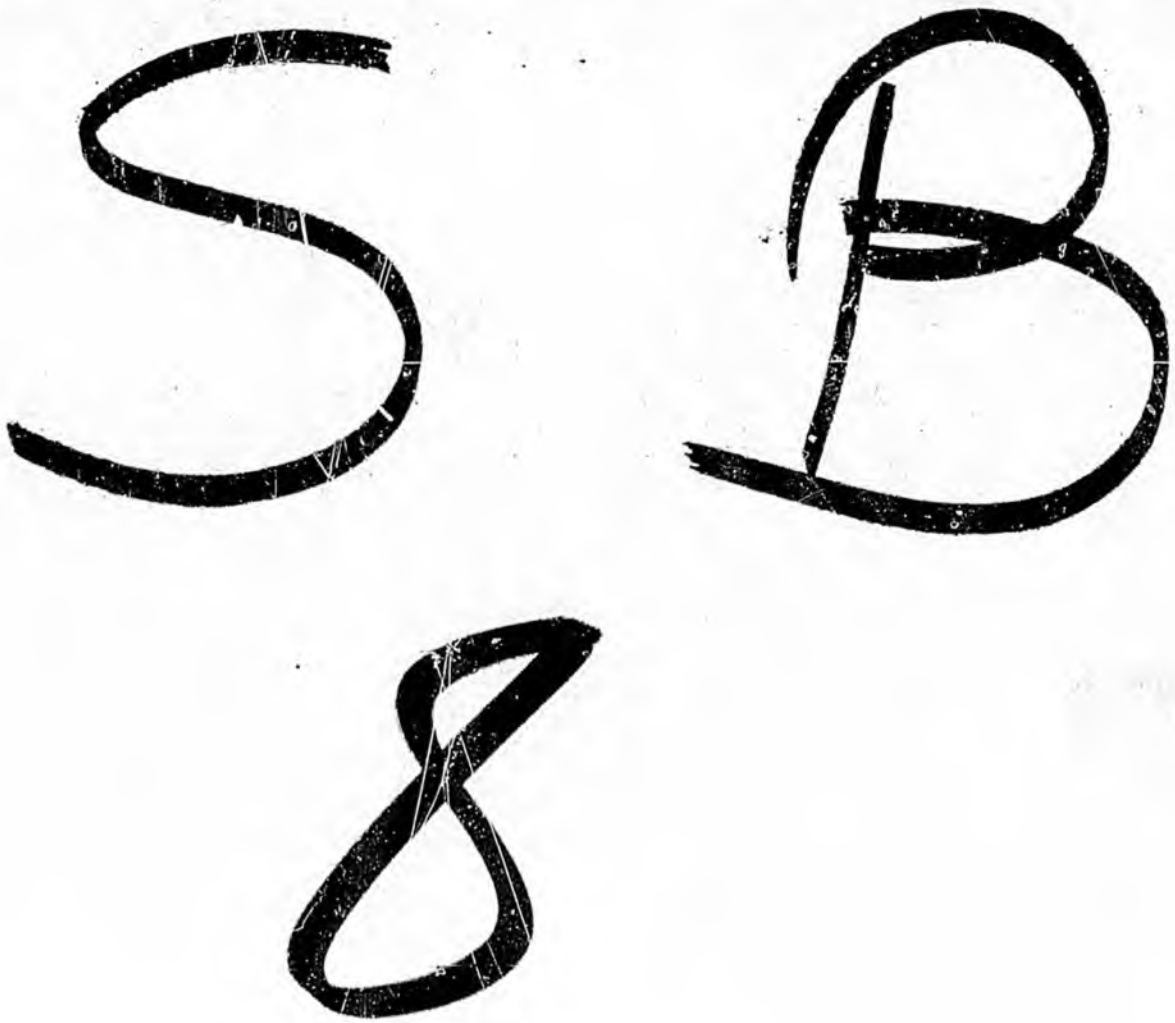
ALASKA LEGISLATURE COMMITTEE FILES 1981-1982 8672

1895 SRES SB 8

1895



COMMITTEE REPORT

SENATE

1/13/81 FURTHER: Finance

Date: ____________________

Mr. President:

The Committee on RESOURCES has had SB 8 making a special appropriation to the Alaska Power Authority for construction of Susitna River hydroelectric project

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

[X] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[ ] replace with CS for ____________________ [ ] same title [ ] new title

and recommends ____________________

[X] AND attaches a "Letter of Intent" [ ] New Fiscal Note

[ ] reports it back without recommendation

[ ] referred to the ____________________ Committee

MEMBERS SIGNING
DO PASS

Dan Gelman
Bob Mulcahy
[signature]
Brad Bradley
[signature]

MEMBERS HAVING
OTHER RECOMMENDATIONS:

[signature]
CHAIRMAN do pass

S 60 (Rev. 12/78)

February 5, 1981

Senator Don Bennett
Senator Ed Dankworth
Co-Chairmen
Senate Finance Committee
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senators Bennett and Dankworth:

On February 4 the Senate Resources Committee considered and passed SB 8, "An Act making a special appropriation to the Alaska Power Authority for construction of the Susitna River hydroelectric project; and providing for an effective date."

