially improve the marketability of Tyee power, although a further decrease in rates through other means could still be necessary. It should be noted that increasing the utilization of Tyee itself would be the most effective means of lowering the power rate from that project. Consideration is being given to this option, but the market for surplus power in Petersburg and Wrangell appears weaker than in Ketchikan. One longer-term option would be to construct an intertie between the Tyee and Swan Lake projects, in order to make additional capacity available to Ketchikan when the power from Swan Lake is fully utilized. The Power Authority is currently conducting a study to evaluate this option, as well as other power sources for Ketchikan.

Attachment B illustrates the relationship between increased utilization of Swan Lake and power rates for the project. The figures also show that Swan Lake covers an increasing percentage of debt service for the energy program as utilization rises. This increasing share of debt borne by Swan Lake is what causes the decline in power rates for other projects.

The one drawback or limitation to the increased utilization of Swan Lake is that the contracts for the sale of surplus power will not be firm take-or-pay contracts. This means that if an industrial purchaser shuts down because of market conditions or a strike, for example, the purchaser will not have to pay for the power which is not used. As a result, the power rate paid by the Ketchikan utility would have to revert to a higher rate to cover the debt service and operating costs of the project.

This situation would not be as problematic for Ketchikan as for Petersburg and Wrangell, because the highest rate for Ketchikan would still be below the cost of diesel generation (according to current estimates).

Representative McBride  
April 15, 1983  
Page 5

However, for Petersburg and Wrangell, the increased power rate resulting from reduced utilization of Swan Lake could be higher than the cost of diesel generation for these communities. Therefore, Petersburg and Wrangell may be reluctant to sign power sales agreements based on a power rate that depends on full utilization of Swan Lake. It may be necessary to implement some type of "backup plan" based on State appropriations or loans to ensure that the power rates for these cities will not exceed an acceptable level.

The Power Authority Board of Directors will consider the power rate issue at their board meeting scheduled for Monday, April 18 in Juneau.

#### SWAN LAKE POWER SALES AGREEMENT

An agreement for the purchase of Swan Lake power was signed by the Power Authority and the City of Ketchikan in the spring of 1982. The agreement now needs to be revised to incorporate the substantial changes made by HB 9, which was enacted at the end of the 1982 legislative session. The original agreement specified that the contract was subject to statutory changes and would be changed to reflect any changes.

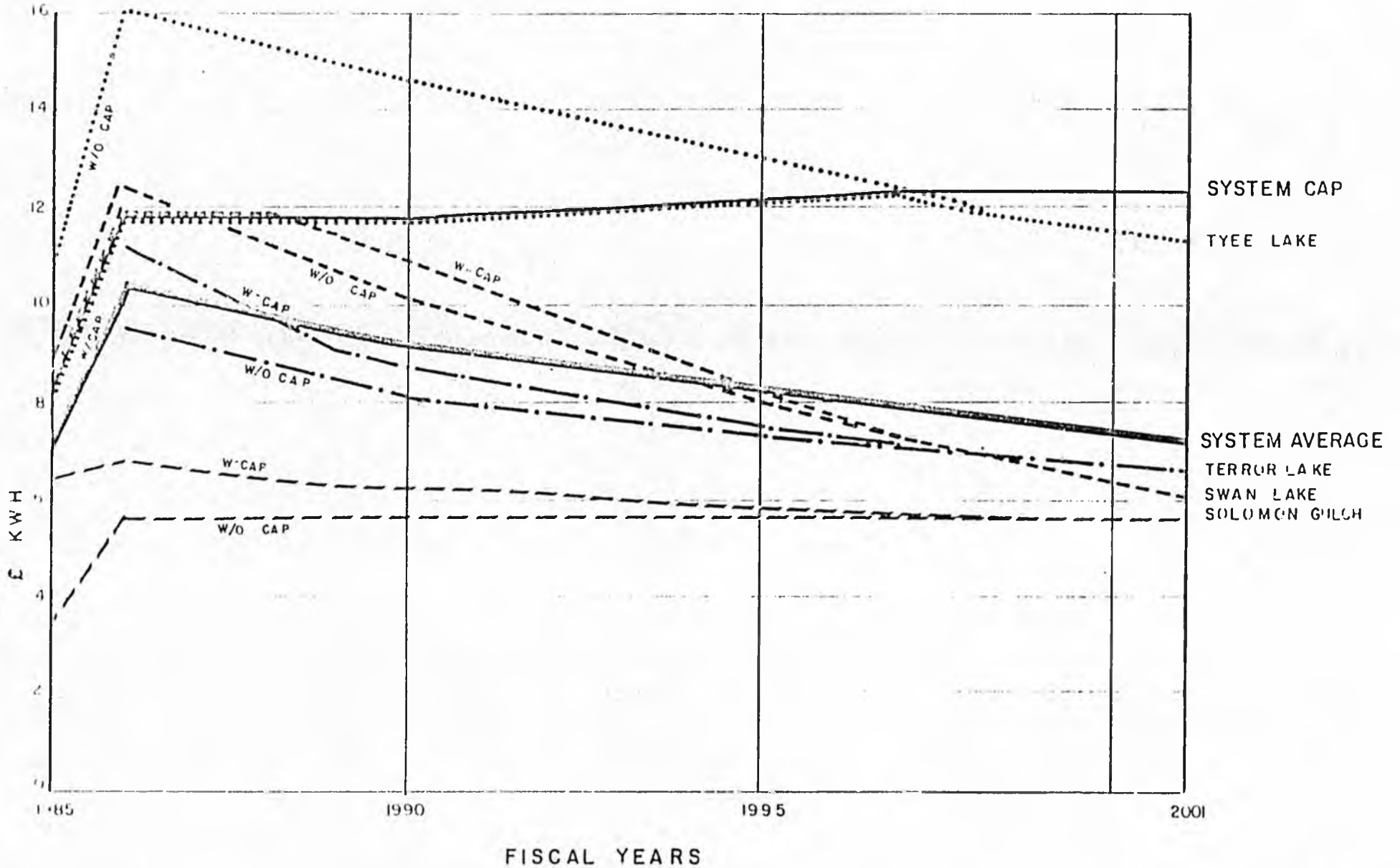
The Power Authority and the City of Ketchikan decided last fall to wait until the end of the current legislative session before revising the existing contract, rather than risk having to revise the contract a second time if changes to the Power Authority's statutes are made during this session. As the project will not begin operation until at least January 1984, this delay should not have any significant effect on the project.

\* \* \* \* \*

I hope you find this information useful. If you have any questions or would like additional research, please do not hesitate to call.

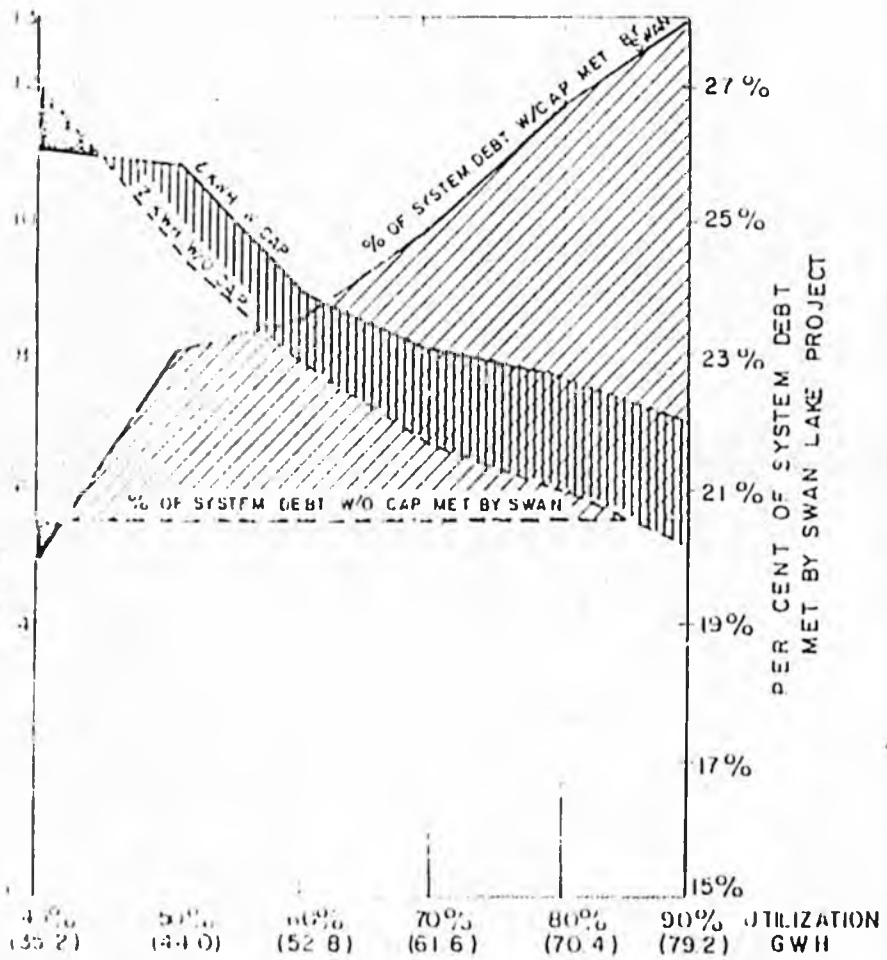
Attachments

HOUSE BILL 9  
BASE CASE POWER RATE STRUCTURE (1985-2001)

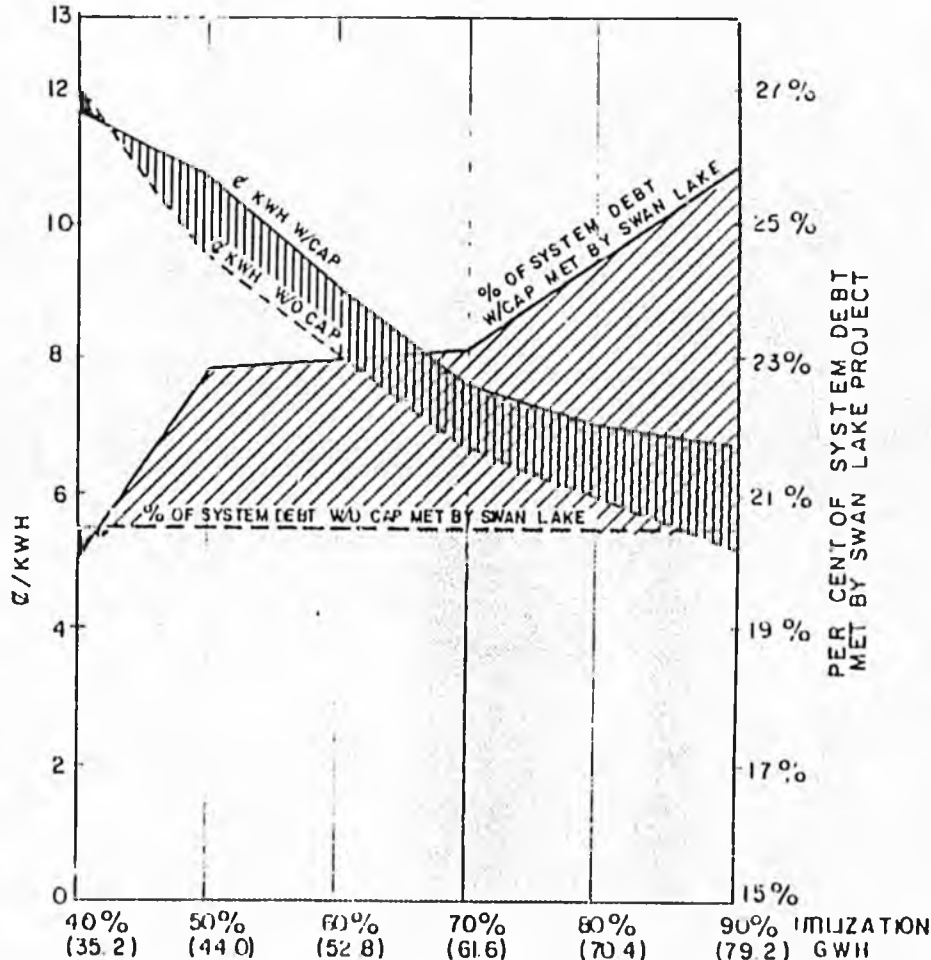


# UTILIZATION ANALYSIS FOR THE SWAN LAKE PROJECT

F.Y. 1986, F.Y.1987



FY 1986



FY 1987

**ANALYSIS:**

- AS UTILIZATION OF SWAN LAKE INCREASES THE "WITHOUT CAP RATE" AND THE "WITH CAP RATE" DECREASES
- THE AMOUNT OF TOTAL SYSTEM DEBT COVERED BY SWAN LAKE BETWEEN F.Y.1986 AND F.Y.1987 DECREASE AT EACH LEVEL OF UTILIZED CAPACITY.



ALASKA STATE LEGISLATURE  
HOUSE OF REPRESENTATIVES  
RESEARCH AGENCY

Pouch Y, State Capitol  
Juneau, Alaska 99811  
(907) 465-3991

February 11, 1983

MEMORANDUM

TO: Representative Don Clocksin

FROM: Jack Kreinheder  
Research Staff

RE: Lake Tye Power Costs and Project History  
Research Request 83-39

You requested that we summarize the current status of contract negotiations for the sale of power from the Lake Tye hydro project. You asked that we address the expected cost of power from the project, current power costs in Petersburg and Wrangell, and alternatives for reducing Tye power costs to marketable levels.

The attached letter from the Alaska Power Authority outlines the sequence of construction cost estimates for the Tye project and the decisions made by the Power Authority Board concerning project construction.

It is important to emphasize that the power cost projections in this memorandum are preliminary and are currently being revised by the Power Authority to reflect detailed financing arrangements for the Tye project. These revised cost estimates will probably be somewhat lower than the figures cited here.

---

SUMMARY OF FINDINGS

The basic power marketing problem for the Tye project is that the wholesale cost of power from the project in its first years of operation is projected to be about 40 percent higher than current power generation costs for Petersburg and Wrangell. The Power Authority estimates that Tye power will cost about 16.5 cents per kilowatt hour (KWH) in FY 1986. Recent press reports have cited claims by Petersburg officials that the retail cost of power from Tye would be 100 percent higher than current levels. However, these claims are disputed by the Power Authority, as discussed later.

