

LEG. FINANCE - BILLS 1977 - 1978 715

HB 353 cont., thru CSHB 357am

## THE DELTA LAND MANAGEMENT PLANNING STUDY

### Citizen Council:

These management areas are a good idea.

I'm not comfortable with these plans; the calving grounds should be protected, but habitat manipulation is too nebulous.

Bison habitat should be created on the west side of the Delta.

### General public:

Why is legislative action needed for the area south of the highway?

These plans are not specific enough.

I agree on the area south of the highway, but I don't think any action is needed for the calving grounds.

The boundaries of the critical habitat area concern me. If there were restrictions on activities in the northern third, Fort Greely might be forced to close.

Try to get control of the calving grounds.

Leave these areas as they are.

Make sure it's difficult to transfer management from one agency to another. I don't want some other agency to get control of an area without the public's knowledge.

### BURNS

Strict planning would be needed to protect private property.

Don't do any habitat manipulation.

There should be an all-inclusive policy to allow burns wherever they enhance habitat, don't detract from the area's utility, and won't endanger adjacent areas where burns are not desirable.

A larger burn area should be considered south of the highway.

I disagree with the recommendation. The present management is okay.

### GOODPASTER FLATS-SHAW CREEK FLATS

I agree except for the all-terrain vehicle clause (two people).

No habitat manipulation.

I don't like restrictions on ATV's (two people).

Restrict ATV's only upon the Fish and Game Department's order due to a definite need.

I disagree with the recommendation. The present management is okay.

### MINERAL LICKS

Allow mining if the need is critical.

Regarding sheep licks, falcon areas, and Macomb Plateau: quit trying to eliminate trails and cabins!

This recommendation is not necessary.

## THE DELTA LAND MANAGEMENT PLANNING STUDY

### CLEARWATER LAKE

#### Citizen Council:

Try to move the army training camp away from the area; there are too many boats during the nesting season.

Watch out for problems with agricultural development.

#### General public:

Is sport hunting allowed in wildlife refuges?

Waterfowl hunting should be allowed, along with logging by permit.

In time logging would have to be done (bv permit).

No trapping.

Absolutely no further land should be released for private ownership here.

This is a very good recommendation.

What about the oil-scum from boats on Clearwater Lake? It gets worse every year.

### ENDANGERED SPECIES HABITAT

There is no need to restrict activity during the winter.

Private lands here should remain private and should be used as the owner sees fit.

Buy back any homesites already there.

One of the habitat areas is already being developed for agriculture.

### MACOMB PLATEAU

Move the eastern boundary to the Robertson River.

Include the whole plateau; try to discourage present and further settlement at the northern edge of the plateau in winter sheep habitat. The sheep were there first.

Mining should be allowed if a critical need develops.

There should be a year-round ban on vehicles on the plateau. They disturb game far more than anyone on foot or horseback does.

I do not agree with fire suppression!

Don't cut out grazing, though overgrazing should be guarded against.

Don't allow any mining, even small-scale mining; and don't allow any mechanized vehicles.

## FORESTS, MINERALS, AND OTHER RESOURCES

### FOREST MANAGEMENT AND CLASSIFICATION

Some of your management guidelines are not consistent with the pace of agricultural development you've recommended.

Logging should be for local use, not export.

Timber that is cleared for other developments should be set aside for public use for cabin logs.

# THE DELTA LAND MANAGEMENT PLANNING STUDY

## MINERAL RESOURCE MANAGEMENT GUIDELINES

### Citizen Council:

If miners have to return land to its original condition, why don't farmers?

Take care that mining cabins and development don't get out of hand.

Mining on any scale is detrimental to any other use. Unless the need is critical, it should be prohibited from the wildlands, especially placer mining. You can't eat gold.

The highest priority is for local consumption.

### General public:

Regulation should be practical and kept to a minimum, so as not to prohibit mining inadvertently.

These guidelines won't preclude placer mining, will they? (two people).

## WATER RESOURCE MANAGEMENT GUIDELINES

I agree except for the guideline about wetlands. ATVs rarely follow the same route, and the crossing of one or two vehicles has no lasting effect.

We don't need further research on "non-point" pollution sources.

We don't need an overall water resource plan. /

Some exceptions will need to be made in these guidelines-for instance, for mining when it's in the public interest.

## TRANSPORTATION AND UTILITY CORRIDORS

Rights-of-way should all be along the same corridor.

Delta needs a railroad.

# THE DELTA LAND MANAGEMENT PLANNING STUDY

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## THE DELTA LAND MANAGEMENT PLANNING STUDY

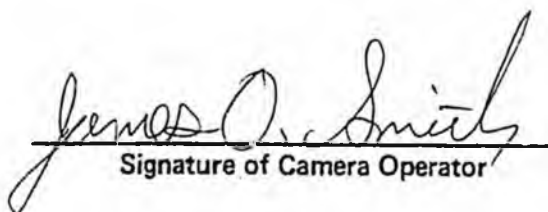
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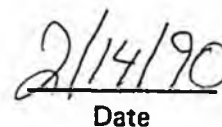


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Signature of Camera Operator

  
Date

# COMMITTEE REPORT

## HOUSE

4/4/77

5-4-77

Date

Mr. Speaker:

The Committee on FINANCE has had HR 154 under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for \_\_\_\_\_ and that CS for \_\_\_\_\_ do pass
- (and) recommends it be referred to the \_\_\_\_\_ committee
- reports it back without recommendation
- AND attaches a report of its intent
- (other) \_\_\_\_\_

### MEMBERS SIGNING THE MAJORITY REPORT:

<u>[Signature]</u>	<u>[Signature]</u>	_____
<u>[Signature]</u>	<u>[Signature]</u>	_____
<u>[Signature]</u>	<u>[Signature]</u>	_____
<u>[Signature]</u>	<u>[Signature]</u>	_____

### MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

[Signature]  
Chairman

Introduced: 3/16/77  
Referred: Commerce and  
Finance

BY GARDINER, DUNCAN, ELIASON  
FREEMAN, HAUGEN, MILLER,  
SNIDER, AND SPECKING

1 IN THE HOUSE

2 HOUSE BILL NO. 356

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to the water resources revolving loan  
7 fund."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. AS 45.36.010 is amended to read:

10 Sec. 45.36.010. FUND ESTABLISHED. There is established as a  
11 separate fund the water resources revolving loan fund. Loans from this  
12 fund are to be used to develop and conserve in the public interest the  
13 water resources of Alaska, using state revenues from nonrenewable re-  
14 source [MINERAL] development.

15 \* Sec. 2. AS 45.36.020 is repealed and re-enacted to read:

16 Sec. 45.36.020. FUND UTILIZATION. (a) Loans from the fund shall  
17 be for a term not to exceed 50 years, and the rate of interest shall be  
18 not less than three nor more than five per cent per year on the unpaid  
19 balance. The repayment schedule shall be as determined by the depart-  
20 ment. Repayment of a loan shall commence at the date of commercial  
21 operation of the project or 10 years from the date the loan is granted,  
22 whichever is sooner.

23 (b) The loans may be used for capital construction projects, for  
24 hydroelectric generation and potable water supply including surface  
25 storage and groundwater sources and transmission of water from surface  
26 storage to the existing distribution system and development of hydro-  
27 electric generating facilities including transmission of power to the  
28 load center. Loans may be made to applicants for new or existing pro-  
29 jects including feasibility and preconstruction engineering studies,

# CORRECTION

THIS DOCUMENT  
HAS BEEN REPHOTOGRAPHED  
TO ASSURE LEGIBILITY

Introduced: 3/16/77  
Referred: Commerce and  
Finance

BY GARDINER, DUNCAN, ELIASON,  
FREEMAN, HAUGEN, MILLER,  
SNIDER, AND SPECKING

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25 storage and groundwater sources and transmission of water from surface  
26 storage to the existing distribution system, and development of hydro-  
27 electric generating facilities including transmission of power to the  
28 load center. Loans may be made to applicants for new or existing pro-  
29 jects including feasibility and preconstruction engineering studies,

1 expenses incurred in securing necessary permits and licenses, design of  
2 the project and construction of capital improvements. Existing hydro-  
3 electric and water supply projects may be expanded or rehabilitated with  
4 loan funds under this chapter if the rehabilitation and expansion is a  
5 capital improvement project.

6 (c) Loans shall be repaid to the fund by the borrower from revenue  
7 derived from the sale of electric power or water.

8 \* Sec. 3. AS 45.36.040(b) and (c) are repealed and re-enacted to read:

9 (b) There is created within the department the Water Resources  
10 Revolving Loan Fund Committee chaired by the commissioner or his deputy,  
11 and including as members the director of the division of energy and  
12 power development and the director of the division of business loans.  
13 The committee shall review all applications referred to it for approval  
14 by the department.

15 (c) The department shall establish a priority list for the ap-  
16 proval of project applications based upon a determination of which  
17 projects will better serve the interests of the state. An applicant may  
18 appeal the level of priority assigned to his application by requesting a  
19 review of the list of priorities by the committee. The committee, upon  
20 sufficient notice and a public hearing, may change an assigned priority.  
21 Applications not approved due to a lack of funds will retain the  
22 priority assigned and may be held for reconsideration.

23 \* Sec. 4. AS 45.36.040 is amended by adding a new subsection to read:

24 (d) If the committee finds that preconstruction feasibility and  
25 engineering studies establish that a project is not feasible from either  
26 a technical, economic or financial viewpoint, the department may waive  
27 repayment of loans granted to conduct the studies.

28 \* Sec. 5. AS 45.36.050 is amended to read:

29 Sec. 45.36.050. ELIGIBILITY FOR PROJECT LOANS. A public utility

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is an eligible borrower for a project loan under this chapter if

(1) it is a public utility as defined in AS 42.05.701(2)(A), and (C);

(2) the utility can demonstrate in its loan application that the project is economically and technically [AND] feasible and, taking into account the low interest on loans under this chapter, is the most economical means of furnishing the proposed service.

\* Sec. 6. AS 45.86 is amended by adding a new section to read:

Sec. 45.86.060. DEFINITIONS. In this chapter,

(1) "commissioner" means the commissioner of the Department of Commerce and Economic Development;

(2) "department" means the Department of Commerce and Economic Development.