The committee wished to recommend that this legislation do pass but wished to attach a letter of intent. The intention of the committee is that SB 8 would become mute and void if SSSB 25 and SB 26 become law. The appropriation under SB 8 would not be valid if these other two laws become law. This understanding has been agreed to by the sponsor of the bill.

Sincerely,

Bettye Fahrenkamp

Senator Bettye Fahrenkamp
Chairman
Senate Resources Committee

5/19

Alaska State Legislature

MAY 15 1981

Senate

Office of the President

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

Bettye wants this close at hand

M E M O R A N D U M

TO: Senator Bettye Fahrenkamp, Chairman
Senate Resources Committee

FROM: Senator Jay Kerttula
President of the Senate

DATE: May 12, 1981

Attached is some information which is of considerable interest.

You may find the material of value and wish to keep it on file.

Alaska State Legislature

Senate

Office of the President

Pouch V
State Capitol
Juneau, Alaska 99811

Official Business

May 12, 1981

Energy

Mr. Edward Kiely
4335 Laurel, Suite 300
Anchorage, Alaska 99504

Dear Mr. Kiely:

A member of my staff informed me today of your request that I pass on to appropriate committees the information you submitted to my office concerning loan programs for small hydro-electric projects.

I have transmitted copies of the material to the following:

Senator Bettye Fahrenkamp, Chairman
Senate Resources Committee

Senator Bob Mulcahy, Chairman
Senate Labor & Commerce Committee

Senators Don Bennett & Ed Lankworth, Co-Chairmen
Senate Finance Committee

I have also sent a copy of the information to Representative Bette Cato for distribution in the House of Representatives.

Sincerely,

Senator Jay Kerttula
President of the Senate

JK/af

rec'd 5/4/81

April 28, 1981

Gordon Tope
C/O Senator Jay Kertula
Pouch V
State Capitol
Juneau, Alaska 99811

Edward Kiely
4335 Laurel, Suite 300
Anchorage, Alaska 99504

Dear Mr. Tope:

There are four projects that I would like to see go this year along with the enclosed project and they are the following:

1. Due to the high cost of energy the State Department of Transportation has asked if we could supply them power, Slana and at Paxson. Presently at Paxson Stan Brown has the service area and it is costing the State D.O.T. approximately $.50/kw plus heat or approximately $120,000 for their energy source. An aquifer hydroelectric has a potential of 400 kw in the winter time, at a construction of 2,500 to 3,000/kw or $.15 to .20/kw.

2. Slana has the same but can provide inexpensive power to the surrounding area as out line in my first report.

3. Chitna is a small village on the Copper River and the Village Corp. of Chitna needs funds for re-establishment of a small hydroelectric system that was established there in 1917 by Alf Nelson. The water flow study indicates that it produces 135 kw at and approximate cost of $200,000 or $.12 to .20/kw it is presently costing the people $.40 to .50/kw at the present time.

4. Tsina Lodge, this a small lodge which is located 35 miles from Valdez and ten miles north of Thompson Pass. Due to the area this lodge is an important factor as far as public safety due to the heavy snow storms in the area. During the winter month due to the high cost of fuel it is costing this lodge over $2,000 a month. A small hydro system, 30 kw, would bring this cost down to less than a $1,000 a month. The installed cost would be approximately $3,000.

5. Ptarmigan Creek (pilot project)

What is nescessary is a small hydro electric, long term, low interest, uncommited loan fund so that these communities may get started. As it is most of these lodges are closing up, causing unemployment and economic depression in these areas. If necessary please pass this report on to Governor Hammond.

Singerely,

Edward M. Kiely

PTARMIGAN CREEK

SMALL HYDROELECTRIC PROJECT

PROPOSAL

PURPOSE

- COST ANALYZATION
- ICE CONDITIONS
- FILTERABILITY
- NATURAL HABITAT

LOCATION

PLANT EQUIPMENT

REQUIREMENTS

EFFECT

PROPOSAL

This proposal is to build a small Hydroelectric system to demonstrate the feasibility or using an aquifer collection system. Due to the State of Alaska; Department of Transportation, Highways Division, at Thompson Pass, requirements for an energy scource. We have selected Ptarmigan Creek approximately 2 miles North of the highways maintenance facilities at Thompson Pass. The reason for this site selection is; winter water flow, (approximately 1200 cfm) the vertical drop (approximately 200 ft;) summer glacial activities, material displacement, siltation, rock be depth and the development of an underground dam. The power generated from this facility will be sold to the Highway facilities.