Power generation in Petersburg and Wrangell now costs about 12 cents per KWH and this cost is not likely to increase substantially over the next several years unless oil prices increase more than expected by most forecasters. These communities are understandably not willing

to sign contracts to purchase Tye power at rates substantially higher than current generation costs.

If no action is taken by the legislature to reduce Tye rates, it appears that power sales agreements could not be obtained and the Power Authority would not be able to sell the necessary revenue bonds to repay the interim financing for the project. Although I did not research the possible steps the Power Authority might take in this situation to avoid a default on the Tye debt, the Authority would probably be in a precarious financial position.

There are several possible approaches to reducing power rates for the Tye project, most of which require more State money:

- (1) Make an additional lump sum appropriation to the hydro program to reduce the amount of debt financing required for Tye and other projects. About \$70-80 million may be required to reduce Tye rates to the level of current power costs. If desired, this appropriation could be structured as a loan, to be repaid to the State after Tye power becomes competitive with the cost of power from present generation facilities.
- (2) Appropriate a smaller amount of about \$20 million only to the Tye project and enact temporary legislation which would reduce only the Tye rates. (Under present law, an appropriation to any power project would reduce the power rates by an equal percentage for all projects.)
- (3) Make annual appropriations of about \$2-3 million to cover a portion of the debt service costs for the Tye project, allowing power rates to be reduced until the project becomes competitive with diesel generation costs.
- (4) Amend the rate structure under present law to spread the higher cost of Tye power among other power projects.
- (5) Restructure the long-term debt for the Tye project to reduce debt service costs in the early years of project operation (the viability of this approach is uncertain).

Administration  
Choice →

TYEE POWER COSTS

The following table shows projected wholesale power costs for the Tyee project from FY 85 to FY 90.

PROJECTED TYEE WHOLESALE POWER COSTS (Cents per Kilowatt Hour)						
<u>Fiscal Year</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Power Cost	12.8	16.5	16.7	16.8	17.0	17.2
Power Sales (Millions of KWH)	32.0	32.8	33.6	34.5	35.3	36.2

Source: Alaska Power Authority for FY 85-86, adjusted by House Research Agency for FY 87-90 for 4 percent annual increase in debt service cap, 3 percent average annual load growth for all APA projects, and 5 percent annual inflation in operation and maintenance costs. Debt service calculations based on 35-year revenue bonds at 11 percent interest, with a 1.1 coverage level.

---

Again, these projections are preliminary, and more accurate figures will be available within a week. These projected rates are probably on the high side because they do not account for the interest earned on debt reserve funds or the lower-than-expected cost of the interim financing for the project. The Power Authority's financial advisors are now working to incorporate these and other adjustments to arrive at more accurate rate projections. One uncertainty in these rates is that they assume the Wrangell sawmill will buy about 7 million KWH per year -- about 20 percent of total projected power sales from the project. The sawmill was shut down for over a month this winter and could be an uncertain buyer of Tyee power.

The Tyee project is scheduled to be completed in early 1984, and may be on line as soon as October 1983 if work continues at its current pace. When the project begins generating power, the initial rate will be set to cover only operation and maintenance costs (4-5 cents/KWH) until the start of the 1985 fiscal year, when the rate will increase to cover the costs of long-term financing for Tyee and the Swan Lake project. The power rate will increase again in FY 86 to reflect the cost of

revenue bonds issued for the Terror Lake project. After 1986, the Tye power rate will probably increase by about two percent per year.\*

#### PROJECT FINANCING

The completed cost of the Tye project is now estimated at \$115 to \$125 million. Construction of the project has been financed by \$82 million in appropriations from the legislature and \$50 million in interim financing. This interim financing will have to be repaid in the spring of 1984 through the issuance of revenue bonds, additional State appropriations, or a combination of the two. The Swan Lake project also has \$50 million in interim financing which will be repaid at about the same time. Terror Lake has \$100 million in short-term debt which will be due in 1985.

#### HB 9 RATE STRUCTURE

The financing and power costs for Tye are tied to those of other Power Authority hydro projects under legislation enacted in 1982 (CCSHB 9 -- Chapter 155). This statute requires each hydro project to pay its "proportionate share" of the total debt service costs for all projects, as determined under a formula in the statute. Basically, the statute means that if the construction cost of Tye is 25 percent of the total cost of all projects in the system, Tye must pay 25 percent of the total debt service costs for all projects. The wholesale power rate for each project is then determined by adding operation and maintenance expenses to debt service costs and dividing this sum by the expected power sales for each project.

The HB 9 rate structure replaced the "postage stamp" or single statewide rate formula which was enacted in 1981 by SB 25. The major purpose for the change in the rate structure was to increase the incentive for building cost-effective and properly sized projects, by linking power costs more directly with project construction costs.

When the conference committee on HB 9 reviewed rate projections for the four power projects, there was concern that the rates for the Tye and Swan Lake projects would be excessive under the HB 9 rate structure. As a result, the committee included in the legislation a limit or cap on the debt service cost for each project. Under this cap, no project must pay more than the average debt service cost for all Power Authority

---

\* The rate calculation is complex, but the three main factors that affect the project rates after 1986 are: inflation in O&M costs, the rate of growth in power sales, and the 4 percent annual increase in the HB 9 debt service cap. The addition of the Bradley Lake project or other projects could also affect Tye rates substantially.

projects, plus a certain percentage which increases each year (8 percent in FY 85, 12 percent in FY 86, and so on). Although this debt service limit reduces the power rate for Tyee substantially, it does not reduce the rate to a marketable level.

Because the debt service costs are pooled for all projects in the system, an appropriation to Tyee or any other project would reduce the power costs for all projects by an equal percentage.

### PETERSBURG AND WRANGELL POWER COSTS

#### Current Costs

Exact power costs for Wrangell and Petersburg were not readily available at this writing. However, the busbar generation cost (equivalent to the wholesale power cost from Tyee) for both communities is approximately 12 cents per KWH. Wrangell generates all of its electricity from diesels, while Petersburg obtains about half its power from the Crystal Lake hydro project, which was built many years ago. The Petersburg utility apparently has a higher level of debt than the Wrangell utility, which offsets the lower cost of power from the hydro facility.

While most of the recent publicity concerning the Tyee project has focused on the city of Petersburg, the Power Authority staff maintains that Wrangell would face a larger rate increase if Tyee power were purchased at current projected rates than would Petersburg. According to Mike Yerkes, who is negotiating the Tyee contracts for the Power Authority, this is because Wrangell would convert entirely from diesel generation to Tyee power, while Petersburg would continue to generate about half its power from the low-cost Crystal Lake hydro project, which was built decades ago.

#### Future Costs

The rate of increase in future generation costs for Petersburg and Wrangell is one of the basic questions to consider in determining what approach the State might take to the Tyee situation. The cost of diesel fuel is the largest expense component for these utilities, averaging about 9-10 cents per KWH generated over the past year. As you know, the future of world oil prices is highly uncertain and the range of forecasts is considerable. However, the most recent Department of Revenue forecast projects a 28 percent cumulative decrease in the real price of oil through FY 87. In nominal terms, oil prices in FY 88 are forecast to be about the same as today.

If this projection is accurate, it may be the early to mid-1990s before diesel generation costs would increase to the level of Tyee

costs. However, an additional consideration is that Wrangell and Petersburg may have deferred expansion of their generation facilities in expectation of receiving Tye power. Therefore, new generators might have to be added to meet increases in load growth during the 80s, which would increase power rates.

#### Retail Power Rates

Part of the publicity over the Tye project centered on claims by Petersburg officials that they would have to add about 9 cents per KWH to the wholesale cost of power from Tye for distribution and overhead costs, thus doubling the retail power costs from current levels. The Power Authority staff believe this figure is highly inflated and does not account for savings in diesel maintenance costs which would occur when Tye comes on line. The staff is preparing documented estimates of what they feel are more realistic distribution and overhead costs.

#### Other Concerns

It is important to note that the cost of power from current projects is not the only concern of Petersburg, Wrangell, and other cities or utilities to be served by Power Authority projects. These groups are also concerned that under the current rate structure, their power rates could increase substantially as additional projects are added to the system. Whether this would occur depends on the level of State funding for the additional projects. If the ratio of State funding to bonded costs for new projects is lower than the average for current projects, the rates for current projects would rise.

The "Susitna Blackmail Clause" [AS 44.83.398(b)(2)] is an additional source of concern for municipalities and utilities, as the clause could dramatically increase power rates if not repealed. This clause would increase power rates by requiring a 10 percent annual return on investment to the State if \$5 billion has not been appropriated for power projects by 1986.

### POSSIBLE APPROACHES TO THE TYEE RATE PROBLEM

There are several possible approaches to the Tyee rate problem, as summarized earlier. The choice among them is complex and depends on basic policy issues relating to the power development program. Some of the more important factors to consider are discussed below.

#### Lump Sum Appropriation

This approach would be the most expensive; preliminary calculations indicate that \$70-80 million would be necessary to lower the Tyee power rates to the cost of diesel generation.\* Although the outstanding debt on the Tyee project is only \$50 million, the pooling of debt service among all projects under the APA rate structure requires a larger appropriation to reduce Tyee rates sufficiently. A lump sum appropriation would also lower the power rates for Solomon Gulch, Swan Lake, and Terror Lake by an equal percentage (about 40 percent). This raises two questions.

First, is it necessary or desirable to reduce the power rates for other projects that already have reasonably priced power? Second, what effect would lowering the rates for all projects now on line or under construction have on future projects? Lowering the average power rate would reduce the debt/equity ratio for current projects and require a higher level of State appropriations for future projects unless power rates were to be increased for all projects.

#### Special Tyee Legislation

If special legislation were passed so that a one-time appropriation would be used to reduce only Tyee power rates, roughly \$20 million ~~would be required to provide the necessary rate reduction.~~ However, this approach could be viewed as creating a precedent for "bailing out" high-cost projects which might result in similar problems for future projects.

#### Annual Appropriation

In lieu of a one-time appropriation, the legislature could make annual appropriations of about \$2.4 million to cover the debt service shortfall that will result if power is sold at 12 cents rather than 16.5 cents per KWH. These appropriations would continue and eventually diminish

---

\* I have not included these calculations here for the sake of brevity, but can provide them if desired.

to zero as the cost of diesel generation increased to match the cost of Tyee power or the cost of Tyee power fell. Although it is uncertain how long these annual appropriations would be required, depending on fuel escalation rates and other factors, the total cost would probably be half or less the cost of a lump sum appropriation.

The Petersburg and Wrangell utilities would be eligible for rate relief under the power cost assistance program, but only for the portion of retail rates above 16 cents in FY 86. This floor increases by one cent each fiscal year. Also, cost assistance is available only for the first 600 KWH per month sold to each customer. Therefore, a separate appropriation specifically for Tyee debt service might be required each year in order to reduce power rates sufficiently.

#### Modification of Rate Structure

It would be technically possible to modify the statutory rate structure to reallocate at least part of the Tyee debt service to other lower cost projects, primarily Solomon Gulch and Terror Lake. The communities served by these projects would probably strongly oppose this change. In addition, the bond markets could view this juggling of the rate structure with some concern.

#### Restructure Project Debt

It may be possible to reduce the debt service costs for the first few years of operation of the Tyee project by borrowing additional funds with which to pay part of the interest on the bonds for several years. According to Sterling Gallager of John Nuveen and Associates, it is legally possible to have this type of arrangement for five years without violating federal arbitrage regulations. However, the financial viability of this approach is uncertain and would require additional research.

Another possibility would be to use a geometric financing approach, in which the debt service schedule would be shifted so that debt service costs would be lower in the early years and increase gradually as the project power sales increased. This approach has been used in a few utility bond issues, but it is uncommon and would also require more investigation to determine its viability for the Tyee situation.

### IMPLICATIONS FOR OTHER POWER PROJECTS

A number of legislators and other observers have expressed concern about the possibility of the Tye marketing problem occurring with Susitna or other hydro projects. This is a controversial issue with numerous points of view, but a few observations may be helpful in understanding the problem.

It is important to recognize the distinction between the economic feasibility of a hydroelectric project and the marketing feasibility of the same project. Although the economic feasibility of the Tye project is an issue itself, the point is that even a clearly feasible hydro project will usually require some sort of grant or low-cost financing to lower power rates to marketable levels in its early years of operation. After a period of years, increasing power sales and higher fuel costs for the alternative generation source should result in a break-even point, after which the hydro power becomes less expensive. The initial subsidy to the project can then be repaid, if necessary.

In the case of the Tye project, the continually increasing cost estimates for the project made it difficult to determine how much State money was required to achieve marketable power rates. The power-marketing problem for Tye is also accentuated by the fact that Tye has the largest excess generation capacity of the four projects now on line or under construction -- only about 25-30 percent of the project's capacity will be used in the first years of operation. This lower level of utilization means that a higher proportion of State funds is necessary to obtain reasonable power rates.

A major element of the Tye problem appears to be that neither the legislature nor the Power Authority placed sufficient emphasis until recently on the marketing of power from the projects under construction. Part of the reason for this apparent oversight is that in 1980 and 1981, State revenues were increasing rapidly and it was expected that most of the project costs would be funded through direct appropriations or low-cost loans, rather than by revenue bonds. With this expectation, power marketing was not an issue because of the low power costs. The sharp decline in State revenues has resulted in more reliance on debt financing, causing higher power rates and the marketing problem demonstrated by the Tye project.

With respect to the Power Authority, an additional problem was the lack of staff with experience in marketing and rate issues. It was only about 10 months ago that the Power Authority hired someone with rate setting and utility experience. Until then, the focus of the staff

was more on the feasibility, design, engineering and financing aspects of power development.

A final contributing factor to the Tyee situation was that the revisions to the Power Authority rate structure enacted in 1982 by HB 9 were not based on a full assesment of the effect of these rate revisions on the marketability of power from Tyee and the other projects.