#

AMENDMENT #1

OFFERED IN THE HOUSE:

By: Commerce Committee

To: \_\_\_\_\_ HOUSE BILL No. 356

SENATE BILL No. \_\_\_\_\_

PAGE: 1

LINE: 13

*delete the comma and*  
After "Alaska", insert a period (".");

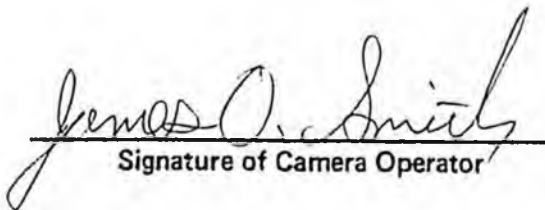
Delete rest of sentence on lines 13 and 14.

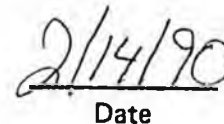


# RECORDS CERTIFICATION



I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

  
Signature of Camera Operator

  
Date

COMMITTEE REPORT  
SENATE

5/27/77

May 22, 1977

Date

Mr. President:

The Committee on FINANCE has had HB 356 am  
water resources revolving loan fund  
under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for \_\_\_\_\_ and that  
CS for \_\_\_\_\_ do pass
- (and) recommends it be referred to the \_\_\_\_\_  
committee
- reports it back without recommendation
- AND attaches a report of its intent
- (other) \_\_\_\_\_

MEMBERS SIGNING THE MAJORITY REPORT:

[Signature] \_\_\_\_\_  
[Signature] \_\_\_\_\_  
[Signature] \_\_\_\_\_  
[Signature] \_\_\_\_\_

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

\_\_\_\_\_ recommends: \_\_\_\_\_  
 \_\_\_\_\_ recommends: \_\_\_\_\_  
 \_\_\_\_\_ recommends: \_\_\_\_\_

[Signature]  
 \_\_\_\_\_  
 Chairman

A M E N D M E N T

Offered in the SENATE

By RESOURCES COMMITTEE

To: \_\_\_\_\_ SENATE BILL NO. \_\_\_\_\_

\_\_\_\_\_ HOUSE BILL NO. 356 Am.

AMENDMENT: Page 2 Lines 23 through 27


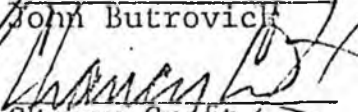
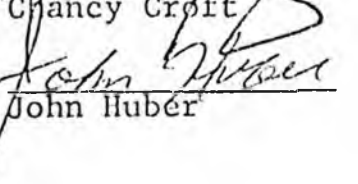
Delete section four in its entirety and re-number accordingly.

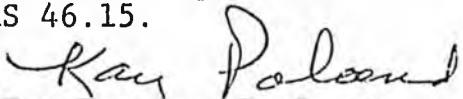
" May 17, 1977

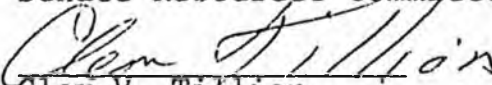
SENATE RESOURCES COMMITTEE

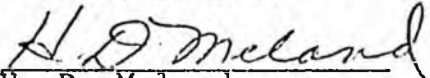
LETTER OF INTENT ON HB 356 am

Inasmuch as the administration of State water resources is currently the responsibility of various departments, it is the intent of the Resources Committee in enacting the water resources revolving loan fund (HB 356) that the Commissioner of the Department of Commerce and Economic Development, in adopting regulations to carry out the provisions of this act, is directed to take into account the responsibilities for water resources of the Department of Environmental Conservation under AS 46.03, of the Department of Fish and Game under AS 16, and of the Department of Natural Resources under AS 46.15.

  
John Butrovich  
  
Chancy Croft  
  
John Huber

  
Kay Poland, Chairman  
Senate Resources Committee

  
Clem V. Tillion

  
H. D. Meland

  
Mike Colletta

THE LEGISLATURE OF THE STATE OF ALASKA  
TENTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB 356  
 Title An Act relating to the water resources revolving loan fund  
 Requested by Senate Finance Date 5/19/77

II. FISCAL DETAIL

Agency Affected Commerce & Economic Development  
 Program Category Affected Development  
 Budget Request Unit(s) Affected Division of Business Loans  
Division of Energy & Power Development

EXPENDITURES (Thousands of Dollars) NONE

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL						

FUNDING (Thousands of Dollars) NONE

GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify)						

POSITIONS NONE

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

No fiscal impact

IV. DATE 5/20/77 PREPARED BY *Louis J. Cook*  
 AGENCY Commerce & Economic Development  
 PHONE 465-2500  
 Original: Legislative Finance  
 cc: Budget and Management  
 Prime Sponsor (First Legislator Named)



# THE SOUTHEASTERN CONFERENCE

P. O. BOX 531  
WRANGELL, ALASKA 99929

March 11, 1977

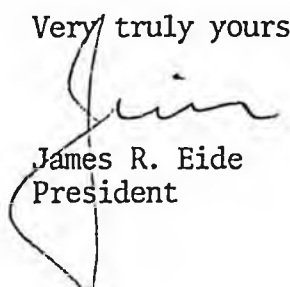
Representative Terry Gardiner  
Chairman, House Judiciary Committee  
Pouch V Mail Stop No. 3100  
Juneau, Alaska 99811

Dear Sir: *Terry*

The Southeastern Conference wishes to express their appreciation to you for your interest and efforts in sponsoring legislation of economic importance to Southeast Alaska and those other communities needing support in the development of hydro and other water resource development.

As requested in our meeting held March 1, 1977, we are submitting back up material for the proposed changes in the Water Resources Revolving Loan Fund Act. Enclosed are the suggested changes in the Statutes and proposed appropriations for the next fiscal year, including a revised summary of funding requirements for FY 1978.

Very truly yours,



James R. Eide  
President

JRE/jr

enclosures

President	James R. Eide
First Vice President	William Macomber
Second Vice President	John Halliwell

PROPOSED AMENDMENTS

WATER RESOURCES REVOLVING LOAN FUND ACT

Sec. 45.86.010. There is established a separate fund, The Water Resources Revolving Loan Fund. Loans from this fund are to be used to develop and conserve in the public interest the water resources of Alaska, using State revenues from the Alaska Permanent Fund (mineral development).

Sec. 45.86.040 (b) is repealed and re-enacted to read:

Sec. 45.86.040 (b) The department shall forward all loan applications it recommends for approval to the Water Resources Revolving Loan Fund Committee established with the department and made up of the commissioner or his deputy, the director of division of energy and power development, and the director of division of business loans.

Sec. 45.86.060 shall be added as follows:

Sec. 45.86.060. CONDITIONS APPLICABLE TO PROJECT LOANS. (a) The term of the loan shall not exceed 50 years and the interest rate shall be not less than three, or more than five, percent a year on the unpaid balance. The repayment schedule shall be computed in a manner so that annual payments of principal and interest, termed debt service, are approximately equal over a period not to exceed 40 years. Repayment of the loan, principal and interest, will commence at the date of commercial operation of the project or ten years from the date the loan is made, whichever is sooner.

(b) Loans shall be utilized for feasibility studies, pre-construction engineering including the securing of permits and licenses necessary for construction and operation, design and construction of capital improvement projects.

(c) If, in the opinion of the Water Resources Revolving Loan Fund Committee, feasibility studies or preconstruction engineering establish that the project is not feasible from either a technical, economic or financial viewpoint, the department may not require repayment of loans made for this purpose, provided that repayment of all loans shall be required if design or construction of the project proceeds.

This Act takes effect immediately in accordance with \_\_\_\_\_.

## JUSTIFICATION FOR AMENDMENTS

### WATER RESOURCES REVOLVING LOAN FUND ACT

I. The change in Sec. 45.86.010 is to correctly indicate the proper fund from which the revolving fund would secure revenue for making the loans. When the Water Resources Revolving Loan Fund was first drafted, one of the sources of loan funds was tied to Alaska mineral lease bonus funds. This was passed by the Legislature, but vetoed by the Governor as being unconstitutional. Since then, voter approval of the permanent fund has made possible this vehicle for funding these projects.

Sec. 45.86.040 - the Loan Committee composition as now specified in the Statutes, was a high level group deemed necessary to consider loans for large projects such as the Susitna and Yukon Taiya projects. Projects of this nature would now come under the State Power Authority which, together with Federal support, would finance the large installations.

The formation of a committee within the Department of Commerce would be more appropriate to consider the financing of small hydro and water projects. These would be administered similar to the other business loans the Department handles.

Sec. 45.86.060 - The first draft of HB171 (copy attached) spelled out the conditions of loans consistent with long term low interest. However, it was determined that this type of condition could best be handled by regulatory provisions. As a result, the conditions now being applied to the loans are not in accord with the intent of the Legislation. Loans are for a term of seven years rather than long term of forty to fifty years and interest rates of 6% are hardly low. Interest is due and payable yearly and prior to the project generating revenues or the ability to meet debt service. This burden on small utilities preclude their involvement in the revolving fund.

Subsection (b) spells out the type of activities in the development of the property which would be eligible for loans under the revolving fund. Subsection (c) is an "advance planning fund" provision similar to H.U.D. 701. If the studies indicate the project is not feasible, the repayment of the loans for the studies may not be required. Here again is the intent to alleviate the financial burden for the small communities for those projects which turn out to be a "dry hole" and for which revenues cannot be realized.

II. Basis for the proposed appropriation bill FY 1978 for the Resources Revolving Loan. The proposed appropriations for FY 1978 are based on estimated community requirements for the specified projects over and above the funds made available in the 1977 appropriations. The attached list of funding requirements total \$3,730,000, however, it appears that the applications for FY 1977 will leave a balance of \$230,000 which can reduce the proposed appropriations to \$3,500,000.



# KETCHIKAN PUBLIC UTILITIES

334 FRONT STREET

P. O. BOX 1019 KETCHIKAN, ALASKA 99901

TELEPHONE 907-225-3111

February 11, 1977

MUNICIPALLY OWNED  
ELECTRIC WATER PHONE

Representative Oral Freeman  
State Capitol  
Pouch V  
Juneau, Alaska 99811

Subject: Development of Hydroelectric Generating  
Plants in Southeast Alaska

Dear Oral:

Mr. N. L. Teague, City-Utilities Manager has requested that I submit to you some pertinent information regarding the advantages to Ketchikan, and Southeast Alaska as a whole, which would be gained by the installation of hydroelectric generating plants. I will use Ketchikan as an example.

We have three (3) small hydroelectric plants. To 1969 we were hydro oriented. Our first base load type diesel was placed in operation in 1970. We now have three (3) such units. I believe that a comparison of cost, hydro versus diesel generation in our system, is pertinent.

In 1976, the average operation and maintenance cost of producing one (1) kilowatt hour at the bus bar by hydroelectric generation was \$ .0055 or 5.5 mils.