This demonstration will provide information for future development aquifer collection system, such as: Size required; icing condition; surface water flow; material displacement; siltation; natural habitat; temperature; oxygen/water content. With this information future small Hydroelectric System can develop through out the state.

COST ANALYZATION

The purpose of this project is to demonstrate the use of a Aquifer collection system for the development of small Hydroelectric at a reasonable rate of return for the projdecer and to the consumer. Presently Copper Valley Electric Association is building a 138 KVA power line from Valdez to Copper Valley at a cost of 67 million dollars with a 6 mw hydrolectric plant on Salmon Creek. This brings the installed cost of this project to $11,166.66/kw production cost per kw with dept service of 35 years, will be approximately $.28/kw, to build a step down substation at this facility, it would have to be enclosed due to snow condition and this would bring the cost of this type of a facility to near a 1 million dollars which would be past on to the consumer. Presently the Thompson Pass facility is generating it's power by two, 45 kw diesel electric power plants. The cost of heating & power at this facility is an approximate $.45/kw. Depending on the Deparment of Transprotations requirements for total electric system, will determine the cost, which should be approximately $400,000 or 2000/kw.

ICE CONDITION

With the development of an aquifer collection system as compared to a conventional system. A conventional or a diversion dam, has to be four times the height that of the summer water flow of most creeks or river due to the winter water flow, therefore, the dam would have to in most cases, be 8' to 16' high, the reason for this is that the water flow is four times less in the winter time, therefore, to maintain a water flow below the ice that will build up on a diversion pond will be 3 to 4 ft. and during the spring run off the dams will collect the ice and block the intake to the dam. If the dam is made of concrete due to extreme weather condition the face of the dam will have some deterioration because of icing. Using an aguifer system since the water is collected beneath the stream bed where it never freezes. The frost level usually is 3 ft. deep in the areas, since most of the material within the stream area are of glaciated material. Depending on the area that the collector is installed a underground dam can be installed insuring a more effecient way in collecting the water without any form of icing conditions.

LOCATION

The location of Ptarmigan Creek small hydroelectric plant, will be located within Section 23, T.N.8., R.3.W. C.R.M. the aquifer collector will be located under the Ptarmigan Creek stream bed, approximately 5,600 ft. and 95 S.E. of Rock Spur VABM located-in Sec 22, T. 8.N., R.3.W. C.R.M. at an approximate elevation of 2,290 ft.

The power plant will be located off the west bank of Ptarmigan Creek approximately 6,500 ft. and 75 degrees N.E. of Rock Spur. VABM located in Sec 22 T.8.N., R.3.W., C.R.M. at an approximate elevation of 2,090 ft.

Depending on structural effenciency of the penstock from the aquifer collectors, the penstock will follow the Old State Highway bed for an approximately 1,000 ft. at 15 degrees N.E. of the aquifer collector. Leaving the road at this point it will follow the same path across state property for an approximately 200 ft. at the power plant location, as described above.

The 11 KVA line will be buried along the same path as the penstock to the Aquifer collector from this point the 11 KVA power line will be buried within the confines of the Department of Transportations, Division Highway right aways boundries, to their maintanence complex, approximately 2.5 mile from the Aquifer collector.

FILTERATION

Conventional dams or diversion systems in a glaciated stream has no protection from the heavy materials that are washed down these streams or rivers during the summer months. Also in clear running streams, the debris that washed down during the spring run offs and rainy season wouldn't be protected from turbine damage. Any material that is larger than the nozzle to the turbine can destroy a complete Hydrolectric system. Therefore it has to be screened and with all of the plant material in the water the screen collects this material causing no water to pass.

Using an aquifer collector buried at an optimum depth, the collecter will be filtered by the natural flow of water and material within the creek or river bottom, allowing a continueous flow of water.

NATURAL HABITAT

The use of a dam or a diversion dam in clear running streams has a destructive force against the various types of fish that migrate with in these streams, (they could be glaciated), due to the fact fish ladders don't allow all of the fish to process to their natural habitat, their intake to the penstock would cause considerable destruction to the fry and other fish returning to their fall or spring havitat, therefore the trade off is not that critical.

The use of an aquifer system would allow fish to pass to their habitat as the stream flow itself would be affected only within the confines of the project. Since the turbine would breakup the oxygen in it's discharge it would enhance the fisheries in those streams that have them.

PLANT EQUIPMENT

The aquifer system should consist of corregated pipe 3' to 4' cut in 1/2 reinforced and screened. These should be 25' to 50' long and will be attached to a manifold as described in the attached preliminary drawing. The penstock will consist of a 24" or 30" reinforced P.V.C. pipe following the old road bed approximately 1,500 to 2,000 ft. long. The power plant should consist of a metal structure building to withstand the snow loading in this area. This building should have an area of about 20' x 20' depending upon the Highways facility. The turbine will have to be from 150 kw to 250 kw.