The likelihood of the Tyee rate problem occurring with other power projects is difficult to assess. The Power Authority appears to have made good progress in dealing with the marketing issue. Several measures have been taken to avoid the recurrence of the Tyee cost escalation problem, and a number of recent bids for construction of the Terror Lake and Anchorage-Fairbanks projects have been substantially lower than engineering estimates.

In addition, the Authority has proposed changing its procedures to require power sales contracts to be signed before project construction begins, and this was done for the Terror Lake project. In the past it has been difficult to obtain contracts because it was uncertain how much funding would be provided by the legislature, and there is a natural incentive for communities to lobby the legislature for additional funds to reduce their power rates. It may also be difficult to obtain pre-construction power sales agreements for the Susitna project because of the long lead time of the project.

The chances of the Tyee power marketing problem occurring with future power projects would be reduced if the legislature made certain it had sound estimates of the maximum appropriation necessary for power marketing purposes before approving construction of a project, and committed itself to the appropriation of the necessary amount. Any changes in the rate structure should also be made only after detailed evaluation of the impact on project power rates and marketability.

\* \* \* \* \*

I hope this information is useful. If you have any questions or would like additional information, please don't hesitate to call.

JK

Attachment

# ALASKA POWER AUTHORITY

334 WEST 5th AVENUE · ANCHORAGE, ALASKA 99501

Phone: (907) 277-7841  
(907) 278-0001

February 9, 1983

Mr. Jack Kreinheder  
House Research Agency  
Pouch Y  
Juneau, Alaska 99811

Subject: Tye Hydroelectric Project-Summary of Estimated Total Costs

Dear Jack:

As per your request, following is a brief summary on the sequence of events on the Tye hydropower project primarily relating to cost. The summary of Board actions was extracted from our corporate minutes. Most of the actions taken by the Board were based on advice from myself and my staff.

On December 19, 1979, the Alaska Power Authority submitted a revised application to the Federal Energy Regulatory Commission (FERC) for the construction of the Tye Hydroelectric Project in the vicinity of Wrangell and Petersburg, Alaska. Our engineers, R.H. Rutherford Associates/International Engineering Company (IECO) estimated the total cost of the project at that time at \$19,590,000 (1980\$'s). With an allowance for inflation and interest during construction the estimated total capital investment at that time came to \$53,333,000.

In September 1980, IECO submitted a revised cost estimate of \$50,976,000 (August 1980\$'s).

Early in 1981, the Power Authority retained EBASCO Services, Inc., to prepare an independent cost estimate. EBASCO subsequently estimated the total project cost at \$96,693,000 (May 1981\$'s). Escalated to the midpoint of construction, this would represent a completed cost of approximately \$170 million. After reviewing the EBASCO estimate, IECO conceded that its previous estimates were low and IECO raised its estimate to \$81,069,000 (June 1981\$'s). EBASCO refuted this revised estimate.

Procurement of long-lead-time turbines began in July 1981 in anticipation of a FERC license. The Board of Directors was realigned by Statute in the latter part of July 1981. The FERC issued a license on August 5, 1981 and the award of several additional procurement and one construction contract followed almost immediately thereafter.

IECO continued to make monthly reports on the status of the project, including estimated total project costs. It is important to note that by the end of March 1982, IECO had increased its project estimate to \$97,072,000,

including engineering costs prior to construction. In the March report the overhead transmission line was estimated to cost \$12,840,000 plus a \$6,000,000 contingency. Less than two months later, during the bid opening for that contract, IECO provided an engineer's estimate of \$23,280,887.00-- an estimate that is 24 percent above any previous estimate, including contingency funds. The actual low bid was even higher at \$24,901,466.

Starting with the IECO estimate from the March 1982, report, adjusting for the actual low bid on the transmission line, and adding the estimated cost for a proposed separate substation construction contract, the estimated total project cost was increased by IECO to \$110,133,000 (May 1982). This did not include approximately \$5 million for owner provided insurance. During the months that followed, the total project cost has decreased and increased, slightly, as adjustments have been made for actual bids on relatively small procurement contracts..

In December 1982, and again in January 1983, senior staff of IECO and IECO's parent company, Morrison Knudson (M-K), met with representatives of the Power Authority to discuss construction management of the project, including total project costs. The latest information from IECO is that the total project cost will not exceed \$124,886,100. The Power Authority has asked the parent company, M-K, to completely review this estimate. A report from the M-K staff is anticipated the second week of March 1983.

A summary of Board actions, as extracted from our corporate minutes, is as follows:

- October 4, 1978 Board receives report on Tye Project indicating that, according to the reconnaissance study by Robert W. Retherford Associates, (RWR) the Project looks favorable and that Thomas Bay Power Commission (TBPC) will soon enter into contract with RWR for Federal Energy Regulatory Commission (FERC) work and that TBPC may request the Alaska Power Authority to take over the project.
- November 18, 1978 APA Board voted to make \$120,000 loan to TBPC for Tye FERC work and this would supplement the \$300,000 available from the Water Resources Revolving Loan Fund (WRRLF) in order to cover the \$475,000 contract with RWR.
- June 21, 1979 Board makes a loan to TBPC of \$60,000 for Tye Project. TBPC and Representative E.J. Haugen request the APA take over Tye. The Board directed staff to bring information back at next Board meeting for Project take-over.
- September 27, 1979 Tye Letter of Understanding with TBPC adopted by Board.
- November 2, 1979 Board authorized Executive Director to submit FERC license application. Also passed "stop-the-clock" resolution needed for bonding.
- February 7, 1980 Board agreed to extend contract for advanced Engineering

and Design to IECO for Tye but it was later decided with legal council to seek competitive proposals.

April 13, 1980 Board selects IECO for the Engineering and Design from among three proposals.

October 23, 1980 Board informed that costs have increased from \$39,000,000 to \$51,000,000 and has IECO explain to Board.

April 20, 1981 Board selects consultant panel as required by FERC.

May 14, 1981 Board awards Bids for Turbines.

July 6, 1981 Board considered awarding contract for Steel Towers and Conductors but defers "notice to proceed" until after opening of major Civil Contract so that the Board could get a better fix on the true cost of the Project.

August 18, 1981 FERC license has been received. Bids for Civil construction were reviewed as were the economics of the Project based on new cost estimates. Notice-to-proceed was given on Towers and Conductors. The Board was informed that existing funds were insufficient and that interim financing would be necessary. Board deferred action until the next meeting.

September 10, 1981 Board awards Civil Works contract to Southeast Harrison Western (SEHW) after lengthy debate.

October 2, 1981 Board informed on legal actions against Tyes construction contracts. Need for interim financing was discussed and indicated a proposal would be presented to the Board in December, 1981. Risk Management's desire to use "Wrap-up Insurance" on Tye Project was discussed and actions that would be taken to effectuate such a program.

December 15, 1981 A Finance Plan was presented to the Board. It was recommended that the Board appoint a subcommittee to review the feasibility of the Tye Project based on present knowledge of the costs. Commissioners War and Mueller and Dr. Weeden were appointed to the subcommittee. The Board moved that final financing documents for financing be prepared. The economics of the Project was reviewed.

January 22, 1982 Senator Dankworth and Representative Haugen addressed the Board and recommended proceeding with interim financing. Board authorized securing of \$50,000,000 in interim financing. Board awarded a contract for Underwater Cables.

May 25, 1982 The Board awarded the Overhead Transmission Line contingent upon the Legislature not passing a piece of legislation that was being considered but that subsequently was not passed. Thus on June 3, 1982 the Executive Director informed the Board of his intent to issue the award for Transmission Tower construction.

Mr. Jack Kreinheder

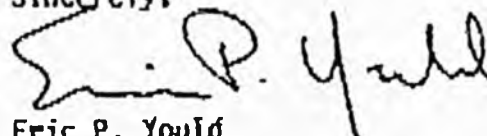
Page #4

February 9, 1983

October 22, 1982 The Board awarded contract for Transformers.

I trust this information is of assistance to you. If there is any further information you need, please call on me.

Sincerely,



Eric P. Yould  
Executive Director

CC:

C. Conway

Comm. D. Lyon



ALASKA STATE LEGISLATURE  
HOUSE OF REPRESENTATIVES  
RESEARCH AGENCY

Pouch Y, State Capitol  
Juneau, Alaska 99811  
(907) 465-3991

March 10, 1983

MEMORANDUM

TO: Representative Jack McBride

FROM: Jack Kreinheder *JK*  
Research Staff

RE: History of Hydro Projects in Election District 1  
Research Request 83-54

You requested that we summarize the development of hydro projects in Election District 1, focusing on the Swan Lake, Lake Grace and Tye Lake sites. As you know, the Swan Lake and Tye Lake projects are under construction by the Alaska Power Authority, while Lake Grace was considered as an alternative to the Swan Lake site.

Existing Hydro Projects in Ketchikan and Petersburg

The City of Ketchikan's electric utility generates about 45 percent of its annual power production from three existing hydro facilities at Ketchikan, Beaver Falls, and Lake Silvis. The generation capacity of these hydro units is 4,200, 5,000, and 2,100 kilowatts, respectively. The first generating unit at the Ketchikan site was installed in 1938, with another unit added in 1957. The first Beaver Falls unit was installed in 1946, with two more generators added in 1954. The Lake Silvis plant was installed in 1968.

Ketchikan's remaining power demand is met by diesel generators with a total capacity of about 18,300 kilowatts. These diesel units will be retired except for standby generation purposes when the Swan Lake project is completed.

Petersburg generates about 50 percent of its current power requirements from the Crystal Lake hydro project. This project was originally developed in 1929, with a major expansion in 1955. The current generation capacity of the Crystal Lake plant is about 2,000 kilowatts.

The City of Wrangell presently generates all of its electricity from diesel plants.

### Lake Grace

Lake Grace is located about 15 miles east of Swan Lake on the west side of Behm Canal. The proposed hydro plant at Lake Grace would have been substantially larger than Swan Lake in terms of power output and cost. The Lake Grace project would provide 25,000 kilowatts (KW) of capacity and 102 million kilowatt hours (KWH) of average annual energy, in comparison to 18,000 KW of capacity and 85.4 million KWH of energy for the Swan Lake project.

You expressed an interest in how the decision was made by Ketchikan to proceed with development of the Swan Lake hydro site, rather than the Lake Grace site. The principal basis for this decision was an appraisal report prepared by R.W. Beck and Associates in June 1977 for Ketchikan Public Utilities. This report evaluated the technical and economic feasibility and compared the cost of power for hydro developments at Swan Lake, Lake Grace, and Mahoney Lake, which is a smaller site.

The R.W. Beck report found that although hydro development was feasible at each of the three sites, Swan Lake was the most economic hydro alternative which would eliminate Ketchikan's reliance on diesel fuel. The average 10-year cost of power for the Swan Lake project was estimated at 6.7 cents per KWH, compared to 7.8 cents per KWH for the Lake Grace alternative. The Mahoney Lake alternative was competitive with Swan Lake with a power cost of 6.7 cents per KWH, but the Mahoney Lake site would not generate enough power to replace all of Ketchikan's diesel generation. A summary comparison of the three projects is included in Appendix A, taken from the R.W. Beck report.

You also indicated an interest in whether the U.S. Borax mineral development at Quartz Hill was considered in the evaluation of alternative hydro projects for Ketchikan. It appears that the power requirements of the Borax development were not given significant consideration, for at least two reasons. When the Borax molybdenum discovery was first announced in 1977, Borax planned to meet its power needs by constructing its own hydro project at Wilson Lake (this plan was later dropped because of strong local opposition, due in large part to the high sport fishing value of Wilson Lake). In addition, the City of Ketchikan was primarily concerned with meeting the power needs of its residents, not of mining or other industries outside of the city.

R.W. Beck recommended that Lake Grace and Mahoney Lake be reevaluated as additional hydroelectric developments when the power output from Swan Lake nears full utilization. Lake Grace is now within the Misty Fjords National Monument, which may make future development of this site more difficult. The Lake Grace area was withdrawn under federal land classification at one time as a power project site, but is unclear whether this withdrawal was superseded by the National Monument designation.

### Swan Lake

The Alaska Power Authority prepared the following brief history of the Swan Lake project, which is expected to begin producing power by January or February of 1984.

The City of Ketchikan, having made the decision to discontinue its reliance on the use of diesel electric generation to meet rising energy demands, authorized the engineering firm of R.W. Beck in September of 1977 to investigate the feasibility of developing, as a major hydroelectric generating resource, the Swan Lake Project which is located approximately 22 miles northeast of Ketchikan near the northern end of Carroll Inlet in the central portion of Revillagigedo Island.

In June of 1978, R.W. Beck issued a feasibility report indicating that a hydroelectric project which would demonstrate a benefit/cost ratio of 1.25 could be constructed at Swan Lake at a total investment cost of \$80,924,000. Subsequently, the City of Ketchikan, Ketchikan Public Utilities (KPU) authorized R.W. Beck to proceed with preparation of final design of the project.

The 1980 Legislature through joint resolution authorized the Alaska Power Authority to issue bonds up to the maximum amount of \$120,000,000 for financing the construction of the Swan Lake Project.

Construction was initiated by KPU in November of 1980. Funding for project design and initial construction was secured primarily through the proceeds of loans from the Power Authority's Power Project Revolving Loan Fund.

On May 28, 1981, the Power Authority loaned KPU \$35,000,000 for construction from funds which had been raised through the sale of General Obligation Bonds.

On May 21, 1982, the Power Authority and KPU executed an acquisition agreement under which, in return for providing funds to complete project construction, the Power Authority will receive title to the project and as operation of the project [begins] will provide sufficient power for the City of Ketchikan's needs via a Power Sales Agreement.

The total construction cost for the Swan Lake project is now estimated at \$93.5 million in nominal dollars. The target completion date is April 1984; however, the construction work is ahead of

Representative McBride  
March 10, 1983  
Page 4

schedule and the project may be completed as early as January 1984. Swan Lake will have an installed generation capacity of 22.5 megawatts and an annual firm energy production of about 70 million KWH. The project is expected to have about 50 percent utilization in its first years of operation; that is, about 35 million KWH of the 70 million KWH available will be used by Ketchikan Public Utilities. The year in which the full capacity of Swan Lake will be consumed depends largely on the rate of increase in future power demand, which is uncertain. However, current Power Authority projections show the project being fully utilized in about 2002.