The average cost of operation and maintenance per kilowatt hour of generation by diesel was \$ .0638.

A recap in the same vein, from 1970 to date, clearly points up that hydroelectric power is the greatest hedge against inflation since the Republicans.

TIME PERIOD - January 1, thru December 31, 1970:

Diesel = \$ .01249/KWHR

Hydro = \$ .00272/KWHR

Differential in cost/KWHR - Diesel greater by \$ .00977

Differential in dollars - 2,718,600 KWHR x \$ .00977 = \$26,560.72

TIME PERIOD - January 1, thru December 31, 1971:

Diesel = \$ .01689/KWHR

Hydro = \$ .00336/KWHR

Differential in cost/KWHR - Diesel greater by \$ .01353

Differential cost in dollars = \$174,228.52

TIME PERIOD - January 1, thru December 31, 1972:

Diesel = \$ .01476/KWHR

Hydro = \$ .00365/KWHR

Differential in cost/KWHR - Diesel greater by \$ .01111

Differential cost in dollars = \$143,065.69

TIME PERIOD - January 1, thru December 31, 1973:

Diesel = \$ .02144/KWHR

Hydro = \$ .00388/KWHR

Differential in cost/KWHR - Diesel greater by \$ .01756

Differential cost in dollars = \$226,123.63

TIME PERIOD - January 1, thru December 31, 1974:

Diesel = \$ .04125/KWHR

Hydro = \$ .00534/KWHR

Differential in cost/KWHR - Diesel greater by \$ .03591

Differential cost in dollars = \$462,420.25

TIME PERIOD - January 1, thru December 31, 1975:

Diesel = \$ .0430/KWHR

Hydro = \$ .0051/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0379/KWHR

Differential cost in dollars = \$491,763.87

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Three

TIME PERIOD - January 1, thru December 31, 1976:

Diesel = \$ .0638/KWHR

Hydro = \$ .0055/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0583/KWHR

Differential cost in dollars = \$470,883.27

Note that 1976 differential cost in dollars is slightly less than 1975. This is due to a small hydro-electric plant (Silvis) being returned to service in 1976. The Silvis Plant had been destroyed by a landslide in 1969.

The Silvis hydro plant generated approximately 13% of our electrical system output in 1976. Without the Silvis Plant in operation, our differential cost in dollars would have been approximately \$532,098.00 for 1976.

Look at what is happening in the major item needed for diesel generation. That "NON-RENEWABLE RESOURCE", diesel fuel oil.

Costs for fuel delivered by barge to our S. W. Bailey diesel plant located ashore on Tongass Narrows, for example, are as follows:

<u>Date</u>	<u>Cost per gallon</u>	<u>Cost of fuel oil/KWHR generated</u>
1972	\$ .1375	\$ .0095
1973	\$ .1930	\$ .0133
1974	\$ .3260	\$ .0225
1975	\$ .3610	\$ .0249
1976	\$ .3930	\$ .0271
1977 (Feb.)	\$ .4190	\$ .0289

In a time span of just over four years and two months, our diesel fuel costs have increased 205 percent.

The industrial growth of the lower 48 States and most specifically the Pacific Northwest was made possible by the construction by the U. S. Government of large hydroelectric projects. In addition, it permitted a better living standard for the people at low energy cost.

The technology of transmission line construction permitted transmission line "grids" to be built from the large government projects to all points of the land or load centers.

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Four

Southeastern Alaska does not lend itself to the aforementioned methodology. We are situated in an archipelago that would strain the technology of transmission line construction and be vastly more expensive. It is one thing to serve load centers connected by land, another to serve load centers connected only by water.

It is therefore most logical to construct (large for us) hydroelectric projects as close to the load centers as possible, e.g. our Swan or Grace Lake projects. Short, interconnecting transmission lines could be installed between neighboring islands, e.g. Revillagigedo Island (Ketchikan) and Annette Island (Metlakatla).

Oral, it is safe to say that every power utility in Southeastern Alaska is municipally owned with the exception of Juneau, Alaska. It seems odd to us that Juneau is the only community that has a Federal hydroelectric project "on line" in our part of the State.

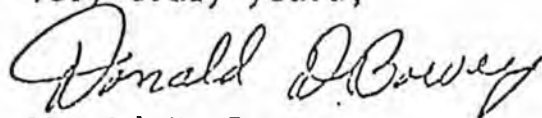
Government seems to speak with forked tongue. They advocate conservation of depletable natural resources and energy, and yet seem to balk at providing the help necessary to alleviate the situation in our portion of Alaska.

Also, Oral, any added expense to the Utilities or cities created by the construction of the hydroelectric projects should be deferred until the projects are "on line". I do not believe any of us can individually carry the burden of cost of generation by our existing means, plus pay any interest or principal payments in case of loans or bonds. Payment deferral is of utmost importance.

I have made this letter far longer than I had intended, Oral, and apologize for taking up so much of your valuable time.

I am attaching certain data that we hope you will find of interest.

Very truly yours,



Donald D. Bowey  
Assistant Utilities Manager

cc: N. L. Teague, City-Utilities Manager  
Senator Robert Ziegler  
Representative Terry Gardiner



## KETCHIKAN PUBLIC UTILITIES

334 FRONT STREET

P. O. BOX 3018 KETCHIKAN, ALASKA 99901  
7300

TELEPHONE 907-225-3111

MUNICIPALLY OWNED  
ELECTRIC WATER PHONE

April 5, 1977

*file sponsor*  
*" HB356*

Mr. James Eide  
City Manager  
P. O. Box 531  
Wrangell, Alaska 99929

Subject: Hearing before the Commerce Committee,  
Representative Joe McKinnon, Chairman,  
Re: House Bills No. 356 and No. 357

Dear Jim:

The hearing meeting was held at 8:00 A.M. in the new court building in Juneau, Room 628, on Monday, April 4, 1977.

Representative Ernie Haugen was kind enough to meet Jack Balliard of Wrangell and myself at the Baranof Hotel for coffee and then escorted us to the hearing.

Ernie testified first and pretty well recapped the history of the Water Resources Loan Fund and the intent of the legislative bodies. I believe that Ernie brought out that the Southeastern Conference group has been most active in promulgating the concept of long term, low interest loans for hydroelectric oriented projects and potable water projects from which all Alaskans will benefit.

Next to testify was Representative Terry Gardiner. Terry affirmed the preceding testimony and very ably placed his beliefs and thoughts before the committee.

Dick Ballard, chairman of the Thomas Bay Power Authority did an excellent job of testifying as regards Petersburg-Wrangell power. Dick was knowledgeable and had a good delivery. I am sure he clarified conditions prevailing in your area.

This writer testified next. I had just completed an analysis of the Ketchikan Public Utilities 1976 generation for another report. Much of the data in the analysis was germane to the hearing in that it clearly pointed out cost of operation of hydroelectric in comparison to an alternate means which in our case is diesel. My analysis was in hand written (rough) form. Terry had copies made and presented them to the committee members.

Last to testify was Farrell Campbell, Business Agent for the

Mr. James Eide  
Re: House Bills No. 356 and No. 357  
April 5, 1977 - Page Two

Operating Engineers Union. Farrell pointed out that labor supported the concept as set forth of long term, low interest loans, and the use of a "RENEWABLE RESOURCE" to power the prime movers that turn the generators which produce electric energy.

Chairman McKinnon and the Representatives of his Commerce Committee are to be complimented, and thanked for their courtesy and consideration shown the persons to be heard. The committee was knowledgeable on the subject and questions were direct and honest.

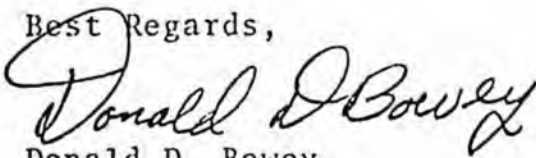
Action taken while I was present consisted of the following:

1. Motion for amendment of H.B. No. 356.  
Page 1, line 13, after the word "ALASKA", insert period and delete, "using State revenues from nonrenewable resource [mineral] development". MOTION APPROVED.
2. Motion made to amend.  
Page 1, line 18, by deleting mention of five percent (5%). Supporter of the amendment felt the intent of the original act was to provide low interest loans and recommended the three percent (3%) figure. MOTION FAILED TO PASS.

House Bills No. 356 and No. 357 will be moved out of the Commerce Committee and, I believe, on to Finance.

Sorry you could not be present at Juneau, Jim, but hope this letter and accompanying data helps keep you informed.

Best Regards,

  
Donald D. Bowey  
Assistant Utilities Manager

cc: N. L. Teague, City-Utilities Manager  
Ted Ferry, KPU Advisory Board Chr.  
Jim Williamson, R. W. Beck and Associates  
Senator Robert Zeigler Sr.  
Representative Oral Freeman  
Representative Terry Gardiner

Enclosures

March 31, 1977

MEMORANDUM TO FILE

FROM : Donald D. Bowey, Assistant Utilities Manager

SUBJECT: COST DIFFERENTIAL, HYDRO VS. DIESEL

Cost of generation per KWHR by prime mover type and Plant.  
Maintenance and operating costs only used. Labor, fuel, oils,  
parts, repair, etcetera.