REQUIREMENTS

To insure that this project can begin in the summer of 1981. It will be necessary that the following be completed.

1. Acquire from the Department of Natural Recourses, State of Alaska.
   a. Land use permit as indicated on status plat map.
   b. Water right permit.
   c. Water use permit.

2. Acquire from the Department of Transportation, Division of Highway.
   a. Right away permits as indicated on Status plat map.
   b. Utility permits at the dicretion of the Division of Highways.

3. Acquire from the Department of Fish and Game.
   a. A permit to enter.

4. Acquire from the Department of Environmental Conservation.
   a. A letter of comment.

5. Send a letter of Intent to B.L.M. and Alyeska, since this project is within the pipeline corridor. Request a letter of comment.

EFFECTS

The effects of this demonstration project should show how it can be used for:

1. Small Hydroelectric power source at a reasonable cost.

2. Ecological sound system for fish habitat.

3. No long range environmental damage.

4. Multiplus of of streams that aren't being used.

RESUME

Edward M. Kiely
P.O. Box 1821
Valdez, Alaska 99686

Birthdate: February 10, 1930
Place of Birth: Fresno, Calif.

Education

Fresno Junior College	1/2 year
Fresno State College	2 1/2 years
San Francisco State College	1/2 year

Major--Electrical Engineering
Minor--Business Administration

Technical School--Federal Aviation Administration
Oklahoma City, Oklahoma
Field of Electronics

Experience

1970 to Present: I have been working in both Electrical Distribution or Electronics in Construction, but I have had 14,000 acres of Hydrate metals that can store 4% or pure hydrogen and rejects all forms of salt. Therefore, it can be used as a filter, noncorrosive pipe, ships, etc. I purchased the old power plant at Kerricott, Alaska, and tried to re-establish it for electrical production for Kennicott and McCarthy, Alaska, in an effort to get energy in the proper prospective.

1967 to 1970: I returned to work for the FAA due to the fact that no one was interested in conserving energy at that time. During 1970, I worked with Don Adam from Sunstran Corporation in an effort to develop applications for total energy systems using a closed ranking system using an organic gas that boils at 159 degrees Farenheit, and had thermal efficiency of 80% to 85%. The U.S. Government requested that the project be closed.

1963 to 1967: I was one of the first independent manafacturer representatives in the State of Alaska. One of the companies that I represented was Solar Gas Turbine, a division of International Harvester Corporation. In 1965, I helped in the sale of the second total energy system, as they called it in the United States. The first was in New Mexico, the second was at Point Barrow, Alaska. This was using a gas turbine and using the waste heat for a boiler system for heat production. Also during this time, I was involved with a small hydroelectric system at Independence Mine, Alaska.

1957 to 1963: I began as a GS-5 Electronic Technician trainee with the CAA. I helped install the first VOR (Air Navaid) in Alaska. In 19[illegible], I attended the CAA Electronic School in Oklahoma. I then became Section Chief of Electronic Equipment with as many as 46 technicians working under my section. When I left the FAA to go into business for myself, I was a GS 11, Step 3.

1955 to 1957: I worked in construction (road building, operating heavy equipment) in Alaska.

1948 to 1955: Full time and part time work for Southern California Edison and Pacific Gas & Electric at various locations in the High Sierras on small and large hydroelectric projects. In 1948, Southern California Edison Corporation went from 50 cycles to 60 cycles per second; and from 150,000 VAC to 220,000 VAC. This caused enormous problems because of design. For the next two years, we worked 12 hours a day, seven days a week with only Labor Day, Christmas, and New Year's Day off. This work included the following: replacing buckets on Pelton wheels and measuring the stress on these buckets using cupped resistive wire at various stress points on the buckets themselves while in operation, and measuring their resistance as the power was increased. This was conducted under a contract with M.I.T. I was assigned to assist in this study along with other studies that included Penstock water water rate flow, high poting generators, rebuilding oil circuit breakers, transformers, generators, and control systems.

In the fall of 1951, after serving my full apprenticeship as a powerhouse electrician, I went to college and worked part time for Pacific Gas & Electric and Southern California Edison Corporation in hydroelectric plants until 1955.

PROJECTED ECONOMIC DEVELOPMENT OF THE RICHARDSON HYWAY - VALDEZ & NORTH

OUTLINE

1. Present Development
   a. Valdez
   b. Hyway
   c. Human Resources
   d. Communities

2. Effects

3. Future Developments

4. Requirements

PRESENT PROJECT DEVELOPMENTS

1. a. Valdez; At the present time the city of Valdez is building a 44 million dock facility, to serve as a port of entry for the various town and communities of the interior of Alaska. The Copper River Electric is building its first phase of a 12 mw hydroelectric system. The first phase includes the building of 100 miles of 130 mv transmission line to Coppercenter, and 6 mw generator at Salmon Creek. ALPETCO is building a 1.5 billion refinery in Valdez, the State of Alaska, Department of Natural Resources has released land for development in the community.