#### Lake Tye

I believe that you have seen a copy of my memo on the Tye project to Representative Clocksin, dated February 11. Attached to that memo was a Tye chronology prepared by the Power Authority which focused mainly on cost estimates. This chronology is also attached here as Appendix 2.

The Tye project was originally proposed by the Thomas Bay Power Authority, a local Petersburg and Wrangell group. This group was first interested in the development of the Thomas Bay hydro site, but a reconnaissance study by the Corps of Engineers indicated that the smaller Tye project was more feasible and cost-effective. Based on the Corps study, the Thomas Bay Power Authority dropped the Thomas Bay site in favor of the Tye project. When the Alaska Power Authority became operational in 1978, an agreement was reached for the Authority to take over the development of the project and proceed with design and licensing work.

The Alaska Power Authority prepared the following brief history of the Tye project.

On December 19, 1979, the Alaska Power Authority submitted an application to the Federal Energy Regulatory Commission (FERC) for the construction of the Tye Hydroelectric Project in the vicinity of Wrangell and Petersburg, Alaska. Our engineers, R.W. Retherford Associates/International Engineering Company (IECO), estimated the cost of the project at that time at \$53,333,000, including an allowance for inflation at the rate of seven percent per year during the construction period. Procurement of long-lead-time turbines began in July 1981, in anticipation of a FERC license. FERC issued a license August 5, 1981, and the award of several additional procurement and one construction contract followed almost immediately thereafter.

Representative McBride  
March 10, 1983  
Page 5

The power-on-line date is scheduled for January 1984. The current estimate of the total project cost is \$124 million. Available funds include \$82 million in State grants and \$50 million in interim financing.

The powerhouse is located in the Tongass National Forest, approximately 40 miles east-southeast of Wrangell, Alaska. The project is designed to develop the energy potential of Tye Lake--a natural lake at Elevation 1396--convert it to electricity, and transmit the energy to the communities of Wrangell and Petersburg for distribution.

Tye will have an initial generating capacity of 20 megawatts, expandable to 30 megawatts with the addition of a third generating unit. The project will be able to produce about 110 million KWH per year, of which about 34 million KWH (31 percent) is expected by the Power Authority to be sold to Petersburg and Wrangell in the first year of operation. Based on the Power Authority's estimate of 2.5 percent annual increase in power demand, the power output from the Tye project will not be fully utilized until the year 2033.

I have also attached as Appendix C a memorandum by George Matz of the Office of Management and Budget which outlines the history of the Tye project from the perspective of studies and approvals.

If you have any questions or would like more specific information on any of these hydroelectric projects, please do not hesitate to contact me. Also, I plan to complete a response to your research request on Swan Lake power rates (#83-89) by March 25. This analysis will compare projected power rates for the Swan Lake project with current power generation costs in Ketchikan and discuss alternatives for reducing Swan Lake rates, if necessary.

ALTERNATIVE HYDRO PROJECTS  
SUMMARY OF CHARACTERISTICS

	<u>Swan Lake</u> <u>Project</u>	<u>Lake Grace</u> <u>Project</u>	<u>Mahoney Lake</u> <u>Project</u>
<u>BASIN HYDROLOGY</u>			
Drainage Area Above Dam, Sq. Mi. ....	36.5	29.2	2.05
Avg. Drainage Area Elevation .....	1,800	1,500	2,500
Avg. Annual Runoff at Dam Site, A.F. ...	335,000	279,000	33,500
Avg. Annual Runoff per Sq. Mi., cfsm ...	12.7	13.2	22.4
Max. Annual Runoff at Dam Site, A.F. ...	426,360	350,900	43,050
<u>PROJECT POWER DATA</u>			
Avg. Annual Energy Generated, GWh .....	88.0	105.2	49.7
Avg. Annual Energy at Load Center, GWh .	85.4	102.0	48.2
Annual Firm Energy Generated, GWh .....	68.0	93.3	29.5
Annual Firm Energy at Load Center, GWh .	66.0	90.5	28.6
Dependable Capacity at Load Center, kW .	18,000	25,000	9,000
<u>RESERVOIR</u>			
Normal Maximum Pool Elevation .....	330	500	1,956
Minimum Reservoir Elevation .....	269	458	1,776
Reservoir Area at Normal Maximum Pool ..	1,500	2,580	68
Active Storage Capacity, A.F. ....	86,000	150,600	7,150
<u>DAM</u>			
Type .....	Conc. Arch	Conc. Arch	None
Crest Elevation .....	344	509	-
Height Above Foundation, Feet .....	190	150	-

	<u>Project</u> SWAN LAKE	<u>Project</u> LAKE GRACE	<u>Project</u> MAHONEY LAKE
<u>SPILLWAY</u>			
Length, Ft. ....	100	200	90
Crest Elevation .....	330	500	1,956
<u>POWER INTAKE</u> .....	Single Level on Dam	Multi-Level on Abutment	Lake Tap and Valve Chamber
<u>POWER CONDUIT</u>			
Tunnel:			
Diameter, Ft. ....	10	9	-
Length, Ft. ....	2,250	3,400	-
Q Maximum, cfs .....	1,160	920	-
V Maximum, fps .....	14.8	14.5	-
Penstock (Steel):			
Diameter, Ft. ....	9	6.5	3
Length, Ft. ....	70	875	6,200
Q Maximum, cfs .....	1,160	920	86
V Maximum, fps .....	18.2	27.8	12.2
<u>POWERHOUSE</u>			
Turbines (Type) .....	2-Vertical Shaft Francis	2-Vertical Shaft Francis	2-Impulse
Speed, rpm .....	450	600	900
Net Design Head, Ft. ....	291	429	1,709
Rated Capacity, Best Gate, kW Total ....	22,680	26,700	10,600
Discharge at Avg. Head, cfs .....	1,014	855	78
Avg. Tailwater Elevation .....	8	27	88

DRAWING NO. 1  
 (PART I) (IMPULSE)

	<u>SWAN LAKE</u> Project	<u>Lake Grace</u> Project	<u>Mahoney Lake</u> Project
--	-----------------------------	------------------------------	--------------------------------

TRANSMISSION LINE

Voltage, kV .....	115	115	34.5
Length, Mi. (for New Line) .....	25	40	4
Type .....	Wood-Pole	Wood-Pole	Wood-Pole

ACCESS ROADS

New Roads, Miles .....	1.0	3.6	7.0
------------------------	-----	-----	-----

**ALASKA POWER AUTHORITY**

334 WEST 5th AVENUE - ANCHORAGE, ALASKA 99501

Phone: (907) 277-7641  
(907) 276-0001

February 9, 1983

Mr. Jack Kreinheder  
House Research Agency  
Pouch Y  
Juneau, Alaska 99811

Subject: Tyee Hydroelectric Project-Summary of Estimated Total Costs

Dear Jack:

As per your request, following is a brief summary on the sequence of events on the Tyee hydropower project primarily relating to cost. The summary of Board actions was extracted from our corporate minutes. Most of the actions taken by the Board were based on advice from myself and my staff.

On December 19, 1979, the Alaska Power Authority submitted a revised application to the Federal Energy Regulatory Commission (FERC) for the construction of the Tyee Hydroelectric Project in the vicinity of Wrangell and Petersburg, Alaska. Our engineers, R.W. Retherford Associates/International Engineering Company (IECO) estimated the total cost of the project at that time at \$39,590,000 (1980\$'s). With an allowance for inflation and interest during construction the estimated total capital investment at that time came to \$53,333,000.

In September 1980, IECO submitted a revised cost estimate of \$50,976,000 (August 1980\$'s).

Early in 1981, the Power Authority retained EBASCO Services, Inc., to prepare an independent cost estimate. EBASCO subsequently estimated the total project cost at \$96,693,000 (May 1981\$'s). Escalated to the midpoint of construction, this would represent a completed cost of approximately \$110 million. After reviewing the EBASCO estimate, IECO conceded that its previous estimates were low and IECO raised its estimate to \$81,069,000 (June 1981\$'s). EBASCO refuted this revised estimate.

Procurement of long-lead-time turbines began in July 1981 in anticipation of a FERC license. The Board of Directors was realigned by Statute in the latter part of July 1981. The FERC issued a license on August 5, 1981 and the award of several additional procurement and one construction contract followed almost immediately thereafter.

IECO continued to make monthly reports on the status of the project, including estimated total project costs. It is important to note that by the end of March 1982, IECO had increased its project estimate to \$97,072,000,

including engineering costs prior to construction. In the March report the overhead transmission line was estimated to cost \$12,840,000 plus a \$6,000,000 contingency. Less than two months later, during the bid opening for that contract, IECO provided an engineer's estimate of \$23,280,887.00--an estimate that is 24 percent above any previous estimate, including contingency funds. The actual low bid was even higher at \$24,901,466.

Starting with the IECO estimate from the March 1982, report, adjusting for the actual low bid on the transmission line, and adding the estimated cost for a proposed separate substation construction contract, the estimated total project cost was increased by IECO to \$110,133,000 (May 1982). This did not include approximately \$5 million for owner provided insurance. During the months that followed, the total project cost has decreased and increased, slightly, as adjustments have been made for actual bids on relatively small procurement contracts..

In December 1982, and again in January 1983, senior staff of IECO and IECO's parent company, Morrison Knudson (M-K), met with representatives of the Power Authority to discuss construction management of the project, including total project costs. The latest information from IECO is that the total project cost will not exceed \$124,886,100. The Power Authority has asked the parent company, M-K, to completely review this estimate. A report from the M-K staff is anticipated the second week of March 1983.

A summary of Board actions, as extracted from our corporate minutes, is as follows:

- October 4, 1978 Board receives report on Tye Project indicating that, according to the reconnaissance study by Robert W. Retherford Associates, (RWR) the Project looks favorable and that Thomas Bay Power Commission (TBPC) will soon enter into contract with RWR for Federal Energy Regulatory Commission (FERC) work and that TBPC may request the Alaska Power Authority to take over the project.
- November 18, 1978 APA Board voted to make \$120,000 loan to TBPC for Tye FERC work and this would supplement the \$300,000 available from the Water Resources Revolving Loan Fund (WRRLF) in order to cover the \$475,000 contract with RWR.
- June 21, 1979 Board makes a loan to TBPC of \$60,000 for Tye Project. TBPC and Representative E.J. Haugen request the APA take over Tye. The Board directed staff to bring information back at next Board meeting for Project take-over.
- September 27, 1979 Tye Letter of Understanding with TBPC adopted by Board.
- November 2, 1979 Board authorized Executive Director to submit FERC license application. Also passed "stop-the-clock" resolution needed for bonding.
- February 7, 1980 Board agreed to extend contract for advanced Engineering

and Design to IECO for Tye but it was later decided with legal council to seek competitive proposals.

April 18, 1980 Board selects IECO for the Engineering and Design from among three proposals.

October 23, 1980 Board informed that costs have increased from \$39,000,000 to \$51,000,000 and has IECO explain to Board.

April 20, 1981 Board selects consultant panel as required by FERC.

May 14, 1981 Board awards Bids for Turbines.

July 6, 1981 Board considered awarding contract for Steel Towers and Conductors but defers "notice to proceed" until after opening of major Civil Contract so that the Board could get a better fix on the true cost of the Project.

August 18, 1981 FERC license has been received. Bids for Civil construction were reviewed as were the economics of the Project based on new cost estimates. Notice-to-proceed was given on Towers and Conductors. The Board was informed that existing funds were insufficient and that interim financing would be necessary. Board deferred action until the next meeting.

September 10, 1981 Board awards Civil Works contract to Southeast Harrison Western (SEHW) after lengthy debate.

October 2, 1981 Board informed on legal actions against Tye construction contracts. Need for interim financing was discussed and indicated a proposal would be presented to the Board in December, 1981. Risk Management's desire to use "Wrap-up Insurance" on Tye Project was discussed and actions that would be taken to effectuate such a program.

December 15, 1981 A Finance Plan was presented to the Board. It was recommended that the Board appoint a subcommittee to review the feasibility of the Tye Project based on present knowledge of the costs. Commissioners Ward and Mueller and Dr. Weeden were appointed to the subcommittee. The Board moved that final financing documents for financing be prepared. The economics of the Project was reviewed.

January 22, 1982 Senator Dankworth and Representative Haugen addressed the Board and recommended proceeding with interim financing. Board authorized securing of \$50,000,000 in interim financing. Board awarded a contract for Underwater Cables.

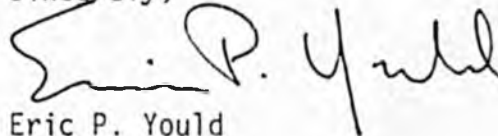
May 25, 1982 The Board awarded the Overhead Transmission Line contingent upon the Legislature not passing a piece of legislation that was being considered but that subsequently was not passed. Thus on June 3, 1982 the Executive Director informed the Board of his intent to issue the award for Transmission Tower construction.

February 9, 1983

October 22, 1982 The Board awarded contract for Transformers.

I trust this information is of assistance to you. If there is any further information you need, please call on me.

Sincerely,

A handwritten signature in cursive script that reads "Eric P. Yould". The signature is written in dark ink and is positioned above the typed name.

Eric P. Yould  
Executive Director

CC:

C. Conway

Comm. D. Lyon

# MEMORANDUM

State of Alaska

TO: Gordon Harrison  
Associate Director  
Office of Management and Budget FILE NO:  
Division of Strategic Planning  
TELEPHONE NO 465-3573

DATE February 23, 1983

FROM: George Matz <sup>GSM</sup>  
Division of Strategic Planning  
Office of Management and Budget

SUBJECT: Tyee Lake Project

There has been controversy recently regarding the Tyee Lake Project. The City of Petersburg has stated that the cost of power from the project is too expensive and they may not want to sign a power sales contract under the terms initially proposed by the Alaska Power Authority (APA). This situation has led to an examination of other questions including the projects economic feasibility and the process by which this is determined. The purpose of this memo is to provide an historical perspective on the question of economic feasibility. The information in this memo should supplement rather than duplicate information in a February 9, 1983 memo from Eric Yould to Jack Kreinheder and a February 11, 1983 memo from Jack Kreinheder to Representative Don Clocksin.