DIESEL - YEAR 1976:

<u>ACCT. NOS.</u>	<u>KETCHIKAN</u>	<u>TOTEM BIGHT</u>	<u>BAILEY</u>	<u>TOTAL</u>
546	\$ -0-	\$ 2,484.98	\$ 4,259.75	\$ 6,744.73
547	2,202.00	21,404.85	181,942.23	205,549.08
548	2,089.19	11,404.85	71,995.64	85,088.07
549	87.55	517.16	3,789.01	4,393.72
551	-0-	-0-	1,445.90	1,445.90
552	-0-	-0-	15,408.49	15,408.49
553	7,429.11	7,232.17	185,038.96	199,700.24
554	-0-	3,378.11	5,078.78	8,456.89
	<hr/>	<hr/>	<hr/>	<hr/>
	\$11,807.85	\$46,020.51	\$468,958.76	\$526,787.12

HYDRO - YEAR 1976:

<u>ACCT. NOS.</u>	<u>KETCHIKAN</u>	<u>BEAVER FALLS</u>	<u>SILVIS</u>	<u>TOTAL</u>
535	\$11,736.34	\$ 4,550.10	\$ 3,373.16	\$ 19,659.60
536	-0-	-0-	-0-	-0-
537	11,040.88	6,295.40	4,282.81	21,619.09
538	167,897.24	64,310.82	12,878.83	245,086.89
539	10,077.48	4,168.18	9,534.15	23,779.81
541	293.89	1,961.09	528.14	2,783.12
542	7,248.64	3,137.13	725.64	11,111.41
543	4,589.61	5,936.72	2,449.79	12,976.12
544	5,328.12	8,861.16	13,881.94	28,071.22
545	94.63	-0-	-0-	94.63
	<hr/>	<hr/>	<hr/>	<hr/>
	\$218,306.83	\$99,220.60	\$ 47,654.46	\$365,181.89

Memo to File - Page Two  
 re: Cost Differential, Hydro vs. Diesel  
 March 31, 1977

YEAR 1976:

HYDRO:

<u>POWERHOUSE</u>	<u>GENERATION KWHR</u>	<u>M &amp; O COSTS DOLLARS</u>	<u>COST/KWHR CENTS</u>
Ketchikan Plant	17,693,700	\$218,306.83	\$ .01234
Beaver Falls	40,669,000	99,220.60	.00244
Silvis	10,172,000	47,654.46	.00468
TOTALS	68,534,700	\$365,181.89	\$ .00533

AVERAGE COST PER KWHR generated by HYDRO = 5.3 MILL

DIESEL:

Ketchikan Plant	55,900	\$ 11,807.85	\$ .21123
Totem Bight	781,000	46,020.51	.05893
S. W. Bailey	7,240,000	468,958.76	.06477
TOTALS	8,076,900	\$526,787.12	\$ .06522

AVERAGE COST PER KWHR generated by DIESEL = 65.2 MILL

Average Cost Per Kilowatthour of Total Generation By Diesel and Hydro. (Conglomerate):

- Total generated 76,611,600 kwhr = \$ .01164 cents/kwhr
- Total M & O Costs = \$891,969.01 or 11.6 MILL/KWHR
- Cost per KWHR "SOLD" (Gen. less Station Use & Losses),  
= \$.0131 cents or 13.1 Mill
- Hydro generated = 89.46% of total generation
- Diesel generated = 10.54% of total generation
- WATER YEAR was exceptional.
- Diesel cost per KWHR generated = \$ .06522 cents, or 65.2 MILL
- Hydro cost per KWHR generated = \$ .00533 cents, or 5.3 MILL
- Diesel generation per KWHR exceeded Hydro generation per KWHR by ..... \$ .05989 cents, or 59.9 MILL

Memo to File - Page Three  
re: Cost Differential, Hydro vs. Diesel  
March 31, 1977

HYPOTHESIS:

HYDRO.....  $\frac{68,534,700 \text{ KWHR}}{14.5 \text{ kwhr/gal.}} = 4,726,531 \text{ gallons of fuel}$

$4,726,531 \text{ gal.} \times \$ .41 = \$1,937,878$

Added to labor, etc. of HYDRO would = \$2,303,058

Added to actual diesel generation cost of  
generation 8,076,900 kwhr or,  
\$2,303,058 PLUS \$526,787..... = \$2,829,845

$\frac{\$2,829,845 \text{ M\&O Costs}}{76,611,600 \text{ kwhr}} = .03694 \text{ cents/kwhr}$

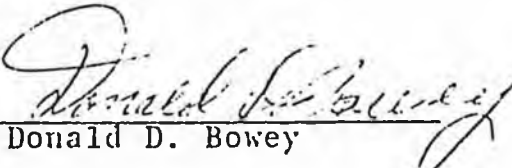
or,  
36.9 mill

The above hypothesis of all diesel operation in  
1976 would have meant,  $\frac{36.9 \text{ mill}}{11.6 \text{ mill}} = 3.181$

OR, generation costs, maintenance and operation only  
would have been 218% greater than it actually was  
by combination, or conglomerate, of hydro & diesel.

The above is very conservative as it does not consider  
additional staffing which would have been necessary,  
plus other factors, if all generation had been by  
diesel.

Time and staffing prevents a more in-depth analysis at this time.

  
Donald D. Bowey

cc: N. L. Teague, City-Utilities Manager  
Mack Wheeler, U.S. Corps of Army Engineers  
Ernst & Ernst

Introduced: 3/16/77  
Referred: Commerce and  
Finance

BY GARDINER, DUNCAN, ELIASON,  
FREEMAN, HAUGEN, MILLER,  
SNIDER, AND SPECKING

1 IN THE HOUSE

2 HOUSE BILL NO. 356 am

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to the water resources revolving loan  
7 fund."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. AS 45.86.010 is amended to read:

10 Sec. 45.86.010. FUND ESTABLISHED. There is established as a  
11 separate fund the water resources revolving loan fund. Loans from this  
12 fund are to be used to develop and conserve in the public interest the  
13 water resources of Alaska [, USING STATE REVENUES FROM MINERAL DEVELOP-  
14 MENT].

15 \* Sec. 2. AS 45.86.020 is repealed and re-enacted to read:

16 Sec. 45.86.020. FUND UTILIZATION. (a) Loans from the fund shall  
17 be for a term not to exceed 50 years, and the rate of interest shall be  
18 not less than three nor more than five per cent per year on the unpaid  
19 balance. The repayment schedule shall be as determined by the depart-  
20 ment. Repayment of a loan shall commence at the date of commercial  
21 operation of the project or 10 years from the date the loan is granted,  
22 whichever is sooner.

23 (b) The loans may be used for capital construction projects, for  
24 hydroelectric generation and potable water supply including surface  
25 storage and groundwater sources and transmission of water from surface  
26 storage to the existing distribution system, and development of hydro-  
27 electric generating facilities including transmission of power to the  
28 load center. Loans may be made to applicants for new or existing pro-  
29 jects including feasibility and preconstruction engineering studies,

1 is an eligible borrower for a project loan under this chapter if

2 (1) it is a public utility as defined in AS 42.05.701(2)(A),  
3 and (C);

4 (2) the utility can demonstrate in its loan application that  
5 the project is economically and technically [AND] feasible and, taking  
6 into account the low interest on loans under this chapter, is the most  
7 economical means of furnishing the proposed service.

8 \* Sec. 6. AS 45.86 is amended by adding a new section to read:

9 Sec. 45.86.060. DEFINITIONS. In this chapter,

10 (1) "commissioner" means the commissioner of the Department  
11 of Commerce and Economic Development;

12 (2) "department" means the Department of Commerce and Econo-  
13 mic Development.

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1 expenses incurred in securing necessary permits and licenses, design of  
2 the project and construction of capital improvements. Existing hydro-  
3 electric and water supply projects may be expanded or rehabilitated with  
4 loan funds under this chapter if the rehabilitation and expansion is a  
5 capital improvement project.

6 (c) Loans shall be repaid to the fund by the borrower from revenue  
7 derived from the sale of electric power or water.

8 \* Sec. 3. AS 45.36.040(b) and (c) are repealed and re-enacted to read:

9 (b) There is created within the department the Water Resources  
10 Revolving Loan Fund Committee chaired by the commissioner or his deputy,  
11 and including as members the director of the division of energy and  
12 power development and the director of the division of business loans.  
13 The committee shall review all applications referred to it for approval  
14 by the department.

15 (c) The department shall establish a priority list for the ap-  
16 proval of project applications based upon a determination of which  
17 projects will better serve the interests of the state. An applicant may  
18 appeal the level of priority assigned to his application by requesting a  
19 review of the list of priorities by the committee. The committee, upon  
20 sufficient notice and a public hearing, may change an assigned priority.  
21 Applications not approved due to a lack of funds will retain the  
22 priority assigned and may be held for reconsideration.

23 \* Sec. 4. AS 45.36.040 is amended by adding a new subsection to read:

24 (d) If the committee finds that preconstruction feasibility and  
25 engineering studies establish that a project is not feasible from either  
26 a technical, economic or financial viewpoint, the department may waive  
27 repayment of loans granted to conduct the studies.

28 \* Sec. 5. AS 45.36.050 is amended to read:

29 Sec. 45.36.050. ELIGIBILITY FOR PROJECT LOANS. A public utility  
HB 356 am

1 is an eligible borrower for a project loan under this chapter if

2 (1) it is a public utility as defined in AS 42.05.701(2)(A),  
3 and (C);

4 (2) the utility can demonstrate in its loan application that  
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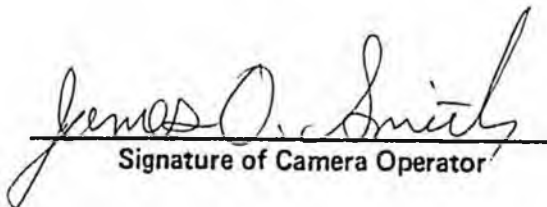
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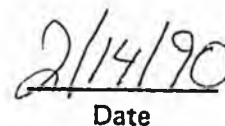


# RECORDS CERTIFICATION



I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

  
Signature of Camera Operator

  
Date

# COMMITTEE REPORT

4/4/77

## HOUSE

April 26, 1977 Date

Mr. Speaker:

The Committee on Finance has had HB 357 under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for HB 357 and that CS for HB 357 do pass
- (and) recommends it be referred to the \_\_\_\_\_ committee
- reports it back without recommendation
- AND attaches a report of its intent
- (other) \_\_\_\_\_

### MEMBERS SIGNING THE MAJORITY REPORT:

<u>Freeman</u>	<u>McBride</u>	_____
<u>Rosen</u>	<u>W. ...</u>	_____
<u>...</u>	<u>...</u>	_____

### MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

Freeman  
Vice Chairman

Original sponsors: Gardiner, Duncan,  
Eliason, et al

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR HOUSE BILL NO. 357

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the power  
7 project revolving loan fund of the Alaska Power Autho-  
8 rity; and providing for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 \* Section 1. The sum of \$3,500,000 is appropriated from the general fund  
11 to the power project revolving loan fund established by AS 44.56.170 to carry  
12 out the purposes of that loan program.

13 \* Sec. 2. This Act takes effect July 1, 1977.  
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THE LEGISLATURE OF THE STATE OF ALASKA  
TENTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB 357  
 Title "An Act making a special appropriation to the water resources loan fund..."  
 Requested by Gardiner Date \_\_\_\_\_

NR 357

II. FISCAL DETAIL

Agency Affected Commerce & Economic Development  
 Program Category Affected Development  
 Budget Request Unit(s) Affected Business Loans

EXPENDITURES (Thousands of Dollars)

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.		3,500				
TOTAL						

FUNDING (Thousands of Dollars)

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
GENERAL FUND		3,500				
FEDERAL FUNDS						
OTHER (Specify)						

POSITIONS

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. DATE 3-24-77 PREPARED BY Pete Jeans  
 AGENCY Commerce & Economic Development  
 PHONE 465-2510  
 Original: Legislative Finance  
 cc: Budget and Management  
 Prime Sponsor (First Legislator Named)



HB 357

# KETCHIKAN PUBLIC UTILITIES

334 FRONT STREET

P. O. BOX 1019 KETCHIKAN, ALASKA 99901

TELEPHONE 907-225-3111

February 11, 1977

MUNICIPALLY OWNED  
ELECTRIC WATER PHONE

Representative Oral Freeman  
State Capitol  
Pouch V  
Juneau, Alaska 99811

Subject: Development of Hydroelectric Generating  
Plants in Southeast Alaska

Dear Oral:

Mr. N. L. Teague, City-Utilities Manager has requested that I submit to you some pertinent information regarding the advantages to Ketchikan, and Southeast Alaska as a whole, which would be gained by the installation of hydroelectric generating plants. I will use Ketchikan as an example.