The population of Valdez is approximately 6,000 people and with the future activities, this population will increase by 2,000. The U.S. Coast Guard is projecting 900 tankers, 150 cargo tugs, barges and ships and 150 passenger ships by the year 1985. Presently Valdez has a capacity of 10 mw Diesel fired units at a production cost of approximately 11.5 ¢/kw. The cost of 130 mv line and the influx in population will not allow this cost to go down, but up.

b. Alaska Department of Hiways is rebuilding the hiway from Valdez to Glennallen, this includes straightening and widening. At the present time all commerce is provided out of Anchorage over very poorly maintained hiway to the Northeast of the state. The energy related aspects to this report is extremely high costs. Copper Valley Electric has to charge an approximately $.21kw due to transportation, and use of Diesel Electric Systems, both in Glennallen and Valdez. Those places that are not serviced by Copper Valley Electric the cost is much higher.

Due to the distance between Valdez and Fairbanks (67 miles short than Anchorage to Fairbanks) and one day shorter from Seattle to Fairbanks. The commerce will increase 150 times more than what it is at the present. This will increase those services that will be required for this increased commerce in the Copper River Area. With the advent of the Road to Cordova, this will also increase the commerce in this area.

c. The State of Alaska Department of Natural Resources has released more property in the Copper [illegible] and Tok areas, than any other place in the State, with the stipulation that the individual that purchases these properties have to live on them within a three year period of time. The Copper River Native Assoc. with it's increase in wealth is demanding better social standards which will include electricity as a source of energy. Due to the high cost of energy most of the Roadhouses are closing down this winter.

d. Communities with social, economical and energy effects. Kennicott-McCarthy: Economical effects, Presently, the Great Kennicott Land Co., has sold an approx. 100-150 out of 600-700 lots and on some of these lots, are home that are being lived in year round. Pl s there is a hotel with restaurant & bar for summer time tourist. McCarthy has year round residence this community has two air fields, Post Office, General Store, 1 hotel, 2 restaurants, bars, gas station, (Gas cost $2.50/gal) and a small Diesel Electric Plant that only serves the service station.

hotel, and bus service. At the Kennicott Mill which has been give to the State of Alaska as a Historical Site, there is in the old Power Plant, a 200 kw Hydroelectric Generator that is in fair condition. The Governor Peltonwheel and generator are in good condition. The exciter is missing and the old wood stove penstock has rotted out. Records show that this plant operated at peak 178 kw in the winter, with a new Penstock, exciter and a 6 mile tieline between Kenicott and McCarthy could supply these communities with their energy requirements.

These communities are centered in the largest National Park in United States accessable by road. Presently there are approx. 15 families living here in the winter time and serves severly thousand in the summer.

Due to the proposed increase in tourist traffic into Valdez and it's historical values these communities will be serving more of a population. Also Kennicott has the potential of being one of the greatest ski areas in the U.S.A., with a 12 mile run, with a 6,000 ft. vertical drop. If the State of Alaska was to maintain the RR to these communities commerce would also develop.

e. Chitna-A tenative $25,000 loan form D.O.E. has been given to Mr. Edward Kiely to a feasibility Study for the energy requirements. Based upon acquisition of water rights.

f. Strelna-This is asmall agriculture mining, and tourist center that has a population of approx. 55 within a 10 mile radius. Silverlake has a hotel restaurant & bar primarily for the excellant fishing, and to serve all of the summer recreational homes on the lake. From Silverlake to Strelna Creek there is an approx. 15 homesteads with no energy source. The water outflow of silver, upper Strelna and Lower Strelna Lake are enough to support Hydroelectric system from 400 kw to 1000 kw. This could be tied to Chitna approx. 12 miles away.

g. Lower Tonsina-This is a small Indian Village at the confines of the copper river and Tonsina River. There is one diesel electric plant that serves 7 families and one other diesel the cost of providing electricity is $.35 - $.40/kw with a population of an approx. 44 Liberty Creek which is 4 mile to the east has the potential of producing up to 1,000 kw or more in the summer. Presently Copper Valley Electric has its power lines within one and half mile from this small village.

h. Chitna Airfield & Fivemile Creek, presently there is a state maintained air field, an air taxi service and a State Hyway maintenance shop that is producing its electricity by diesel electric system. Five Mile Creek has the potential of producing up to 160 kw of Hydroelectric power.

i Thompson Pass Ptarmign, the State Hyway Maintenance Shop is located here due to the severe storms in the winter time that last from Sept. to May with winds to 150 miles per hr. and snow depth to 35 ft. deep. Their power requirement are up to 75 kw in the winter time with a heat requirement of 1,500,000 Btu. Ptarmign has a potential of 400 kw Copper Valley Electrics 138, kv line passes the area but the cost to the state would be the cost of the substation plus $.21/kw substation cost (up to $500,000) therefore it is less expensive to use their present system.