The feasibility study for the Tyee Lake Project was completed for the APA in December of 1979. The statute at this time (AS 44.56.180) required the Office of the Governor to evaluate APA feasibility studies. Since the APA was in its infancy and the Tyee Lake Project was its first project to have completed a feasibility study, no formal review was undertaken.

In 1980, the Legislature passed an omnibus energy bill (Ch 83, SLA 1980) which amended requirements for APA reconnaissance and feasibility studies. This bill also requires the Division of Budget and Management (now Office of Management and Budget) to review these studies for statutory compliance and provide a recommendation to the Governor and the Legislature for feasibility studies. However, certain projects, including the Tyee Lake Project, had been previously approved by the Legislature and were exempted from review by the Division of Budget and Management. House Joint Resolution No. 62, which had been approved by the Legislature earlier in the 1980 session, stated that the general design of the Tyee Lake Project was approved and that the APA could incur \$70,000,000 in revenue bond indebtedness to finance the project.

In 1981, the Legislature once again made significant amendments to the APA statutes (Ch 118, SLA 1981). One of the more significant amendments established a Power Development Fund to be used primarily for financing construction of State owned power projects. Restrictions were placed on the use of this fund. One of these restrictions (AS 44.83.394) states that "the authority may not use money in the fund for a power project except in compliance with AS 44.83.177-44.83.187 and unless the authority determines that the project is economically feasible."

Ch 90, SLA 1981 (which was the appropriation bill which accompanied Ch 118, SLA 1981) made appropriations to begin construction on three power projects. These projects, and the amount of their respective appropriations are Tye Lake Project - \$48,000,000, Swan Lake Project - \$53,000,000, and the Terror Lake Project \$81,500,000. Additional appropriations in the form of a loan, had previously been made to each of these projects. These loans were converted to grants by another bill Ch 91, SLA 1981.

Although each of these projects had completed feasibility studies and received legislative approval, AS 44.83.394 required a final review of the economic feasibility of each project before the APA could make expenditures from the Power Development Fund. The statutes are not specific as to how the economic feasibility should be determined. The AIA assumed that the feasibility assessment should be treated as an updated supplement to previous feasibility studies rather than repeat the entire process.

Apparently, the APA's first attempt at complying with AS 44.83.394 was an August 13, 1981 memo from Robert Mohn, Director of Engineering to the Record (see Attachment A). The information in this memo was presented to the August 18, 1981 meeting of the APA Board of Directors to demonstrate that even with more recent and higher construction cost estimates, the Tye Lake Project was economically feasible at the "most likely" load growth rates. Following this presentation, the Board was asked to approve the award of construction contracts which would obligate funds in the Power Development Fund. It should be noted that this was the first meeting of a newly appointed Board of Directors and not all of the Board members were familiar with statutory requirements for power projects.

Ron Lehr, a Board member and Director of Budget and Management at that time, questioned some of the points used in the presentation and requested backup information. This information was sent to Budget and Management where staff found the information inadequate to make a determination regarding the economic feasibility of the Tye Lake Project. APA staff was informed of this and responded in a September 10, 1981 letter with copies of the calculations used for the August 13, 1981 memo.

Budget and Management staff reviewed these calculations, found some technical errors, and requested that corrections be made in the analysis. Apparently, the request led to a decision by the APA to provide a more complete and adequate explanation of the economic feasibility of the project. The product of this effort was a "Findings and Recommendations" report that was completed on December 2, 1981 and distributed to the Board at its December meeting. This report fully explained the assumptions that were being used and provided enough details to review the economic feasibility of the project.

Although a review by Budget and Management of the "Findings and Recommendations" report was not required by statute, a review was undertaken for the benefit of Ron Lehr who's interest was both as a Board member and State Budget Director. Ron Lehr distributed this review to the Board at its January, 1982 meeting.

The Budget and Management review (Attachment B) questioned several assumptions and calculations used in the "Findings and Recommendations" report. The conclusion of the review is that the Tye Lake Project may not be economically feasible based on the "most likely" load forecast but should be economically feasible if the actual load should exceed the "most likely" load forecast. Some of the more significant points brought out in the review are given below.

- 1) If and When - The economic feasibility analysis of a power project, particularly projects having a long life such as hydro power, should not only determine "if" the project is feasible but "when" is the most economic time to begin construction. A timing exercise of this nature was not done for the Tye Lake Project even though such an exercise is most applicable to projects which have initial overcapacity, such as the Tye Lake Project.
- 2) Reserve Capacity - Neither this economic analysis or cost of power calculation considered the cost of reserve capacity.
- 3) Load Forecast - The base year for the load forecast was higher than actual data. Also, the load forecast assumed an increase in electric space heating even though fuel oil appears to be a less expensive alternative.
- 4) Alternative - A number of smaller and less remote hydro-electric alternatives were not given detailed consideration. U.S. Army Corps of Engineers data indicates that some of these projects could have lower power costs than the Tye Lake Project. Also, since all of the projects were smaller, overcapacity would not be a significant problem.

The load forecast in the most significant and perhaps the most uncertain parameter which applies to the economic feasibility of the Tye Lake Project. Since the load forecasts were made a few years ago, we now have the benefit of hindsight to assess the accuracy of the first few years of the forecast. This information is presented below based on the "most likely" forecast for the "Findings and Recommendations" report and the "expected" forecast for the Feasibility Study. The Feasibility Study used 1978 as the last year of actual data. Neither of these forecasts, as presented, subtract out approximately 11,700 MWh of annual generation from an existing hydroelectric facility near Petersburg.

Energy Sales (MWh) for Wrangell and Petersburg

<u>Year</u>	<u>Actual</u>	<u>Findings and Recommendations Report</u>	<u>Feasibility Study</u>
1978	29,981	---	29,981
1979	29,087	---	31,445
1980	29,788	30,535	32,990
1981	29,222	31,726	35,275
1982	30,989	32,963	37,710

In summary, commitments to the Tye Lake Project have been slightly ahead of establishing a more rigorous process for assessing the economic feasibility of proposed APA projects. Specifically:

- 1) the feasibility study for the project was completed before an independent review process was firmly established by the Legislature;
- 2) the Legislature approved the project without benefit of an independent cost analysis as now required by statute; and
- 3) construction contracts had been awarded before the "Findings and Recommendations" report had been completed and before the provisions of AS 44.83.394 has been met.

# Four towns may agree soon on dams, APA director says

By DEAN FOSDICK  
The Associated Press

JUNEAU — The head of the Alaska Power Authority said Wednesday the utility is near agreement on long-term power contracts with four of five communities in the "Four Dam Pool," but Petersburg is uncomfortable with the deal and will let the voters decide in a special election, a spokesman says.

Larry Crawford, APA executive director, told board members that negotiations continued until nearly midnight Tuesday with representatives of Ketchikan, Wrangell, Petersburg, Kodiak and Valdez.

"I think at this point it's probably a little more dialogue with the communities," Crawford said. "I think we're getting closer with four of them."

He indicated, however, that an "all or none" provision that had been carried through the contract talks be modified so the state could act in the place of any community excluded from the agreement — a reference to Petersburg.

The APA has embarked on a \$462.5 million hydro program involving four new dams to supply power to the five coastal Alaska cities. The projects, either finished or near-finished, were built with \$282.83 million in state loans and the rest in interim financing.

The agency has been trying to get the cities to sign power contracts so the state can refinance about \$179.67 million in short-term loans that begin coming due this year. The resulting long-term revenue bonds would be used for paying project costs not covered by grants.

But the cities have resisted, contending they'll not sign contracts until assured that hydro costs don't overly exceed what they now pay for diesel.

They also contend that the "Susitna Black-mail Clause," which was tacked on by the legislature, would increase consumer rates by as much as 50 percent.

The clause states that if \$5 billion is not appropriated by 1991 to build two hydroelec-

tric dams on the Susitna River to serve Southcentral Alaska, state grants to other projects would have to be repaid at a rate of 10 percent annually.

Jim Fillingame, manager of the Copper Valley Electric Association Inc. at Glennallen, said customers in the Valdez area served by the new Solomon Gulch Dam were promised two years ago they'd be getting "good, cheap electric power."

"It was no little job to sell the program to the people," Fillingame told APA directors. "Now, I've got to go back and tell these same people that good hydro power will cost several cents more per hour than what we can generate by diesel."

Proposed "entry costs" for that utility would mean about a 40 percent increase for large power users and a 22 percent rate hike for residential users, he said.

Wrangell representatives, meanwhile, said that city was about a week away from making a decision on the proposals.

David Neese, general manager for the Kodiak Electric Association, said that community was ready to agree to the deal.

Ketchikan Public Utility Manager Rick Newland said, "We're very close to agreement on the major issues. There are several yet to be resolved but the groundwork is there to reach resolution."

But Richard Underkofler, Petersburg city manager, told a reporter that city has problems with the entry rate and system increment issues.

"We're about \$1.5 million away on their assumption of what the difference between what diesel and hydro costs would be," he said. "That's for the life of the program so it's really not that broad."

"But the system increment issue is philosophical," Underkofler said. "The power authority will have a license to increase our rates over the term of the agreement to pay for its endeavors elsewhere. It's our feeling we should be released from further debt service if we pay off our loans."

684  
589

Alaska Power Authority  
Commissioner: D Lyon  
Executive Director: Lary Crawford

Board meeting, 22 February 1984

Power Sales agreements;

1. Copper Valley: close to an agreement. Jim Billingham, manager of utilities states that he shows some concern of confronting his public with a cost not seen before. Presently Glennallen diesel generation is .06 PKW and proposed APA power will be .07 PKW. This constitutes a 40% increase to some. Valdez is an emphatic NO! Average monthly consumption in Glennallen is 340 KWH and translates to \$90 per month, while Valdez is running an average monthly bill of 550 KWH or \$151. per month. A 40% increase can be devastating.
2. Wrangell: Matt Cole (position unknown) will be taking power sales agreement to city council Thursday night (Feb 23rd) for consideration. He says discussion (informal) with council members appears good and contract may be forthcoming.
3. Kodiak: David Neese, Mgr of Muni-power. Municipality has agreed to purchase power from APA. Two suggestions: possible loans to consumers and the establishment of an advisory board.
4. Ketchikan: Rick -?-- mgr of utilities says it looks very good, contract in the making with questions as to wording of legal documents.
5. Petersburg: NO!

Management study (status report) presented by Roger McMannus of Mead consultants for FY 84, FY 85, FY 86.

Presently APA employes 69 persons

Executive Dept-----	4
Planning -----	9
Projects -----	18
Operations -----	7
Finance-Administration ---	31

*People* *People*

APA is asking for an immediate increase of 16, 17 more FY 85, and an additional 9 for FY 86 to total 111 persons.

1934 Susitna contingency fund: 3.18 Million dollars  
Drilling request (wantana dam) 1.9 million. if approved this will leave in the contingency fund 1.28 million.

Competitive bidding on Watana Dam drilling will be let 27 Feb 84 with awarding of contract sometime in mid April 84.

H B

689

STATE OF ALASKA 1984 LEGISLATIVE SESSION  
FISCAL NOTE

Revision Date: \_\_\_\_\_

REQUEST :

Bill/Resolution No.: HB 689  
Title: Rural Electrification Loan  
Fund \_\_\_\_\_  
Sponsor: \_\_\_\_\_  
Requestor: \_\_\_\_\_  
Date of Request: \_\_\_\_\_

FISCAL DETAIL

Agency Affected: Alaska Power Authority  
Program Category Affected: \_\_\_\_\_  
Development  
BRU, Program or Subprogram(s) Affected: \_\_\_\_\_  
Alaska Power Authority

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

No expected fiscal impact from this bill.

ANALYSIS: Attach a separate page for analysis

Prepared By: Heinz Noonan Phone: (907) 276-0001  
Division: Alaska Power Authority Date: \_\_\_\_\_  
Approved by Commissioner: Richard A. Lyon Date: 3/27/84  
Agency: Commerce & Economic Development

Distribution (by Agency preparing fiscal note):

Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)

12/1/83

689

(A) means a study conducted for the economic and environmental practicality of completing a proposed power project under AS 44.83.181;

(B) includes engineering and design work to meet the requirements for submission of a license application for a proposed new project to the Federal Energy Regulatory Commission;

(9) "small-scale power production facility" means a facility which, by design, is to produce less than 25 megawatts of power. (§ 1 ch 278 SLA 1976; am §§ 21, 22 ch 156 SLA 1978; am §§ 26, 27 ch 83 SLA 1980; am §§ 10, 11 ch 133 SLA 1982)

Effect of amendments. — The 1982 amendment substituted the present definition for "power project" or "project" in paragraph (4) for the definition set out in the main pamphlet and substituted "electrical and thermal energy needs" for "power needs" in paragraph (7).

### Article 7. Susitna River Hydroelectric Project.

#### Sec. 44.83.325. Restrictions on contracting.

Editor's note. — Section 21, ch. 133, SLA 1982, provides: "Notwithstanding the provisions of AS 44.83.325, the Alaska Power Authority may enter into contracts under AS 44.83.300 — 44.83.360 for preliminary work without the approval required by AS 44.83.325. In this section, 'preliminary work' means the preparation of plans and studies and the preparation and submission of license applications, as well as other types of work, that must be

completed before actual construction of the Susitna River hydroelectric project, described in AS 44.83.300, may begin. This section does not authorize the Alaska Power authority to enter into contracts for the actual construction of the Susitna River hydroelectric project or for the preparation of the site of the Susitna River hydroelectric project without the approval required by AS 44.83.325."

### Article 8. Rural Electrification Revolving Loan Fund.

#### Section

361. Rural electrification revolving loan fund

363. Loan advisory committee

#### Sec. 44.83.361. Rural electrification revolving loan fund. (a)

The rural electrification revolving loan fund is established in the Alaska Power Authority. The fund consists of

- (1) appropriations made to the fund; and
- (2) principal payments on loans made under this section.