We have three (3) small hydroelectric plants. To 1969 we were hydro oriented. Our first base load type diesel was placed in operation in 1970. We now have three (3) such units. I believe that a comparison of cost, hydro versus diesel generation in our system, is pertinent.

In 1976, the average operation and maintenance cost of producing one (1) kilowatt hour at the bus bar by hydroelectric generation was \$ .0055 or 5.5 mils.

The average cost of operation and maintenance per kilowatt hour of generation by diesel was \$ .0638.

A recap in the same vein, from 1970 to date, clearly points up that hydroelectric power is the greatest hedge against inflation since the Republicans.

TIME PERIOD - January 1, thru December 31, 1970:

Diesel = \$ .01249/KWHR

Hydro = \$ .00272/KWHR

Differential in cost/KWHR - Diesel greater by \$ .00977

Differential in dollars - 2,718,600 KWHR x \$ .00977 = \$26,560.72

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Two

TIME PERIOD - January 1, thru December 31, 1971:

Diesel = \$ .01689/KWHR

Hydro = \$ .00336/KWHR

Differential in cost/KWHR - Diesel greater by \$ .01353

Differential cost in dollars = \$174,228.52

TIME PERIOD - January 1, thru December 31, 1972:

Diesel = \$ .015/KWHR

Hydro = \$ . /KWHR

Differential in cost/KWHR - Diesel greater by \$ .01111

Differential cost in dollars = \$143,065.69

TIME PERIOD - January 1, thru December 31, 1973:

Diesel = \$ .02144/KWHR

Hydro = \$ .00388/KWHR

Differential in cost/KWHR - Diesel greater by \$ .01756

Differential cost in dollars = \$226,123.63

TIME PERIOD - January 1, thru December 31, 1974:

Diesel = \$ .04125/KWHR

Hydro = \$ .00534/KWHR

Differential in cost/KWHR - Diesel greater by \$ .03591

Differential cost in dollars = \$462,420.25

TIME PERIOD - January 1, thru December 31, 1975:

Diesel = \$ .0430/KWHR

Hydro = \$ .0051/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0379/KWHR

Differential cost in dollars = \$491,763.87

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Three

TIME PERIOD - January 1, thru December 31, 1976:

Diesel = \$ .0638/KWHR

Hydro = \$ .0055/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0583/KWHR

Differential cost in dollars = \$470,883.27

Note that 1976 differential cost in dollars is slightly less than 1975. This is due to a small hydro-electric plant (Silvis) being returned to service in 1976. The Silvis Plant had been destroyed by a landslide in 1969.

The Silvis hydro plant generated approximately 13% of our electrical system output in 1976. Without the Silvis Plant in operation, our differential cost in dollars would have been approximately \$532,098.00 for 1976.

Look at what is happening in the major item needed for diesel generation. That "NON-RENEWABLE RESOURCE", diesel fuel oil.

Costs for fuel delivered by barge to our S. W. Bailey diesel plant located ashore on Tongass Narrows, for example, are as follows:

<u>Date</u>	<u>Cost per gallon</u>	<u>Cost of fuel oil/KWHR generated</u>
1972	\$ .1375	\$ .0095
1973	\$ .1930	\$ .0133
1974	\$ .3260	\$ .0225
1975	\$ .3610	\$ .0249
1976	\$ .3930	\$ .0271
1977 (Feb.)	\$ .4190	\$ .0289

In a time span of just over four years and two months, our diesel fuel costs have increased 205 percent.

The industrial growth of the lower 48 States and most specifically the Pacific Northwest was made possible by the construction by the U. S. Government of large hydroelectric projects. In addition, it permitted a better living standard for the people at low energy cost.

The technology of transmission line construction permitted transmission line "grids" to be built from the large government projects to all points of the land or load centers.

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Four

Southeastern Alaska does not lend itself to the aforementioned methodology. We are situated in an archipelago that would strain the technology of transmission line construction and be vastly more expensive. It is one thing to serve load centers connected by land, another to serve load centers connected only by water.

It is therefore most logical to construct (large for us) hydroelectric projects as close to the load centers as possible, e.g. our Swan or Grace Lake projects. Short, interconnecting transmission lines could be installed between neighboring islands, e.g. Revillagigedo Island (Ketchikan) and Annette Island (Metlakatla).

Oral, it is safe to say that every power utility in Southeastern Alaska is municipally owned with the exception of Juneau, Alaska. It seems odd to us that Juneau is the only community that has a Federal hydroelectric project "on line" in our part of the State.

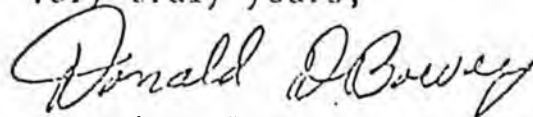
Government seems to speak with forked tongue. They advocate conservation of depletable natural resources and energy, and yet seem to balk at providing the help necessary to alleviate the situation in our portion of Alaska.

Also, Oral, any added expense to the Utilities or cities created by the construction of the hydroelectric projects should be deferred until the projects are "on line". I do not believe any of us can individually carry the burden of cost of generation by our existing means, plus pay any interest or principal payments in case of loans or bonds. Payment deferral is of utmost importance.

I have made this letter far longer than I had intended, Oral, and apologize for taking up so much of your valuable time.

I am attaching certain data that we hope you will find of interest.

Very truly yours,



Donald D. Bowey  
Assistant Utilities Manager

cc: N. J. Teague, City-Utilities Manager  
Senator Robert Ziegler  
Representative Terry Gardiner

Ann. I took  
357 down to be  
read across -  
the letter of intent  
can follow later  
-MS

CSHB357  
Intent:

~~\_\_\_\_\_~~  
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~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~

2 357  
2 357  
2 357

Introduced: 3/16/77  
Referred: Commerce and  
Finance

BY GARDINER, DUNCAN, ELIASON,  
FREEMAN, HAUGEN, MILLER, SNIDER  
AND SPECKING

1 IN THE HOUSE

2 HOUSE BILL NO. 357

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the water  
7 resources revolving loan fund within the Department of  
8 Commerce and Economic Development; and providing for an  
9 effective date."

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 \* Section 1. The sum of \$3,500,000 is appropriated from the general fund  
12 to the water resources revolving loan fund within the Department of Commerce  
13 and Economic Development to carry out the purposes of the water resources  
14 loan program.

15 \* Sec. 2. This Act takes effect July 1, 1977.

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Introduced: 3/16/77  
Referred: Commerce and  
Finance

BY GARDINER, DUNCAN, ELIASON,  
FREEMAN, HAUGEN, MILLER,  
SNIDER, AND SPECKING

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13 water resources of Alaska, using state revenues from nonrenewable re-  
14 source [MINERAL] development.

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22 whichever is sooner.

23 (b) The loans may be used for capital construction projects, for  
24 hydroelectric generation and potable water supply including surface  
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26 storage to the existing distribution system, and development of hydro-  
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1 expenses incurred in securing necessary permits and licenses, design of  
2 the project and construction of capital improvements. Existing hydro-  
3 electric and water supply projects may be expanded or rehabilitated with  
4 loan funds under this chapter if the rehabilitation and expansion is a  
5 capital improvement project.

6 (c) Loans shall be repaid to the fund by the borrower from revenue  
7 derived from the sale of electric power or water.

8 \* Sec. 3. AS 45.36.040(b) and (c) are repealed and re-enacted to read:

9 (b) There is created within the department the Water Resources  
10 Revolving Loan Fund Committee chaired by the commissioner or his deputy,  
11 and including as members the director of the division of energy and  
12 power development and the director of the division of business loans.  
13 The committee shall review all applications referred to it for approval  
14 by the department.

15 (c) The department shall establish a priority list for the ap-  
16 proval of project applications based upon a determination of which  
17 projects will better serve the interests of the state. An applicant may  
18 appeal the level of priority assigned to his application by requesting a  
19 review of the list of priorities by the committee. The committee, upon  
20 sufficient notice and a public hearing, may change an assigned priority.  
21 Applications not approved due to a lack of funds will retain the  
22 priority assigned and may be held for reconsideration.

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24 (d) If the committee finds that preconstruction feasibility and  
25 engineering studies establish that a project is not feasible from either  
26 a technical, economic or financial viewpoint, the department may waive  
27 repayment of loans granted to conduct the studies.

28 \* Sec. 5. AS 45.36.050 is amended to read:

29 Sec. 45.36.050. ELIGIBILITY FOR PROJECT LOANS. A public utility  
HB 356

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(1) it is a public utility as defined in AS 42.05.701(2)(A), and (C);

(2) the utility can demonstrate in its loan application that the project is economically and technically [AND] feasible and, taking into account the low interest on loans under this chapter, is the most economical means of furnishing the proposed service.

\* Sec. 6. AS 45.86 is amended by adding a new section to read:

Sec. 45.86.060. DEFINITIONS. In this chapter,

(1) "commissioner" means the commissioner of the Department of Commerce and Economic Development;

(2) "department" means the Department of Commerce and Economic Development.

A M E N D M E N T

OFFERED IN THE HOUSE:

BY: GARDINER

To: \_\_\_\_\_ HOUSE BILL No. CSHB 357

SENATE BILL No. \_\_\_\_\_

PAGE: \_\_\_\_\_

LINE: \_\_\_\_\_

Page 1, lines 6-13: Delete all material and insert in its place:

For an Act entitled: "An Act making a special appropriation for power and water projects; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

\* Section 1. The sum of \$3,600,000 is appropriated from the general fund in the following manner:

(1) \$1,600,000 to the Department of Revenue for a loan to the municipality of Sitka for design, site preparation and preconstruction activity for the Green Lake hydroelectric project; the terms and conditions of the loan are to be determined by the commissioner of revenue in consultation with the commissioner of public works;

(2) \$1,800,000 to the power project revolving loan fund established by AS 44.56.170 to carry out the purposes of that loan program;

(3) \$200,000 to the water resources revolving loan fund within the Department of Commerce and Economic Development to carry out the purposes of the water resources loan program.