k. Cascade Creek-Tsina Lodge, this lodge is a public safety matter. In the winter of 1979-1980 there was an avalanche that was over 2,000 ft. long and another over 1,000 ft. long across the hyway north of Tsina Lodge, and south at the pass, it was closed because high winds & drifts which close the hyway for several weeks. Presently their source of energy is diesel electric and stove oil which is costing $2,000 a-month. Cascade Creek 400 ft. South of the lodge has a potential of 70 KW.

k. Stuart Creek-Seradippity. Presently this is a small one family operated gift, General & Liquor Store, just north of an avalanche area which makes it a public safety matter. Presently their energy source is diesel electric at a cost of $900/month. Stuart Creek that runs through their property has a potential of producing 40 kw.

L. Tonsina Lodge-Squirrel & Bernard Creeks. Tonsina Lodge which employees 12 people to maintain a 36 room lodge, restaurant, gas station, washateria and a bar and liquor store. The Lodge is now operating a 100 kw diesel electric system with a heat exchanger to provice approximately 70% of heat for the Lodge. Because of the high cost of energy this Lodge will close down, even while Copper Valley Electric is hooked up to the Lodge, the $.21/kw is to expensive. This lodge is in the public interest to be maintained year round, because of social exonomics, public safety, and historical values, Squirrel Creek has a potential up to 800 kw, and Benard Creek has a potential up to 1200 kw. The year of 1980 this lodge used 2,192 barrels of fuel. For their energy requirements by co-generating with Copper Valley Electric this could save this lodge this fuel cost.

m. Slana-This is a small community on the Tok-Gulkana Hyway halfway inbetween the two. Within a 12 mile radius there is an approx. population of 75 in the area. There is a FAA Air Navigation & Communication Site, a sawmill, General Store, restaurant, bar, liquor store, State Hyway Maintenance Shop, airport and large horse guiding, station. All of these are operating their own diesel electric plants at a cost of $.35 to .40/kw. Porcupine Creek has a potential of 100 kw, Ahtell Creek has a potential of 400 kw, and Carlson Lake has a potential of 100 kw.

n. Chistachina-A small community that includes a native village on the Tok-Gulkana Highway approx. 32 miles from Gulkana. The community includes a State School, 2 general stores, a lodge, gas station, a Lite State Airfield and liquor store. This community has a population within a 12 mile radius of an approx 70. There is presently 3 diesel electric systems providing electricity to this community Chinona Creek has a potential of 150 kw another unknown Cddk approx. 12 miles from Chistachina that has an unknown potential. Mentasna Station Creek. Mentasna is a small native village off the 6 miles off the Tok-Gulkana Hyway and within a 12 mile radius there is a population of an approx. 55 to 65. There is a State School, lodge, restaurant, service station, guiding service with horses, airfield and bar. Presently the State School is running a 15 kw diesel electric, the lodge a 35 kw diesel electric. Station Creek has a potential of 400 kw. Bartell Creek has a potential.

o. Paxton-Gulkana. Mile Post 172 on the Richardson Hyway where the Denali Hyway interscects, this community has a State School, State Hyway maintenance shop, Alscom Support facility, 2 Hotels, 2 restaurants, general store, service station, airfield, guide services, 2 air taxi services, bar and liquor store within a 12 mile radius the oppulation is approx. 65-70. The lodge is presently providing the state facilities with 150 kw Diesel Electric. Gulkana River has a potential of 400 kw.

p. Power at a cost of $.35 to .40/kw. The other Lodge will have to close due to high cost of fuel where it should be able to operate year round due to public safety due to adverse weather condition in the winter time. O'Briens & Haley Creek presently these creeks are 3 & 7 miles south of Chitna which is 12 miles from Copper Valley Electrics Power line system. O'Brien Creek has a potential 4,400 kw. Haley Creek unknown. But it should have an approx. the same.

q. OTHER SYSTEMS-Trims Creek, Silvertip Creek. Trims on the Richardson Hyway has a potential of 100 kw for State Hyway maintenance Camp. Silvertip Creek on the Anchorage Seward Hyway has a potential of 100 kw to support State Hyway Maintenance Camp. Both of these facilities are supported diesel electric systems.

r. Independence Mine-Consists of State Historical Site Mining, ski lodge, bar, restaurant and resort community. In the early thirties when the mine was first in operation, there was a hydroelectric system working from Independence Creek. The potential is unknown.

s. Fresno Creek, Colorado Creek, Nenna River South of Mt. McKinely Park, Lowel Creek at Seward, & Chulitna Middle Fork (State Hyway Maintenance Camp) are unknown, but they all have potential in replacing diesel electric systems.

t. The saving in diesel fuel would be to the Copper Valley Electric 120,203 barrels at a cost of $5,048,526. The savings to the the State Hyways would be an approximately 15,344 barrels per year at a cost of $544,225.