(b) The authority may make loans from the rural electrification revolving loan fund to electric utilities certified by the Alaska Public Utilities Commission. A loan from the fund may be made only for the purpose of extending new electric service into an area of the state that an electric utility may serve under a certificate of public convenience and necessity issued by the Alaska Public Utilities Commission. A loan may be made from the fund to an electric utility if the utility invests the money necessary to provide one pole, one span of line, one transformer, and one service drop for each consumer for whom immediate service would be provided by the extension of electric service. However, a loan may not be made from the fund unless

(1) the loan is recommended by a loan advisory committee appointed under AS 44.83.363; and

(2) the extension of electric service would provide immediate service to at least three consumers.

(c) A loan from the rural electrification revolving loan fund shall bear an annual rate of interest of two percent of the unpaid balance of the loan. Interest received on a loan made under this section must be transferred monthly to the commissioner of revenue for deposit in the general fund.

(d) When a loan is made by the authority under this section, the electric utility receiving the loan

(1) shall, in addition to the rates that it is authorized to charge, charge the consumers served by the electric service extended with the loan proceeds an amount sufficient to pay the interest costs of the loan;

(2) shall pay to the authority annually an amount equal to

(A) interest of two percent on the unpaid balance of the loan; and

(B) payments on the unpaid balance of the principal of the loan for each new consumer served by the electric service extended with the loan proceeds; payments on the unpaid balance of the principal of the loan shall be made at a rate equal to the difference between the actual cost of making the service connection to the consumers and the minimum investment per consumer required of the utility before a loan is made under (b) of this section.

(e) The authority shall

(1) adopt regulations necessary to carry out the provisions of this section;

(2) administer the rural electrification revolving loan fund; and

(3) submit to the legislature within the first 10 days of each regular legislative session a report of actions taken by the authority under this section and an accounting of the rural electrification revolving loan fund.

(f) In this section,

(1) "consumer" means a person, as defined in AS 01.10.060(7), or a governmental agency, if the person or governmental agency requests and offers to pay for electrical service to a facility or part of a facility;

the authority shall consider a person who, or a governmental agency that, offers to pay for electrical service to several facilities to be a separate consumer for each facility, if each facility is physically separate from another facility, other than through electric service lines, and if the person or governmental agency requests and offers to pay for electrical service to each facility;

(2) "facility" means a structure capable of receiving and using electrical energy; and

(3) "governmental agency" includes, with respect to the state or federal government or a municipal government, a legislative body, board of regents, administrative body, board, commission, committee, subcommittee, authority, council, agency, public corporation, school board, department, division, bureau, or other subordinate unit, whether advisory or otherwise, of the state, federal, or municipal government. (§ 1 ch 118 SLA 1981; am §§ 10 — 13 ch 89 SLA 1983)

Effect of amendments. — The 1983 amendment, effective July 22, 1983, deleted "and interest" following "principal" in paragraph (a)(2), added the second sentence of subsection (c), substituted "extended with the loan proceeds" for "during the preceding year for which the loan was made" in paragraph (d)(2)(B), and added subsection (f).

Sec. 44.83.363. Loan advisory committee. When an application for a rural electrification loan is submitted to the authority under AS 44.83.361, the authority shall appoint a local advisory committee from persons residing in the area that the applicant utility is certified to serve. The loan advisory committee shall consider the loan application, and shall recommend whether the loan application is to be approved or disapproved. A favorable recommendation from the loan advisory committee shall be based on a determination that development in the area of the proposed extension of electric service is likely to provide for full repayment of the loan under AS 44.83.361(d) within 10 years. In making that determination the committee shall consider

- (1) permanence of the premises to be served by the extension;
- (2) land use patterns in the area;
- (3) access for the line that would be installed with loan proceeds;
- (4) availability of other utility service in the area; and
- (5) the economic feasibility of the extension of electric service with the proceeds of the loan. (§ 1 ch 118 SLA 1981)

Article 9. Energy Program for Alaska.

Section	Section
380. Program established	390. Reappropriation of fund balance
382. Power development fund established	392. Lapse of excess appropriations
384. Use of fund balance	394. [Repealed]
386. Investment of fund	396. Operation of power project
388. Allotment to projects	398. Sale of power from power project

# Alaska State Legislature

POUCH V  
JUNEAU, ALASKA 99811  
907/465-4821



REPRESENTATIVE RICK UEHLING  
CHAIRMAN  
REPRESENTATIVE WALT FURNACE  
REPRESENTATIVE NILO KOPONEN  
REPRESENTATIVE JERRY WARD  
REPRESENTATIVE RON WENDTE

## House Special Committee on State Loans

To: Rep. John Cowdery, Chairman  
House Labor & Commerce Committee

From: Rep. Rick Uehling, Chairman *RAU*  
House Special Committee on State Loans

Subject: HB 689

Date: March 5, 1984

HB 689, An Act relating to the rural electrification loan fund, is presently in your Committee.

During our Loans Committee hearings on HB 650, which contains an appropriation for the Alaska Power Authority - Rural Electrification Loan Fund, testimony was received about the Loan fund and the need to clarify the existing statutes.

As Chairman of the House Loans Committee I would like to request that you schedule action on this measure because it will eliminate those discrepancies and make it possible to use the funds in the Rural Electrification Loan Fund. It is important that this be done before additional appropriations are made for projects such as the Craig-Klawock Intertie.

Thank you very much for your attention to this matter.

RAU/as

# Alaska State Legislature

POUCH V  
JUNEAU, ALASKA 99811  
(907) 465-4821



REPRESENTATIVE RICK UEHLING  
CHAIRMAN  
REPRESENTATIVE WALT FURNACE  
REPRESENTATIVE NILO KOPONEN  
REPRESENTATIVE JERRY WARD  
REPRESENTATIVE RON WENDTE

## House Special Committee on State Loans

To: Rep. John Cowdery, Chairman  
House Labor & Commerce Committee

From: Rep. Rick Uehling, Chairman *RAU*  
House Special Committee on State Loans

Subject: HB 689

Date: March 5, 1984

HB 689, An Act relating to the rural electrification loan fund, is presently in your Committee.

During our Loans Committee hearings on HB 650, which contains an appropriation for the Alaska Power Authority - Rural Electrification Loan Fund, testimony was received about the Loan fund and the need to clarify the existing statutes.

As Chairman of the House Loans Committee I would like to request that you schedule action on this measure because it will eliminate those discrepancies and make it possible to use the funds in the Rural Electrification Loan Fund. It is important that this be done before additional appropriations are made for projects such as the Craig-Klawock Intertie.

Thank you very much for your attention to this matter.

RAU/as



# ALASKA RURAL ELECTRIC COOPERATIVE ASSOCIATION, INC.

237 E. FIREWEED LANE • SUITE 301  
ANCHORAGE, ALASKA 99503 • (907) 276-3235

March 16, 1984

Representative John Cowdery, Chairman  
House Labor and Commerce Committee  
Pouch V  
Juneau, Alaska 99811

Dear Representative Cowdery:

House Bill 689 is essential to clean up the statutory language authorizing the rural electrification revolving loan fund so that program can finally be made to work as intended.

This loan fund was created as a section of SB 25 in 1981 by including in that historic legislation the contents of a bill sponsored by then Representative Pappy Moss. As a result, there is almost no separate legislative history which would have given the power authority some guidance in administering the program. For anyone not intimately involved with line extensions of an electric utility, the present statutory language is quite confusing. The result of all this is that the rural electrification revolving loan fund has never worked as intended.

The purpose of this loan fund is to extend the backbone electric distribution system through developing rural areas. The target areas at present do not have enough population to meet the definitions of feasibility set out by the lending institutions such as the Rural Electrification Administration. However, the target areas are expected to develop rather quickly once utility service becomes available.

This is a narrow purpose program, and I would not envision that it would ever become very large in terms of the total funding it requires. The concept for this program was originally developed to meet specific problems around Fairbanks like the Goldstream area and in the Mat-Su Borough like the Caswell Lakes area. After three years, not one dime has gone to meet the very serious needs of those areas and other like them across the state.

Enclosed is a sectional analysis which briefly describes the contents of HB 689. The key feature of this program necessary to make it work is that the payback period has to be for an indeterminate period rather than for a set term of years. This is

DEMOCRACY IN ACTION

Representative John Cowdery  
March 16, 1984  
Page Two


an unusual feature of a loan program, but it is essential in this case. If the term of years is fixed, the utility is the one at risk that the anticipated development will in fact occur. REA will not permit its borrowers to accept loans for projects which do not meet the REA definition of feasibility. If these projects could meet the REA feasibility test, we would borrow from REA and would not need this program.

The concept of making the term of the loan indeterminate and having the payback schedule tied to the actual rate of development was contained in the original legislation. The power authority has never accepted that legislative policy, and they have in fact arbitrarily set a 20 year term by regulation. That is why this program has never worked.

We think HB 689 is a very good bill, and we ask you and your committee to support it. However, there is one amendment which is needed to prevent possible confusion in the future. As used in this program, the term "rural" simply means an area where the population density is low. I would propose that a new definition be included in section 5 of the bill to read:

"rural area" means an area in which the number of consumers to be served by an electric distribution line in the year in which it is constructed does not exceed five per mile of line.

Sincerely,



David Hutchens  
Executive Director

House Bill No. 689

Sectional Analysis

Section 1 states the legislative intent that this program is to help finance pioneer electric distribution lines through developing rural areas.

Section 2 provides that loans may be made to public utilities to build distribution lines into rural areas not receiving electric service if (1) the loan is recommended by a loan advisory committee, (2) the line extension will serve at least three consumers in its first year and (3) the utility has a certificate from the APUC to serve that area.

Section 3 provides that the utility shall collect 2% interest on this loan from its consumers served by the line extension and shall pay that interest to the APA annually with its principal payment. The principal repayment formula is geared to the number of new consumers being served by this line extension rather than to a specific term of years. The cost of the line is divided into units consisting of its average cost per 350 feet (the approximate distance of a span of line). The utility repays one unit of the principal for each new consumer served by the line.

Section 4 vests the administrative authority with the APA and requires an annual report to the legislature.

Section 5 defines the terms used in this legislation.

Section 6 limits the amount of a loan to the amount necessary to build an overhead line, but a more expensive method of construction may be used if the additional cost is financed from some other source. The utility is required to invest from other sources one unit of cost (the average cost for 350 feet of line) for each consumer to be served in the first year.

Section 7 authorizes the executive director of the APA to appoint a loan advisory committee from residents of the assigned service area of the applicant utility. The committee has the responsibility to advise whether or not development of the area in question is likely to occur rapidly enough to provide full repayment of the loan within 20 years.

HB

703

BILL SHEFFIELD  
GOVERNOR



STATE OF ALASKA  
OFFICE OF THE GOVERNOR  
JUNEAU

March 21, 1984

The Honorable Joe Hayes  
Alaska House of Representatives  
Pouch V  
Juneau, AK 99811

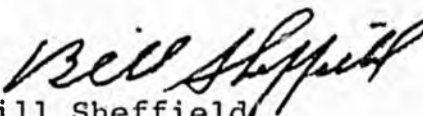
Dear Representative Hayes:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill to amend AS 43, the Revenue and Taxation Code, by repealing AS 43.20.031(d) and AS 43.70.030(b).

This bill repeals AS 43.20.031(d), which exempts banks and savings and loan associations from taxation under AS 43.20, the corporate income tax chapter. It also repeals AS 43.70.030(b), which taxes banks, trust companies, and savings and loan associations under AS 43.70, the Business License Act.

Currently, banks and savings and loan associations are specifically exempted from the corporate income tax under AS 43.20 because of federal restrictions which required states to tax national banks and savings and loan associations separately from other corporations. Those federal restrictions no longer exist. Therefore, we may now tax banks under AS 43.20 along with all other corporate taxpayers, and that is what this bill will accomplish.

Sincerely,

  
Bill Sheffield  
Governor

STATE OF ALASKA 1984 LEGISLATIVE SESSION  
FISCAL NOTE

*cd*

Revision Date \_\_\_\_\_

REQUEST

Bill/Resolution No: HB 703  
Title: State taxation of national banks

Sponsor: Governor  
Requestor: \_\_\_\_\_  
Date of Request: \_\_\_\_\_

FISCAL DETAIL

Agency Affected: Department of Revenue  
Program Category Affected: Collection and Management  
BRU, Program of Subprogram(s) Affected: Audit Division

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
<b>OPERATING</b>						
100 PERSONAL SERVICES	-	-	-	-	-	-
200 TRAVEL	-	-	-	-	-	-
300 CONTRACTUAL	-	-	-	-	-	-
400 SUPPLIES	-	-	-	-	-	-
500 EQUIPMENT	-	-	-	-	-	-
600 LANDS & STRUCTURES	-	-	-	-	-	-
700 GRANTS, CLAIMS	-	-	-	-	-	-
800 MISCELLANEOUS	-	-	-	-	-	-
<b>TOTAL OPERATING</b>	-	-	-	-	-	-
<b>CAPITAL</b>	-	-	-	-	-	-
<b>REVENUE</b>	-	-	-	-	-	-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-	-	-	-	-	-
FEDERAL FUNDS	-	-	-	-	-	-
OTHER	-	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-	-

POSITIONS:

FULL-TIME	-	-	-	-	-	-
PART-TIME	-	-	-	-	-	-
TEMPORARY	-	-	-	-	-	-

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

ANALYSIS: Attach a separate page for analysis.

Prepared By: Maureen O'Brien *Maureen O'Brien*  
Division: Audit Division

Phone: 465-2320  
Date: March 20, 1984

Approved by Commissioner: *R. H. O'Heath*  
Agency: Revenue

Date: 3/20/84

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Currently banks are required to file returns and pay tax under a statute separate from all other corporations (AS 43.70). This results in significant administrative and legal problems. The Department of Revenue therefore recommends that banks be taxed under the same income tax statutes as other corporations (AS 43.20).