\* Section 2. This act takes effect immediately in accordance with AS 01.10.070(c).

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Original sponsors: Gardiner, Duncan,  
Eliason, et al

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR HOUSE, BILL NO. 357

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the power  
7 project revolving loan fund of the Alaska Power Autho-  
8 rity; and providing for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 \* Section 1. The sum of \$3,500,000 is appropriated from the general fund  
11 to the power project revolving loan fund established by AS 44.56.170 to carry  
12 out the purposes of that loan program.

13 \* Sec. 2. This Act takes effect July 1, 1977.  
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Alaska State Legislature

POUCH V  
 JUNEAU, ALASKA 99811  
 TELEPHONE (907) 465-3706



REPRESENTATIVE  
 Steve Cowper  
 CHAIRMAN  
 FINANCE COMMITTEE

House of Representatives

LETTER OF INTENT

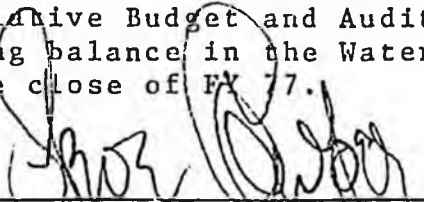
for

CSHB 357 (Finance)

It is the intent of the Committee that preference be given to the following communities when making loans for design and preconstruction studies:

Sitka-City and Borough	Green Lake Hydro	1,600,000
Petersburg-Wrangell Thomas Bay Power Com.	Virginia Lake Hydro	300,000
Ketchikan-City	Swan Lake Hydro or Lake Grace Hydro	400,000
Kodiak-Kodiak Elec. Association	Terror Lake Hydro	190,000
Anchorage-Municipal.	Municipal Water Supply	200,000
Cordova-City	Power Creek Hydro	380,000
Kenai-Borough	Municipal Water Supply	150,000
Juneau-Alaska Elec- tric Light & Power	Automating Annex Creek Hydro	480,000
Craig-Klawock-Hyda- burg Municipalities	Black Bear Lake Hydro	<u>30,000</u>
	Subtotal	\$3,730,000
	Less Surplus Funds FY 77	<u>230,000</u>
	TOTAL	<u>\$3,500,000</u>

It is further intended by the Committee that the appropriation assumes the transfer by the Legislative Budget and Audit Committee of \$230,000 of the remaining balance in the Water Resources Revolving Loan Fund at the close of FY 77.

  
 Steve Cowper, Chairman  
 House Finance Committee

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150000



# RECORDS CERTIFICATION



I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

James O. Smith  
Signature of Camera Operator

2/14/90  
Date

# COMMITTEE REPORT

## SENATE

5/14/77

May 23, 1977

Date

Mr. President:

The Committee on FINANCE has had CSHB 357am special appropriation to the power project revolving loan fund of the Alaska under consideration. A majority of the members of the Committee Power Authority

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for CS HRS 319am and that CS for CS HRS 319am do pass
- (and) recommends it be referred to the \_\_\_\_\_ committee
- reports it back without recommendation
- AND attaches a report of its intent
- (other) \_\_\_\_\_

### MEMBERS SIGNING THE MAJORITY REPORT:

[Signature] \_\_\_\_\_

[Signature] \_\_\_\_\_

[Signature] \_\_\_\_\_

[Signature] \_\_\_\_\_

### MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

\_\_\_\_\_ recommends: \_\_\_\_\_

[Signature]  
Chairman

AMENDMENT

OFFERED IN THE SENATE:

By: WMA

To: SOCIAL ASSIST SENATE BILL No. \_\_\_\_\_

HOUSE BILL No. \_\_\_\_\_

PAGE: 1

LINE: 11

add Dept of Revenue  
and replace with  
of the sources including gas, land

Original sponsors: Gardiner, Duncan,  
Eliason, et al

Offered: 4/27/77  
Referred: Rules

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2

CS FOR HOUSE BILL NO. 357

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

TENTH LEGISLATURE - FIRST SESSION

5

A BILL

6

For an Act entitled: "An Act making a special appropriation to the power

7

project revolving loan fund of the Alaska Power Autho-

8

rity; and providing for an effective date."

9

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10

\* Section 1. The sum of \$3,500,000 is appropriated from the general fund

11

to the power project revolving loan fund established by AS 44.56.170 to carry

12

out the purposes of that loan program.

13

\* Sec. 2. This Act takes effect July 1, 1977.

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#

Original sponsors: Gardiner, Duncan,  
Eliason, et al

Offered: 5/23/77  
Referred: Rules

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2

SENATE CS FOR CS FOR HOUSE BILL NO. 357

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

TENTH LEGISLATURE - FIRST SESSION

5

A BILL

6

For an Act entitled: "An Act making a special appropriation for the Green  
7 Lake hydroelectric project; and providing for an  
8 effective date."

8

9

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10

\* Section 1. The sum of \$1,600,000 is appropriated from the general fund  
11 to the Department of Revenue for a loan to the municipality of Sitka for  
12 design, site preparation and preconstruction activity for the Green Lake  
13 hydroelectric project; the terms and conditions of the loan are to be  
14 determined by the commissioner of revenue in consultation with the commis-  
15 sioner of public works.

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\* Sec. 2. This Act takes effect immediately in accordance with AS 01.10.-  
17 070(c).

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Original sponsors: Gardiner, Duncan,  
Eliason, et al

Offered: 4/27/77  
Referred: Rules

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR HOUSE BILL NO. 357 am

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation for power and  
7 water projects; and providing for an effective date."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. The sum of \$3,600,000 is appropriated from the general fund  
10 in the following manner:

11 (1) \$1,600,000 to the Department of Revenue for a loan to the  
12 municipality of Sitka for design, site preparation and preconstruction  
13 activity for the Green Lake hydroelectric project; the terms and con-  
14 ditions of the loan are to be determined by the commissioner of revenue  
15 in consultation with the commissioner of public works;

16 (2) \$1,800,000 to the power project revolving loan fund  
17 established by AS 44.56.170 to carry out the purposes of that loan  
18 program;

19 (3) \$200,000 to the water resources revolving loan fund with-  
20 in the Department of Commerce and Economic Development to carry out the  
21 purposes of the water resources loan program.

22 \* Sec. 2. This Act takes effect immediately in accordance with  
23 AS 01.10.070(c).  
24  
25  
26  
27  
28  
29

#



N-13 357

# KETCHIKAN PUBLIC UTILITIES

334 FRONT STREET

P. O. BOX 1019 KETCHIKAN, ALASKA 99901

TELEPHONE 907-225-3111

February 11, 1977

MUNICIPALLY OWNED  
ELECTRIC WATER PHONE

Representative Oral Freeman  
State Capitol  
Pouch V  
Juneau, Alaska 99811

Subject: Development of Hydroelectric Generating  
Plants in Southeast Alaska

Dear Oral:

Mr. N. L. Teague, City-Utilities Manager has requested that I submit to you some pertinent information regarding the advantages to Ketchikan, and Southeast Alaska as a whole, which would be gained by the installation of hydroelectric generating plants. I will use Ketchikan as an example.

We have three (3) small hydroelectric plants. To 1969 we were hydro oriented. Our first base load type diesel was placed in operation in 1970. We now have three (3) such units. I believe that a comparison of cost, hydro versus diesel generation in our system, is pertinent.

In 1976, the average operation and maintenance cost of producing one (1) kilowatt hour at the bus bar by hydroelectric generation was \$ .0055 or 5.5 mils.

The average cost of operation and maintenance per kilowatt hour of generation by diesel was \$ .0638.

A recap in the same vein, from 1970 to date, clearly points up that hydroelectric power is the greatest hedge against inflation since the Republicans.

TIME PERIOD - January 1, thru December 31, 1970:

Diesel       "     \$ .01249/KWHR

Hydro       "     \$ .00272/KWHR

Differential in cost/KWHR - Diesel greater by \$ .00977

Differential in dollars - 2,718,600 KWHR x \$ .00977 = \$26,560.72

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Two

TIME PERIOD - January 1, thru December 31, 1971:

Diesel = \$ .01689/KWHR

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Differential cost in dollars = \$174,228.52

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Diesel = \$ .01476/KWHR

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Differential in cost/KWHR - Diesel greater by \$ .01111

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Differential cost in dollars = \$226,123.63

TIME PERIOD - January 1, thru December 31, 1974:

Diesel = \$ .04125/KWHR

Hydro = \$ .00534/KWHR

Differential in cost/KWHR - Diesel greater by \$ .03591

Differential cost in dollars = \$462,420.25

TIME PERIOD - January 1, thru December 31, 1975:

Diesel = \$ .0430/KWHR

Hydro = \$ .0051/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0379/KWHR

Differential cost in dollars = \$491,763.87

Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Three

TIME PERIOD - January 1, thru December 31, 1976:

Diesel = \$ .0638/KWHR

Hydro = \$ .0055/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0583/KWHR

Differential cost in dollars = \$470,883.27

Note that 1976 differential cost in dollars is slightly less than 1975. This is due to a small hydro-electric plant (Silvis) being returned to service in 1976. The Silvis Plant had been destroyed by a landslide in 1969.

The Silvis hydro plant generated approximately 13% of our electrical system output in 1976. Without the Silvis Plant in operation, our differential cost in dollars would have been approximately \$532,098.00 for 1976.

Look at what is happening in the major item needed for diesel generation. That "NON-RENEWABLE RESOURCE", diesel fuel oil.

Costs for fuel delivered by barge to our S. W. Bailey diesel plant located ashore on Tongass Narrows, for example, are as follows:

<u>Date</u>	<u>Cost per gallon</u>	<u>Cost of fuel oil/KWHR generated</u>
1972	\$ .1375	\$ .0095
1973	\$ .1930	\$ .0133
1974	\$ .3260	\$ .0225
1975	\$ .3610	\$ .0249
1976	\$ .3930	\$ .0271
1977 (Feb.)	\$ .4190	\$ .0289

In a time span of just over four years and two months, our diesel fuel costs have increased 205 percent.

The industrial growth of the lower 48 States and most specifically the Pacific Northwest was made possible by the construction by the U. S. Government of large hydroelectric projects. In addition, it permitted a better living standard for the people at low energy cost.

The technology of transmission line construction permitted transmission line "grids" to be built from the large government projects to all points of the land or load centers.

Representative Oral Freeman  
- re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Four

Southeastern Alaska does not lend itself to the aforementioned methodology. We are situated in an archipelago that would strain the technology of transmission line construction and be vastly more expensive. It is one thing to serve load centers connected by land, another to serve load centers connected only by water.

It is therefore most logical to construct (large for us) hydroelectric projects as close to the load centers as possible, e.g. our Swan or Grace Lake projects. Short, interconnecting transmission lines could be installed between neighboring islands, e.g. Revillagigedo Island (Ketchikan) and Annette Island (Metlakatla).

Oral, it is safe to say that every power utility in Southeastern Alaska is municipally owned with the exception of Juneau, Alaska. It seems odd to us that Juneau is the only community that has a Federal hydroelectric project "on line" in our part of the State.

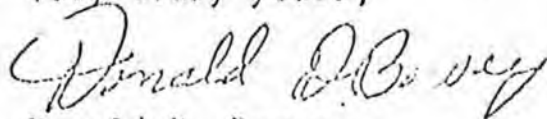
Government seems to speak with forked tongue. They advocate conservation of depletable natural resources and energy, and yet seem to balk at providing the help necessary to alleviate the situation in our portion of Alaska.

Also, Oral, any added expense to the Utilities or cities created by the construction of the hydroelectric projects should be deferred until the projects are "on line". I do not believe any of us can individually carry the burden of cost of generation by our existing means, plus pay any interest or principal payments in case of loans or bonds. Payment deferral is of utmost importance.

I have made this letter far longer than I had intended, Oral, and apologize for taking up so much of your valuable time.

I am attaching certain data that we hope you will find of  
inte. st.

Very truly yours,



Donald D. Bowey  
Assistant Utilities Manager

cc: N. L. Teague, City-Utilities Manager  
Senator Robert Ziegler  
Representative Terry Gardiner

APPROPRIATION TO WATER RESOURCES REVOLVING LOAN FUND  
FISCAL YEAR 1978

SUMMARY OF ESTIMATED PRIORITY FUNDING REQUIREMENTS

<u>COMMUNITY - OWNER</u>	<u>PROJECT NAME</u>	<u>SCHEDULED IN-SERVICE DATE</u>	<u>FUNDING REQUIREMENTS (\$)</u>
2) PETERSBURG - WRANGELL THOMAS BAY POWER COMMISSION	VIRGINIA LAKE HYDRO	NOVEMBER 1983	300,000
1) SITKA - CITY AND BOROUGH	GREEN LAKE HYDRO	OCTOBER 1981	1,500,000
3) KETCHIKAN - CITY	SWAN LAKE HYDRO OR LAKE GRACE HYDRO	JULY 1983	400,000
4) KODIAK - KODIAK ELECTRIC ASSOCIATION	TERROR LAKE HYDRO	JULY 1983	190,000
ANCHORAGE - MUNICIPALITY	MUNICIPAL WATER SUPPLY		200,000
COKEOVIA - CITY	POWER CREEK HYDRO	JULY 1983	390,000
KENAI - BOROUGH	MUNICIPAL WATER SUPPLY		150,000
JUNEAU - ALASKA ELECTRIC LIGHT AND POWER COMPANY	AUTOMATING ANNEX CREEK HYDRO		480,000
CRAIG - FLAWCOCK - HYDABURG MUNICIPALITIES	BLACK BEAR LAKE HYDRO		50,000
		SUBTOTAL	<u>3,750,000</u>
		LESS SURPLUS FUNDS FY 1977	<u>250,000</u>
		TOTAL	<u><u>3,500,000</u></u>

JAY S. HAMMOND  
GOVERNOR



STATE OF ALASKA  
OFFICE OF THE GOVERNOR  
JUNEAU

May 21, 1977

The Honorable John Sackett  
Chairman, Senate Finance Committee  
Alaska State Legislature  
Juneau AK 99801

Dear Senator Sackett:

In response to your request for a statement of position from the administration regarding HB 357 "An appropriation to the Water Resources Revolving Loan Fund" I have prepared the following.

The administration would like to see that at least the Sitka project be funded. We know this is a worthy project. Other projects have as yet not had adequate review to determine their viability. This would mean that the appropriation should be reduced to the appropriate level. Our assumption in supporting this bill is that sufficient recurring and non-recurring Fiscal Year 1978 revenues will exist to cover the FY 1978 budget without adding to the 61%/39% reliance on direct oil revenue. Should that assumption be incorrect, the Governor may be forced to reduce the appropriation for this bill or other bills, or portions of the operating or capital budgets.

I hope this will clarify our position. We believe in the merits of the bill and would be loathe to reduce the appropriation. However, with the amount and types of revenues to be passed this session unknown and the budget not yet complete, we cannot at this time guarantee what ultimate action would be taken on this bill.

As to your question concerning legislation intent for HB 700, I have attached Senate Journal, page 1635 indicating unanimous consent for the letter of intent prepared by Senator Bill Ray and Representative Hugh Malone. This letter preceded by one day the transmittal of the enrolled bill to the Governor 06/02/76.

May 21, 1977

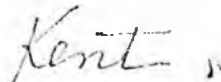
The Department of Commerce and Economic Development has the following applications for the named projects:

	<u>Amount</u>	<u>Purpose</u>	<u>Status</u>
Petersburg	\$950,000	Rehabilitation	Application 5/2/77
Wrangell-Petersburg	300,000	final feasibility	Application 3/22/77
Sitka	450,000	final feasibility	Disbursed 10/6/76
Ketchikan	420,000	final feasibility	Application 2/28/77
Kodiak	420,000	final feasibility	Application 11/30/77
Juneau	<u>500,000</u>	Rehabilitation	Application 4/25/77
Total	\$3,040,000		
FY 77 Appropriation -	<u>2,500,000</u>		
Unfunded Applications	\$ 540,000		

Applications were not received from Kenai and Anchorage while Cordova withdrew its application for \$280,000.

While the above referenced legislative intent may not be binding for the executive branch, the applications received from the named communities exceed the appropriation by \$40,000. Furthermore, the application from Juneau for \$500,000 increases the deficit to \$540,000.

Sincerely,



Kent Dawson  
Administrative Assistant

ALASKA STATE LEGISLATURE - HOUSE OF REPRESENTATIVES



REPRESENTATIVE RICHARD I. ELIASON  
P.O. BOX 143  
SITKA, ALASKA 99833  
POUCH V  
JUNEAU, ALASKA 99811

MINORITY WHIP  
COMMITTEES  
REGOURCES  
JUDICIARY

BREAKDOWN OF APPROPRIATION TO DEPARTMENT OF REVENUE FOR A LOAN  
TO THE MUNICIPALITY OF SITKA:

House Bill *357*

FPC Licensing	40,000
Investigation and final feasibility study	360,000
Road and final design phase	<u>1,200,000</u>
	<u>1,600,000</u>
TOTAL AMOUNT OF LOAN	<u>\$1,600,000</u>

# STATE OF ALASKA

## DEPARTMENT OF REVENUE

JAY S. HAMMOND, Governor

POUCH SB-JUNEAU 99801

March 23, 1977

The Honorable Richard Eliason  
Alaska State Representative  
State Capitol  
Juneau, Alaska 99811

Dear Representative Eliason:

Re: Sitka Loan

The breakdown of funds is as follows:

FPC Licensing	\$ 40,000
Investigation and final feasibility report on the project	360,000
Road and final design phase of the project	1,200,000

The breakdown of funds was received from Mr. Rocky Gutierrez of Sitka at Commissioner Callagher's request. I am enclosing a copy of a former loan made to Sitka concerning power development.

Sincerely,



Jim Edenso  
Deputy Commissioner

JE:ge  
Enclosure

September 10, 1976

Mr. Fermin Gutierrez  
Administrator  
City and Borough of Sitka  
P. O. Box 79  
Sitka, Alaska 99835

Dear Mr. Gutierrez:

Your request for a loan from this agency has been approved in the amount of Four Hundred Fifty Thousand Dollars and No Cents (\$450,000.00) for a term of seven (7) years with interest at six (6) percent per annum. This commitment is subject to the following conditions:

1. The State loan is approved in the amount of Four Hundred Fifty Thousand Dollars and No Cents (\$450,000.00) for a term of seven (7) years, or upon the start of the project construction, whichever is first, with interest at six (6) percent per annum.
2. Interest payments of Twenty Eight Thousand Dollars and No Cents (\$28,000.00) to be due one year from the date of the loan closing and each year thereafter until the loan is repaid in full.
3. A resolution from the City and Borough of Sitka authorizing this loan.
4. That the Board of Directors of the Water Resources Revolving Loan Fund approve the final contract.
5. That the study include the re-examination of the alternate hydro-electric sites as per the Legislative Power Study. (It appeared to the Board of Directors that other power projects would be less costly and more feasible for the area.)
6. (a) That the City of Sitka have input in the study on power demands and projections.  
(b) That they identify estimated true costs per kilowatt hour used.

Mr. Fernin Gutierrez

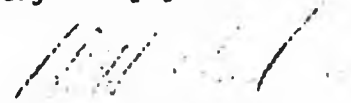
-2-

September 10, 1976

If you feel that it is necessary or useful, the Water Resources Revolving Loan Fund Committee is willing to schedule a meeting in Sitka to discuss their rationale for the terms of this commitment with the assembly members.

If you have any questions regarding this commitment, please do not hesitate to contact this office.

Very truly yours,

  
Langhorne A. Motley  
Commissioner

LAM:lk

cc: Board of Directors

STATE  
of ALASKA

# MEMORANDUM

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

TO:  Water Resources Revolving Loan  
Fund Loan Committee Members

DATE: September 1, 1976

FROM: Pate Jeans, Director  
Division of Business Loans

SUBJECT: City and Borough of Sitka  
Loan Application

The City of Sitka is requesting a loan in the amount of \$427,500 which represents 95% of the funds required for the evaluation and pre-construction studies for the Green Lake hydroelectric project. It is anticipated the project can be developed to deliver 15,000 KW to the load center during periods of peak load and will be capable of an output of 52,000,000 KWh of firm energy, or a plant factor of approximately 40% based on available water.

Green Lake is located approximately 12 miles from Sitka and about 7 miles from Blue Lake at the end of Silver Bay. The lake is a part of the Vodopad River and has formed about 1,500 feet upstream of the mouth. The existing outlet of the lake is a relatively narrow gorge which controls the existing lake level at about elevation 230.