Although state and municipal interest is currently taxable under AS 43.70 and would not be subject to tax under AS 43.20, we estimate that requiring banks to file under AS 43.20 rather than AS 43.70 will result in no loss of revenue to the State. The Department's position is that under IRC sec. 265(2), which is adopted by reference in AS 43.20.021(a), no deduction is allowed for expenses and interest incurred or continued to purchase or carry obligations the interest on which is exempt from tax. This includes not only expenses and interest related to tax exempt state and municipal interest income, but also expenses and interest related to tax exempt U.S. interest income. Therefore, the total amount of nondeductible expenses under AS 43.20 will be close to the amount of nontaxable income.

BILL SHEFFIELD  
GOVERNOR



STATE OF ALASKA  
OFFICE OF THE GOVERNOR  
JUNEAU

March 21, 1984

The Honorable Joe Hayes  
Alaska House of Representatives  
Pouch V  
Juneau, AK 99811


Dear Representative Hayes:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill to amend AS 43, the Revenue and Taxation Code, by repealing AS 43.20.031(d) and AS 43.70.030(b).

This bill repeals AS 43.20.031(d), which exempts banks and savings and loan associations from taxation under AS 43.20, the corporate income tax chapter. It also repeals AS 43.70.030(b), which taxes banks, trust companies, and savings and loan associations under AS 43.70, the Business License Act.

Currently, banks and savings and loan associations are specifically exempted from the corporate income tax under AS 43.20 because of federal restrictions which required states to tax national banks and savings and loan associations separately from other corporations. Those federal restrictions no longer exist. Therefore, we may now tax banks under AS 43.20 along with all other corporate taxpayers, and that is what this bill will accomplish.

Sincerely,

  
Bill Sheffield  
Governor

STATE OF ALASKA 1984 LEGISLATIVE SESSION  
FISCAL NOTE

*OL*

Page 1 of 2

Revision Date \_\_\_\_\_

REQUEST

Bill/Resolution No: HB 703

Title: State taxation of national banks

Sponsor: Governor

Requestor: \_\_\_\_\_

Date of Request: \_\_\_\_\_

FISCAL DETAIL

Agency Affected: Department of Revenue

Program Category Affected: Collection and Management

BRU, Program of Subprogram(s) Affected: Audit Division

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
<u>OPERATING</u>						
100 PERSONAL SERVICES	-	-	-	-	-	-
200 TRAVEL	-	-	-	-	-	-
300 CONTRACTUAL	-	-	-	-	-	-
400 SUPPLIES	-	-	-	-	-	-
500 EQUIPMENT	-	-	-	-	-	-
600 LANDS & STRUCTURES	-	-	-	-	-	-
700 GRANTS, CLAIMS	-	-	-	-	-	-
800 MISCELLANEOUS	-	-	-	-	-	-
<u>TOTAL OPERATING</u>	-	-	-	-	-	-
<u>CAPITAL</u>	-	-	-	-	-	-
<u>REVENUE</u>	-	-	-	-	-	-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-	-	-	-	-	-
FEDERAL FUNDS	-	-	-	-	-	-
OTHER	-	-	-	-	-	-
<u>TOTAL</u>	-	-	-	-	-	-

POSITIONS:

FULL-TIME	-	-	-	-	-	-
PART-TIME	-	-	-	-	-	-
TEMPORARY	-	-	-	-	-	-

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

ANALYSIS: Attach a separate page for analysis.

Prepared By: Maureen O'Brien *Maureen O'Brien*

Division: Audit Division

Phone: 465-2320

Date: March 20, 1984

Approved by Commissioner: *R.H. Hertz*

Agency: Revenue

Date: 3/20/84

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Currently banks are required to file returns and pay tax under a statute separate from all other corporations (AS 43.70). This results in significant administrative and legal problems. The Department of Revenue therefore recommends that banks be taxed under the same income tax statutes as other corporations (AS 43.20).

Although state and municipal interest is currently taxable under AS 43.70 and would not be subject to tax under AS 43.20, we estimate that requiring banks to file under AS 43.20 rather than AS 43.70 will result in no loss of revenue to the State. The Department's position is that under IRC sec. 265(2), which is adopted by reference in AS 43.20.021(a), no deduction is allowed for expenses and interest incurred or continued to purchase or carry obligations the interest on which is exempt from tax. This includes not only expenses and interest related to tax exempt state and municipal interest income, but also expenses and interest related to tax exempt U.S. interest income. Therefore, the total amount of nondeductible expenses under AS 43.20 will be close to the amount of nontaxable income.

H B

704

\*Sec. 1. AS 21 is amended by adding a new chapter to read:

CHAPTER 59.

AUTOMOBILE SERVICE CORPORATIONS

Sec. 21.59.010. SCOPE OF CHAPTER. (a) This chapter applies to every individual, person, firm, corporation, or organization of any kind hereafter engaging or purporting to engage in the provision of all or part of an automobile service corporation coverage as defined in AS 21.59.900, for its subscribers in exchange for periodic prepayments by the subscriber.

(b) This chapter does not apply to a person issued a certificate of authority under AS 21.09.

(c) No provision of this title may apply to an automobile service corporation unless contained or referred to in this chapter.

Sec. 21.59.020. INCORPORATION - CERTIFICATE OF AUTHORITY REQUIRED.

(a) A person engaged in or purporting to engage in the provision of an automobile service corporation service shall be incorporated under the laws of Alaska as a nonprofit corporation and be currently authorized as an automobile service corporation under a certificate of authority issued by the director under this chapter.

(b) Before the articles of incorporation of the proposed corporation or amendments to existing articles of incorporation are filed with the commissioner of commerce, they shall be submitted to the director, and the commissioner of commerce shall not file the articles or amendments unless the director's approval is endorsed thereon. The director shall approve the articles or amendments unless he finds that they do not comply with law. If not approved, the director shall return the proposed articles of incorporation to the incorporators or amendments to the corporation, together with his written statement of particulars of the reasons for nonapproval.

Sec. 21.59.030 QUALIFICATIONS FOR CERTIFICATE OF AUTHORITY. The director may not issue or permit to exist a certificate of authority to be or act as an automobile service corporation to a corporation which does not fulfill the following qualifications:

(1) it must be incorporated as an automobile service corporation;  
(2) it must intend to and actually conduct its business in good faith as a nonprofit corporation;

(3) if a newly formed corporation, it must possess sufficient available working funds to pay all reasonably anticipated cost of acquisition of new business and operating expenses, other than losses, for a period of not less than six months following the date of issuance of the certificate of authority;

(4) it must post with the director, a bond in the amount of \$50,000, issued by a corporate surety authorized under AS 21 to act as surety and conditioned upon the organization's faithful fulfillment of its contracts; and,

(5) it must fulfill all other applicable requirements of this chapter.

Sec. 21.59.040 CERTIFICATE OF AUTHORITY. (a) Application for a certificate of authority to transact business as an automobile service corporation shall be made to the director, on forms as prepared and furnished by the director and requiring the information relative to the applicant, its directors, officers, and affairs as the director may

reasonably require consistent with this chapter.

(b) The application shall be accompanied by the following documents:

(1) one copy of the applicant's articles of incorporation and all amendments, certified by the commissioner of commerce;

(2) one copy of the applicant's bylaws, certified by its corporate secretary;

(3) one copy of each subscribers' contract proposed to be offered;

(4) a financial statement of the applicant as of the date not more than 30 days before the filing of the application, showing the amount of working funds available to the applicant, the source of the funds, any pertinent data related thereto, and accompanied by a copy of the agreement under which the funds were contributed to or provided for the applicant;

(5) the bond required in as 21.59.030(4); and,

(6) a copy of any other relevant document reasonably requested by the director.

Sec. 21.59.050. RESERVES. (a) Each automobile service corporation shall establish and maintain unimpaired reserves as follows:

(1) a reserve in an amount not less than all legal obligations of the corporation, other than claims originating under subscriber's contracts, due but unpaid;

(2) a reserve equal to not less than the amount necessary by reasonable estimate to pay all claims incurred under subscriber's contracts but currently unpaid, and including a reasonable additional amount to cover claims incurred but not reported to the corporation at the time of determination of the corporation's financial condition; and,

(3) a reserve equal to 50 per cent of all sums charged and received by the corporation during the calendar period covered by the financial statement, on account of indemnity benefits provided in subscriber's contracts for terms for which premium was last paid and unexpired at the date of the financial statement.

(b) The reserves required under (a) of this section constitute a liability of the corporation in a determination of its financial condition.

Sec. 21.59.060. RECORDS AND ACCOUNTS. (a) An automobile service corporation shall establish and maintain complete and accurate records and accounts covering its transactions and affairs, in accordance with common and accepted principles and practices of insurance accounting and record keeping as applied to the business of the corporation.

(b) The corporation shall establish a separate record of each claim received for benefits under a subscriber's contract, whether the claim is for service or for indemnity. The claim record shall contain information reasonably necessary for the determination of:

(1) the identity of the claimant;

(2) the nature of the claim;

(3) the probable amount to be paid by the corporation on account of the claim; and,

(4) the amounts actually paid by the corporation on account of the claim.

Sec. 21.59.070. OTHER PROVISIONS APPLICABLE. In addition to the provisions contained in this chapter, other chapters and provisions of this title shall apply to automobile service corporations, to the extent applicable and not in conflict with the express provisions of this chapter and the reasonable implications of the express provisions, and

for the purposes of the application the corporations shall be considered to be mutual insurers, as follows:

- (1) AS 21.03
- (2) AS 21.06
- (3) AS 21.09.050
- (4) AS 21.09.100-260
- (5) AS 21.12
- (6) AS 21.36
- (7) AS 21.69
- (8) AS 21.78
- (9) AS 21.90.

Sec.21.59.900. DEFINITIONS. In this chapter

(1) "automobile service corporation" means a corporation providing all or part of one or more automobile service corporation services for subscribers in exchange for periodic prepayment in identifiable amount by or as to the subscribers;

(2) "services" means any professional service, technical service, replacement of goods which the corporation may become obligated to provide upon a contingent event or a certain event which may occur at an uncertain time and for which a specified single or periodic prepayment is charged or collected, including, but not limited to

(A) emergency road service;

(B) reimbursement of legal fees for representation on traffic offenses;

(C) providing bail bonds for traffic offenses;

(D) providing maps and trip planning services; and,

(E) arrangement of discounts, rebates or price reductions on travel related goods and services.

(3) "subscribers contracts" means the contract between the automobile service corporation and its subscriber under which all or a part of one or more services is to be rendered to or on behalf of the subscriber by an automobile service corporation or by a provider that has entered into a service agreement with the automobile service corporation.

\*Sec. 1. AS 21 is amended by adding a new chapter to read:  
CHAPTER 59.

AUTOMOBILE SERVICE CORPORATIONS

Sec. 21.59.010. SCOPE OF CHAPTER. (a) This chapter applies to every individual, person, firm, corporation, or organization of any kind hereafter engaging or purporting to engage in the provision of all or part of an automobile service corporation coverage as defined in AS 21.59.900, for its subscribers in exchange for periodic prepayments by the subscriber.

(b) This chapter does not apply to a person issued a certificate of authority under AS 21.09.

(c) No provision of this title may apply to an automobile service corporation unless contained or referred to in this chapter.

Sec. 21.59.020. INCORPORATION - CERTIFICATE OF AUTHORITY REQUIRED.

(a) A person engaged in or purporting to engage in the provision of an automobile service corporation service shall be incorporated as a nonprofit corporation and be currently authorized as an automobile service corporation under a certificate of authority issued by the director under this chapter.

(b) If a proposed corporation is to be formed under the laws of Alaska, the articles of incorporation of the proposed corporation or amendments to existing articles of incorporation are to be submitted to the director before they shall be filed with the commissioner of commerce, and the commissioner of commerce shall not file the articles or amendments unless the director's approval is endorsed thereon. The director shall approve the articles or amendments unless he finds that they do not comply with law. If not approved, the director shall return the proposed articles of incorporation to the incorporators or amendments to the corporation, together with his written statement of particulars of the reasons for nonapproval.

Sec. 21.59.030 QUALIFICATIONS FOR CERTIFICATE OF AUTHORITY. The director may not issue or permit to exist a certificate of authority to be or act as an automobile service corporation to a corporation which does not fulfill the following qualifications:

(1) if a newly formed corporation, it must possess sufficient available working funds to pay all reasonably anticipated cost of acquisition of new business and operating expenses, other than losses, for a period of not less than six months following the date of issuance of the certificate of authority;

(2) it must post with the director, a bond in the amount of \$50,000, issued by a corporate surety authorized under AS 21 to act as surety and conditioned upon the organization's faithful fulfillment of its contracts; and,

(3) it must fulfill all other applicable requirements of this chapter.

Sec. 21.59.040 CERTIFICATE OF AUTHORITY. (a) Application for a certificate of authority to transact business as an automobile service corporation shall be made to the director, on forms as prepared and furnished by the director and requiring the information relative to the applicant, its directors, officers, and affairs as the director may reasonably require consistent with this chapter.

(b) The application shall be accompanied by the following documents:

(1) one copy of the applicant's articles of incorporation and all amendments, certified by the appropriate official of the state of incorporation;

(2) one copy of the applicant's bylaws, certified by its corporate secretary;

(3) one copy of each subscribers' contract proposed to be offered;

(4) an audited financial statement of the applicant for the most recent fiscal year; or, a financial statement of the applicant as of the date not more than 30 days before the filing of the application, showing the amount of working funds available to the applicant, the source of the funds, any pertinent data related thereto, and accompanied by a copy of the agreement under which the funds were contributed to or provided for the applicant;

(5) the bond required in AS 21.59.030(2); and,

(6) a copy of any other relevant document reasonably requested by the director.

Sec. 21.59.060. RESERVES. (a) Each automobile service corporation shall establish and maintain unimpaired reserves as follows:

(1) a reserve in an amount not less than all legal obligations of the corporation, other than claims originating under subscriber's contracts, due but unpaid;

(2) a reserve equal to not less than the amount necessary by reasonable estimate to pay all claims incurred under subscriber's contracts but currently unpaid, and including a reasonable additional amount to cover claims incurred but not reported to the corporation at the time of determination of the corporation's financial condition; and,

(3) a reserve equal to 50 per cent of all sums charged and received by the corporation during the calendar period covered by the financial statement, on account of indemnity benefits provided in subscriber's contracts for terms for which premium was last paid and unexpired at the date of the financial statement.