It is anticipated that raising the lake level to elevation 420, by means of a concrete arch dam at the present outlet, will provide sufficient reservoir storage for control of the runoff and adequate head to develop economic power from the site. The power conduit is tentatively proposed as a short tunnel 300 feet which would also serve for river diversion during construction. A 72-inch diameter steel penstock approximately 1,300 feet long would be connected to the downstream portal of the tunnel. A surface powerhouse will be constructed at ground level near Silver Bay. It is anticipated that two horizontally-mounted Francis reaction turbines would be installed, each delivering about 11,500 hp at best gate, under average net head, and connected by a horizontal shaft to a generator rated at 9,300 KVA with about a 90% power factor (8,370 KW). It is estimated that, including generator, transformer, and transmission losses, each unit will deliver 7,500 KW to the load center at peak load conditions, at best gate operation of the turbines, under winter reservoir levels.

The existing facilities in Sitka include:

1. The Blue Lake Hydroelectric Project which consists of two Francis turbines, each rated at 3,750 KVA. These two units can be safely operated to produce a dependable capacity of 7,000 KW during the winter peak period and approximately 5,600 KW during the summer months due to the reservoir level.
2. Unit #1 - Fairbanks-Morse diesel rated at 375 KVA, dependable capacity is 300 KW.
3. Unit #2 - Enterprise diesel rated at 275 KVA, dependable capacity is 200 KW.

4. Unit #3 - GMC diesel rated at 375 KVA, dependable capacity is 300 KW.
5. Unit #4 - Fairbanks-Morse diesel rated at 2,500 KVA, dependable capacity is 2,000 KW.

The diesel units have a combined dependable capacity of 3,100 KW.

In addition to these units operated by the city, Alaska Lumber and Pulp Company operates a stream generation plant with a capacity of 5,000 KVA. The maximum capacity available to the city is 2,500 KW. The city and Alaska Lumber and Pulp have an agreement where power is exchanged being repayable in kind on a monthly basis.

The maximum capacity of the City of Sitka system is 10,000 KW with up to an additional 2,500 KW from Alaska Lumber and Pulp. The minimum reserve requirement is 3,500 KW. The maximum power available to the City of Sitka, less reserve, is 9,100 KW.

The peak load in 1974 was 5,895 KW,  
1975 was 7,114 KW,  
estimate 1976 is 8,297 KW,  
" 1979 is 9,673 KW.

Using these figures, additional sources of power will be required by 1979. The Green Lake facility will also relieve the city of its dependence on Alaska Lumber and Pulp.

The current rate in Sitka is 3.2¢ per KW. This is one of the lowest rates in the state. The rate will increase in an amount sufficient to cover debt servicing of the new facility. This rate cannot be determined until the complete project costs are known.

The project appears to be feasible and the Sitka Utilities appear to be well run.

Attachments:

1. Work Orders
  - (a) W-1521-1102-118
  - (b) W-1521-1102-119
  - (c) W-1521-1102-120
2. Financial Statements, City of Sitka  
Municipal Utilities
3. Letter of Intent
4. Credit Report (Pack & Associates)

Further back-up available but not included:

1. "Analysis of Electric System Requirements: City and Borough of Sitka," by R. V. Beck & Associates
2. City Ordinances Nos. 75-185, 75-186, and 75-210; Service policies and rate schedules
3. A detailed explanation of the work to be performed by Beck & Associates

Recommendation-- Approval, subject to the following conditions:

1. State loan in the amount of \$427,500 for a term of seven (7) years, or upon start of project construction, whichever is first, with interest at 6% per annum.
2. Interest payments of \$25,650 to be due one year from the date of loan closing and each year thereafter until the loan is repaid in full.
3. A resolution from the City and Borough of Sitka authorizing this loan.

It should be noted that the City of Sitka has already invested over \$50,000 cash in this project. These funds paid for the initial report by Beck & Associates (\$25,000) and a preliminary geological survey (\$25,000). Other municipalities are going to want their 5% to be past investments and we should decide now if we're going to allow it, and if so it should apply here.

PJ:ag

Alaska State Legislature

POUCH V  
JUNEAU, ALASKA 99901  
TELEPHONE (907) 462-3700



REPRESENTATIVE  
Steve Cowper  
CHAIRMAN  
FINANCE COMMITTEE

House of Representatives

LETTER OF INTENT

for

CSHB 357 (Finance)

It is the intent of the Committee that preference be given to the following communities when making loans for design and preconstruction studies:

Sitka-City and Borough	Green Lake Hydro	\$1,600,000
Petersburg-Wrangell Thomas Bay Power Comm.	Virginia Lake Hydro	300,000
Ketchikan City	Swan Lake Hydro or Lake Grace Hydro	400,000
Kodiak-Kodiak Elec. Association	Terror Lake Hydro	190,000
Cordova City	Power Creek Hydro	380,000
Juneau-Alaska Electric Light & Power	Automating Annex Creek Hydro	480,000
Craig-Klawock-Hydaburg Municipalities	Black Bear Lake Hydro	<u>30,000</u>
		\$3,380,000

It is intended by the Committee that the \$200,000 appropriated to the water resources revolving loan fund be allocated to the Anchorage Municipality for the municipal water supply.

A handwritten signature in black ink, appearing to read "Steve Cowper", written over a horizontal line.

Steve Cowper, Chairman  
House Finance Committee

THE LEGISLATURE OF THE STATE OF ALASKA  
TENTH LEGISLATURE

FISCAL NOTE

I. REQUEST  
 Bill/Resolution No. HB 357  
 Title "An Act making a special appropriation to the water resources loan fund..."  
 Requested by Gardiner Date \_\_\_\_\_

II. FISCAL DETAIL  
 Agency Affected Commerce & Economic Development  
 Program Category Affected Development  
 Budget Request Unit(s) Affected Business Loans

EXPENDITURES (Thousands of Dollars)

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.		3,500				
TOTAL						

FUNDING (Thousands of Dollars)

GENERAL FUND		3,500				
FEDERAL FUNDS						
OTHER (Specify)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. DATE 3.24-11 PREPARED BY Pete Jeans  
 AGENCY Commerce & Economic Development  
 PHONE 465-2510  
 Original: Legislative Finance  
 cc: Budget and Management  
 Prime Sponsor (First Legislator Named)



## KETCHIKAN PUBLIC UTILITIES

334 FRONT STREET

P. O. BOX 1019 KETCHIKAN, ALASKA 99901

TELEPHONE 907-225-3111

February 11, 1977

MUNICIPALLY OWNED  
ELECTRIC WATER PHONE

Representative Oral Freeman  
State Capitol  
Pouch V  
Juneau, Alaska 99811

Subject: Development of Hydroelectric Generating  
Plants in Southeast Alaska

Dear Oral:

Mr. N. L. Teague, City-Utilities Manager has requested that I submit to you some pertinent information regarding the advantages to Ketchikan, and Southeast Alaska as a whole, which would be gained by the installation of hydroelectric generating plants. I will use Ketchikan as an example.

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Representative Oral Freeman  
re: Development of Hydroelectric Generating Plants  
February 11, 1977 - Page Two

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Differential cost in dollars = \$143,065.69

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Hydro = \$ .00534/KWHR

Differential in cost/KWHR - Diesel greater by \$ .03591

Differential cost in dollars = \$462,420.25

TIME PERIOD - January 1, thru December 31, 1975:

Diesel = \$ .0430/KWHR

Hydro = \$ .0051/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0379/KWHR

Differential cost in dollars = \$491,763.87

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TIME PERIOD - January 1, thru December 31, 1976:

Diesel = \$ .0638/KWHR

Hydro = \$ .0055/KWHR

Differential in cost/KWHR - Diesel greater by \$ .0583/KWHR

Differential cost in dollars = \$470,883.27

Note that 1976 differential cost in dollars is slightly less than 1975. This is due to a small hydro-electric plant (Silvis) being returned to service in 1976. The Silvis Plant had been destroyed by a landslide in 1969.

The Silvis hydro plant generated approximately 13% of our electrical system output in 1976. Without the Silvis Plant in operation, our differential cost in dollars would have been approximately \$532,098.00 for 1976.

Look at what is happening in the major item needed for diesel generation. That "NON-RENEWABLE RESOURCE", diesel fuel oil.

Costs for fuel delivered by barge to our S. W. Bailey diesel plant located ashore on Tongass Narrows, for example, are as follows:

<u>Date</u>	<u>Cost per gallon</u>	<u>Cost of fuel oil/KWHR generated</u>
1972	\$ .1375	\$ .0095
1973	\$ .1930	\$ .0133
1974	\$ .3260	\$ .0225
1975	\$ .3610	\$ .0249
1976	\$ .3930	\$ .0271
1977 (Feb.)	\$ .4190	\$ .0289

In a time span of just over four years and two months, our diesel fuel costs have increased 205 percent.

The industrial growth of the lower 48 States and most specifically the Pacific Northwest was made possible by the construction by the U. S. Government of large hydroelectric projects. In addition, it permitted a better living standard for the people at low energy cost.

The technology of transmission line construction permitted transmission line "grids" to be built from the large government projects to all points of the land or load centers.

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Southeastern Alaska does not lend itself to the aforementioned methodology. We are situated in an archipelago that would strain the technology of transmission line construction and be vastly more expensive. It is one thing to serve load centers connected by land, another to serve load centers connected only by water.

It is therefore most logical to construct (large for us) hydroelectric projects as close to the load centers as possible, e.g. our Swan or Grace Lake projects. Short, interconnecting transmission lines could be installed between neighboring islands, e.g. Revillagigedo Island (Ketchikan) and Annette Island (Metlakatla).

Oral, it is safe to say that every power utility in Southeastern Alaska is municipally owned with the exception of Juneau, Alaska. It seems odd to us that Juneau is the only community that has a Federal hydroelectric project "on line" in our part of the State.

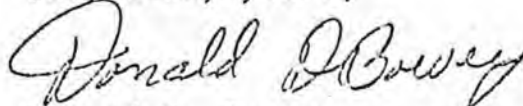
Government seems to speak with forked tongue. They advocate conservation of depletable natural resources and energy, and yet seem to balk at providing the help necessary to alleviate the situation in our portion of Alaska.

Also, Oral, any added expense to the Utilities or cities created by the construction of the hydroelectric projects should be deferred until the projects are "on line". I do not believe any of us can individually carry the burden of cost of generation by our existing means, plus pay any interest or principal payments in case of loans or bonds. Payment deferral is of utmost importance.

I have made this letter far longer than I had intended, Oral, and apologize for taking up so much of your valuable time.

I am attaching certain data that we hope you will find of interest.

Very truly yours,



Donald D. Bowey  
Assistant Utilities Manager

cc: N. L. Teague, City-Utilities Manager  
Senator Robert Ziegler  
Representative Terry Gardiner