(b) The reserves required under (a) of this section constitute a liability of the corporation in a determination of its financial condition.

(c) The requirements of (a) and (b) of this section do not apply if the automobile service corporation shall in lieu of the bond required in AS 21.59.030(2), file a bond under that section in the amount of \$200,000.

Sec. 21.59.060. RECORDS AND ACCOUNTS. An automobile service corporation shall establish and maintain complete and accurate records and accounts covering its transactions and affairs, in accordance with generally accepted accounting principles as applied to the business of the corporation.

Sec. 21.59.070. OTHER PROVISIONS APPLICABLE. In addition to the provisions contained in this chapter, other chapters and provisions of this title shall apply to automobile service corporations, to the extent applicable and not in conflict with the express provisions of this chapter and the reasonable implications of the express provisions, and for the purposes of the application the corporations shall be considered to be mutual insurers, as follows:

(1) AS 21.03

(2) AS 21.06

(3) AS 21.09.050

(4) AS 21.09.100-260

(5) AS 21.12

- (6) AS 21.36
- (7) AS 21.69
- (8) AS 21.78
- (9) AS 21.90.

Sec.21.59.900. DEFINITIONS. In this chapter

(1) "automobile service corporation" means a corporation providing all or part of one or more automobile service corporation services for subscribers in exchange for periodic prepayment in identifiable amount by or as to the subscribers;

(2) "automobile service corporation services" means any professional service, technical service, replacement of goods which the corporation may become obligated to provide upon a contingent event or a certain event which may occur at an uncertain time and for which a specified single or periodic prepayment is charged or collected, including, but not limited to

(A) emergency road service;

(B) reimbursement of legal fees for representation on traffic offenses; and,

(C) providing bail bonds for traffic offenses.

An automobile service corporation may provide other services or benefits which do not fall within the definition of an automobile service corporation services.

(3) "subscriber's contract" means the contract between the automobile service corporation and its subscriber under which all or a part of one or more services is to be rendered to or on behalf of the subscriber by an automobile service corporation or by a provider that has entered into a service agreement with the automobile service corporation.

\*Sec. 1. AS 21 is amended by adding a new chapter to read:  
CHAPTER 59.

AUTOMOBILE CLUBS

Sec. 21.59.010. SCOPE OF CHAPTER. (a) This chapter applies to every individual, person, firm, corporation, or organization of any kind hereafter engaging or purporting to engage in the provision of all or part of an automobile club service as defined in AS 21.59.900, for its subscribers in exchange for periodic prepayments by the subscriber.

(b) This chapter does not apply to a person issued a certificate of authority under AS 21.09.

(c) No provision of this title may apply to an automobile club unless contained or referred to in this chapter.

Sec. 21.59.020. INCORPORATION - CERTIFICATE OF AUTHORITY REQUIRED.

(a) A person engaged in or purporting to engage in the provision of an automobile club service shall be incorporated as a nonprofit corporation and be currently authorized as an automobile club under a certificate of authority issued by the director under this chapter.

(b) If a proposed corporation is to be formed under the laws of Alaska, the articles of incorporation of the proposed corporation or amendments to existing articles of incorporation are to be submitted to the director before they shall be filed with the commissioner of commerce, and the commissioner of commerce shall not file the articles or amendments unless the director's approval is endorsed thereon. The director shall approve the articles or amendments unless he finds that they do not comply with law. If not approved, the director shall return the proposed articles of incorporation to the incorporators or amendments to the corporation, together with his written statement of particulars of the reasons for nonapproval.

Sec. 21.59.030 QUALIFICATIONS FOR CERTIFICATE OF AUTHORITY. The director may not issue or permit to exist a certificate of authority to be or act as an automobile club to a corporation which does not fulfill the following qualifications:

(1) if a newly formed corporation, it must possess sufficient available working funds to pay all reasonably anticipated cost of acquisition of new business and operating expenses, other than losses, for a period of not less than six months following the date of issuance of the certificate of authority;

(2) it must post with the director, a bond in the amount of \$50,000, issued by a corporate surety authorized under AS 21 to act as surety and conditioned upon the organization's faithful fulfillment of its contracts; and,

(3) it must fulfill all other applicable requirements of this chapter.

Sec. 21.59.040 CERTIFICATE OF AUTHORITY. (a) Application for a certificate of authority to transact business as an automobile club shall be made to the director, on forms as prepared and furnished by the director and requiring the information relative to the applicant, its directors, officers, and affairs as the director may reasonably require consistent with this chapter.

(b) The application shall be accompanied by the following documents:

(1) one copy of the applicant's articles of incorporation and all amendments, certified by the appropriate official of the state of

incorporation;

(2) one copy of the applicant's bylaws, certified by its corporate secretary;

(3) one copy of each subscribers' contract proposed to be offered;

(4) an audited financial statement of the applicant for the most recent fiscal year; or, a financial statement of the applicant as of the date not more than 30 days before the filing of the application, showing the amount of working funds available to the applicant, the source of the funds, any pertinent data related thereto, and accompanied by a copy of the agreement under which the funds were contributed to or provided for the applicant;

(5) the bond required in AS 21.59.030(2); and,

(6) a copy of any other relevant document reasonably requested by the director.

Sec. 21.59.050. RESERVES. (a) Each automobile club shall establish and maintain unimpaired reserves as follows:

(1) a reserve in an amount not less than all legal obligations of the corporation, other than claims originating under subscriber's contracts, due but unpaid;

(2) a reserve equal to not less than the amount necessary by reasonable estimate to pay all claims incurred under subscriber's contracts but currently unpaid, and including a reasonable additional amount to cover claims incurred but not reported to the corporation at the time of determination of the corporation's financial condition; and,

(3) a reserve equal to 50 per cent of all sums charged and received by the corporation during the calendar period covered by the financial statement, on account of indemnity benefits provided in subscriber's contracts for terms for which premium was last paid and unexpired at the date of the financial statement.

(b) The reserves required under (a) of this section constitute a liability of the corporation in a determination of its financial condition.

(c) The requirements of (a) and (b) of this section do not apply if the automobile club shall in lieu of the bond required in AS 21.59.030(2), file a bond under that section in the amount of \$250,000.

Sec. 21.59.060. RECORDS AND ACCOUNTS. An automobile service corporation shall establish and maintain complete and accurate records and accounts covering its transactions and affairs, in accordance with generally accepted accounting principles as applied to the business of the corporation.

Sec. 21.59.070. OTHER PROVISIONS APPLICABLE. In addition to the provisions contained in this chapter, other chapters and provisions of this title shall apply to automobile club, to the extent applicable and not in conflict with the express provisions of this chapter and the reasonable implications of the express provisions, and for the purposes of the application the corporations shall be considered to be stock insurers, as follows:

(1) AS 21.03

(2) AS 21.06

(3) AS 21.09.050

(4) AS 21.09.100

(5) AS 21.09.120-210

(6) AS 21.12

- (7) AS 21.36
- (8) AS 21.69
- (9) AS 21.78
- (10) AS 21.90.

Sec.21.59.900. DEFINITIONS. In this chapter

(1) "automobile club" means a corporation providing all or part of one or more automobile club services for subscribers in exchange for periodic prepayment in identifiable amount by or as to the subscribers;

(2) "automobile club services" means any professional service, technical service, replacement of goods which the corporation may become obligated to provide upon a contingent event or a certain event which may occur at an uncertain time and for which a specified single or periodic prepayment is charged or collected, including, but not limited to

(A) emergency road service;

(B) reimbursement of legal fees for representation on traffic offenses; and,

(C) providing bail bonds for traffic offenses.

An automobile club may provide other services or benefits which do not fall within the definition of automobile club services.

(3) "subscriber's contract" means the contract between the automobile club and its subscriber under which all or a part of one or more services is to be rendered to or on behalf of the subscriber by an automobile club or by a provider that has entered into a service agreement with the automobile club.

This proposal is intended to permit auto clubs to form and operate in Alaska. Since auto clubs do provide very limited forms of insurance, they are currently required to form as an insurer under Title 21. This is effectively a barrier since those requirements are aimed at a different kind of entity. The division recognizes that the requirements for an auto club do not need to be as stringent as for a normal insurer and support the concept encompassed in HB 704. HB 704, however presented a dilemma that we have attempted to resolve with a suggested substitute. HB 704 provided the director with duties to do certain things, yet the statute giving him the authority to do those things is made not effective. While this may be a minor consideration, there are other things in the insurance code that should be made applicable, hence the redraft. We have used the statute allowing hospital or medical service corporations as a guide in structuring this substitute.

Sec. 21.59.010.

This section requires that an auto club is subject to the provisions of the new chapter. It excludes insurers with a certificate of authority issued under AS 21.09. It also provides that only provisions referred to or contained in AS 21.59 apply to an auto club.

Sec. 21.59.020.

This section requires that the auto club be a nonprofit corporation and hold a certificate of authority issued by the director. It also establishes some procedural requirements about order of filing certain documents if the auto club is a domestic.

Sec. 21.59.030.

This section establishes qualifications for a certificate of authority. The auto club must be financially sound and it must post a bond assuring that it will meet its contractual obligations.

Sec. 21.59.040.

This section lists the documents needed to obtain a certificate of authority. (4) provides an option of two ways to provide some evidence of financial soundness. The rest is almost boilerplate requirements for issuance of a certificate of authority.

Sec. 21.59.050.

Subsections (a) and (b) provide the reserves needed if the bond filed under Sec. 21.59.030(2) is for \$50,000. Subsection (c) makes no special reserve requirements if the bond filed under Sec. 21.59.030(2) is for \$250,000. Since the amounts for which the auto club will be at risk are very low for each subscriber, the bond is a good substitute.

Sec. 21.59.060.

This section requires that records be kept on a generally accepted accounting principles basis rather than that usual to an insurer, a statutory basis.

Sec. 21.59.070.

Since this is an exclusive statute, one to which provisions outside of the chapter do not apply, this section is needed to bring other appropriate sections of the insurance code to bear on auto clubs.

AS 21.03. This chapter deals with the scope of the insurance code.

AS 21.06. This chapter establishes the authority and powers of the director of insurance.

AS 21.09.050. This section bars misleading or duplication of insurer names.

AS 21.09.100. This section deals with management and affiliations of insurers.

AS 21.09 120-170. These sections deal with the certificate of authority. Issuance, refusal to issue, ownership, continuance, expiration, reinstatement, amendment, revocation, suspension, and duration of suspension of a certificate of authority.

AS 21.09.180-190. These sections deal with service of process.

AS 21.09.200. This section deals with an annual statement.

AS 21.09.210. This section deals with taxation.

AS 21.12. This chapter defines the kinds of insurance.

AS 21.36. This chapter deals with unfair trade practices and frauds.

AS 21.69. This chapter deals with organization and corporate procedure for domestic corporations.

AS 21.78. This chapter deals with rehabilitation and liquidation of impaired or insolvent insurers.

AS 21.90. This chapter contains the general penalty section and general definitions for the insurance code.

Sec 21.59.900.

Definition section.

STATE OF ALASKA 1984 LEGISLATIVE SESSION  
FISCAL NOTE

Revision Date: \_\_\_\_\_

REQUEST

Bill/Resolution No.: CSHB 704 (L&C)  
Title: Automobile clubs

Sponsor: Labor & Commerce  
Requestor: Labor & Commerce  
Date of Request: 4/9/84

FISCAL DETAIL

Agency Affected: Commerce & Economic Dev.  
Program Category Affected: \_\_\_\_\_

Public Protection  
BRU, Program or Subprogram(s) Affected: \_\_\_\_\_  
Division of Insurance

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
<b>OPERATING</b>						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
<b>TOTAL OPERATING</b>	0	0	0	0	0	0

<b>CAPITAL</b>						
----------------	--	--	--	--	--	--

<b>REVENUE</b>						
----------------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>	0	0	0	0	0	0

POSITIONS: None

FULL-TIME						
PART-TIME						
TEMPORARY						

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

ANALYSIS: Attach a separate page for analysis

Prepared By: Kenneth C. Moore, Director  
Division: Insurance

Phone: 465-2515

Date: 4/9/84

Approved by Commissioner: Richard A. Lyon  
Agency: Commerce & Economic Development

Date: 4/9/84

Distribution (by Agency preparing fiscal note):

Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)

12/1/83

APRIL 4, 1984

TO: JOHN

FROM: KEN

RE: HB 704 "RELATING TO AUTOMOBILE CLUBS"

THE INTENT OF HB 704 IS TO AMEND ALASKA STATUTES TO PERMIT THE TRIPLE A AUTOMOBILE CLUB TO INCORPORATE IN ALASKA AS A NON-PROFIT CORPORATION. BECAUSE SEVERAL OF THE SERVICES OFFERED BY TRIPLE A WOULD FALL UNDER THE DEFINITION OF INSURANCE, THE DIVISION OF INSURANCE FELT A NUMBER OF CHANGES WERE NECESSARY TO PREVENT PROBLEMS IN THE STATUTES FOR BOTH THE DIVISION AND FOR TRIPLE A.

IT IS MY UNDERSTANDING THAT DURING THE PAST TWO REPRESENTATIVES OF TRIPLE A AND THE DIVISION OF INSURANCE HAVE WORKED TO DEVELOP A COMPROMISE PIECE OF LEGISLATION WHICH ACCOMMODATES TRIPLE A'S REQUEST FOR INCORPORATION AND SOLVES STATUTE PROBLEMS CITED BY THE DIVISION. A BRIEFING PAPER HAS BEEN SUPPLIED BY TRIPLE A'S REPRESENTATIVES WHICH DETAILS SOME OF THE STATUTORY PROBLEMS. THE RESULTING DRAFT LEGISLATION IS IN ALL MEMBERS PACKETS. A SECTIONAL ANALYSIS IS ATTACHED TO THE BACK.

QUESTIONS

1. WHY HAS THE TRIPLE A AUTO CLUB NOT SOUGHT TO ORGANIZE IN ALASKA BEFORE ?

2. WHY HAS THIS BILL BEEN EXPANDED SO MUCH FROM THE ORIGINAL VERSION ?