The savings for the small communities within these areas would be an approximate 18,632 barrels at a cost of $704,289 for a grand total of an approximate 154,119 barrels per year at a cost of an approximate $5,180,414. and with the cost of energy and demand in this area the cost will go to over $7,000,000 by the year 1985.

FUTURE DEVELOPMENTS

u. Valdez-The U.S. Coast Guard is predicting that there will be 900 tankers, 150 barge and ships with cargo and up to 300 passenger ships to dock in Valdez by 1985. This increase of traffic will make Valdez a major port of entry for the economics of the interior of Alaska. Valdez is approximately 60 miles and a day shorter to Fairbanks than Anchorage. Therefore a great deal of commerce will pass over the Richardson Hyway. This in turn will create more jobs on the hyway in support of this traffic and it will create a new tourist activity all over this area and North.

THE REQUIREMENTS

v. The requirements are to provide a loan service, so that the high initial cost spread over 10-30 years, at a low interest rate, so that these communities will an inexpensive source of energy. The time is now !!!

These projects in this report, adds up to approx. 10,000 kw and at $2,500/kw installed adds up to $25,000,000.00 Thirty-five year amortization at 10% interest, 3% O & M with a 60% load factor cost per kw is 6.3 cent/kw which is considerably lower than what is being paid at the present time.

The capital investment between 1981 and 1985 in the Valdez area, is going to create a great energy demand that will require all of the energy that will be produced by the Salmon Creek Hydro Electric System and possibly more. This being the situation Copper Valley Electrics, Diesel Electric Generator, both at Valdez and Glennallen will have to stay on line, therefore, the cost of electricity will continue to raise.

Glennallen Copper Valley area-Due to the Alaska State Department of Natural Resource releasing huge tracts of land in this area, and the stipulation that those who purchase the properties have to live on and build a swelling within a three year period of time. This is going to create a huge demand of energy. The Copper River Native Assoc., because of their social and economical demand are going to require more energy.

The effects of the high cost of mineral fuels will cause most of the small lodge, outside of a service area, to close for the winter months. This is a time when they are most needed to provide employment public services, and public safety due to adverse weather conditions.

The effects where the Dept. of Hgway is involved, the cost of maintaining hgway will raise due to the higher cost of mineral fuels.

Department of Energy
Idaho Operations Office
550 Second Street
Idaho Falls, Idaho 83401

DEC 1 2 [illegible]

Edward M. Kiely
c/o Columbia National Consultants
4335 Laurel Street
Anchorage, Alaska 99504

SUBJECT: HYDROELECTRIC FEASIBILITY STUDY LOAN APPLICATION (F10-012); CHITNA HYDRO ELECTRIC PROJECT

Dear Mr. Kiely:

Your application for a hydroelectric loan has tentatively been approved by this office pending resolution of the following items. Since you do not have ownership of the project site or the water rights, these two items will have to be resolved. We understand negotiations are under way for purchasing the site and that an application for the water rights has been submitted to the State of Alaska. Resumés for yourself and Mr. Plancich are also needed. We also recommend that you apply for your exemption with FERC if you have not already done so.

We have, therefore, placed your application in a "HOLD" status. At such time as you notify us that the above items have been resolved, the loan agreement will be mailed to you for signature. You should receive the loan agreement within seven days.

In evaluating your loan application, it was recommended that the loan amourt be reduced from $50,000 to $25,000. This reduction was based on the analysis of direct labor dollars and overhead which were considered excessive.

Your cooperation in keeping us informed is appreciated. Notification can be made either by mail or by telephone (208) - 526-1562 or 526-0639.

Sincerely yours,

R. W. Hosking
Alternative Energy Programs
Support Branch

cc: Region 10
B. Meppen, EG&G

Edward Kiely
4335 Laurel, Suite 300
Anchorage, Alaska 99504

Mr. Martin N. Finnesand
President
Chitna Native Village Corp.
P.O. Box
Copper Center, Alaska 99573

Dear Mr. Finnesand:

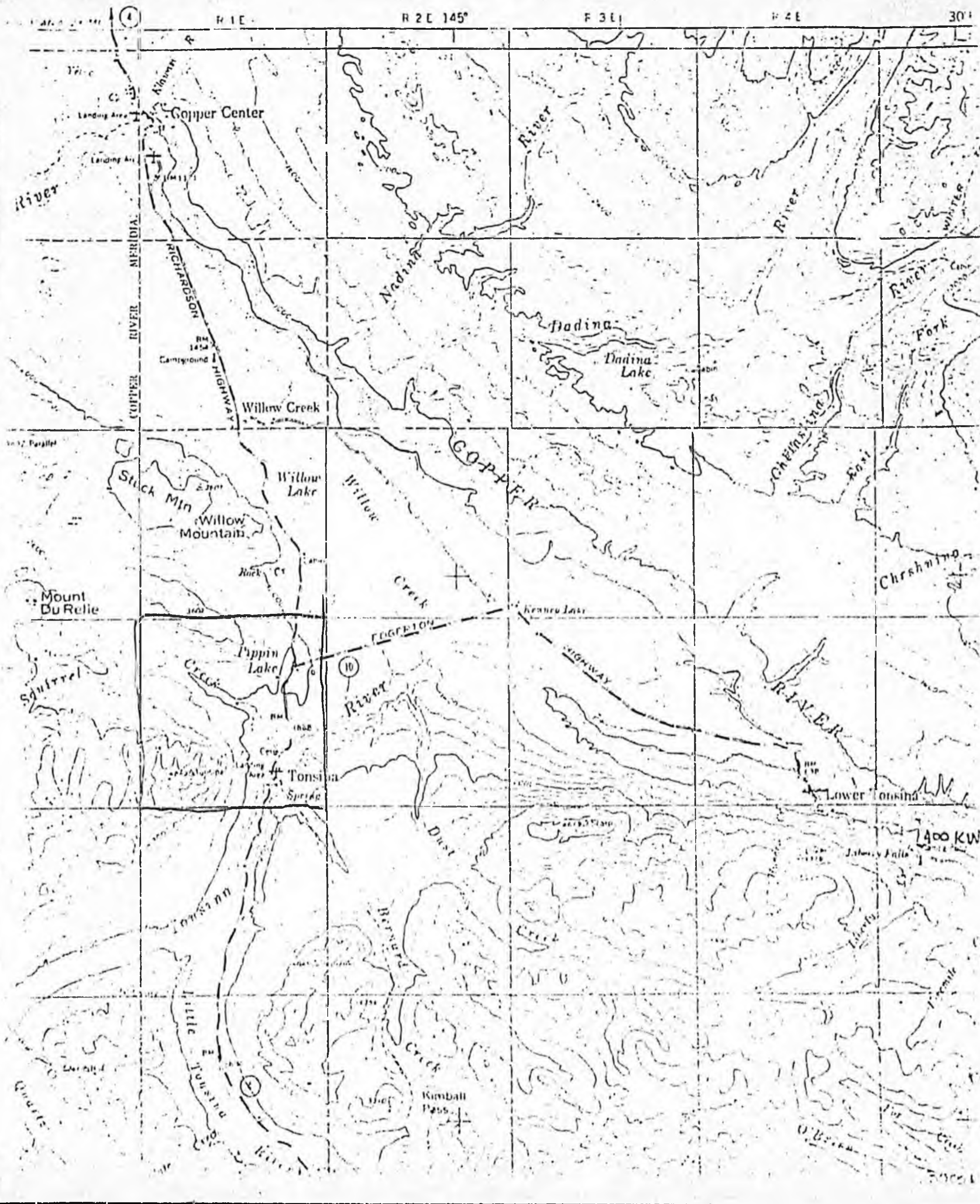
Enclosed is a copy of the public law 95-617 that I acquired this tentative loan. Also enclosed are cover letters that I sent to the Dept. of Energy, as you will note the proposal that I gave them. When I made the water rights application with the State of Alaska, I was not aware of any other group or corporation that interested in providing this type of service. After I had done so I met with Walter Charlie, who then told me of your interest in pursuing this project. At that time since I had invested much of my time into this project I felt that I could help get this project, with the use of Public Law 95-617.

Enclosed is a copy of my Resume and Resume of Mr. Robert B. Swanson and his company S & S Electric. As stated in the cover letter to the D.O.E. with the $25,000 we would provide all of the engineering services and data within a time schedule, based on the Chitna Village Corp. requirements. As I said in the meeting with you on February 7, 1981, we are interested in working with you on this project and other projects such as Lost Lake, O'Brian Creek, Haley Creek, Liberty Creek, and others that I have made water flow studies on last winter and summer. The information that I have acquired would only be duplicated at the expense of your Corporation. I sincerely hope that we can work something out that would be beneficial to your corporation and to our organization.

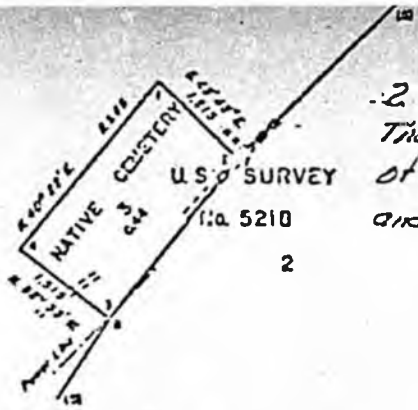
For further inquiries or questions please contact me at the following address: Edward Kiely, % Columbia National Consultants, Suite 300; Anchorage, Alaska 99504, or phone 276-5661.

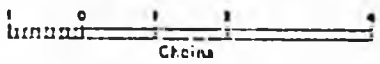
Sincerely yours,

Edward Kiely

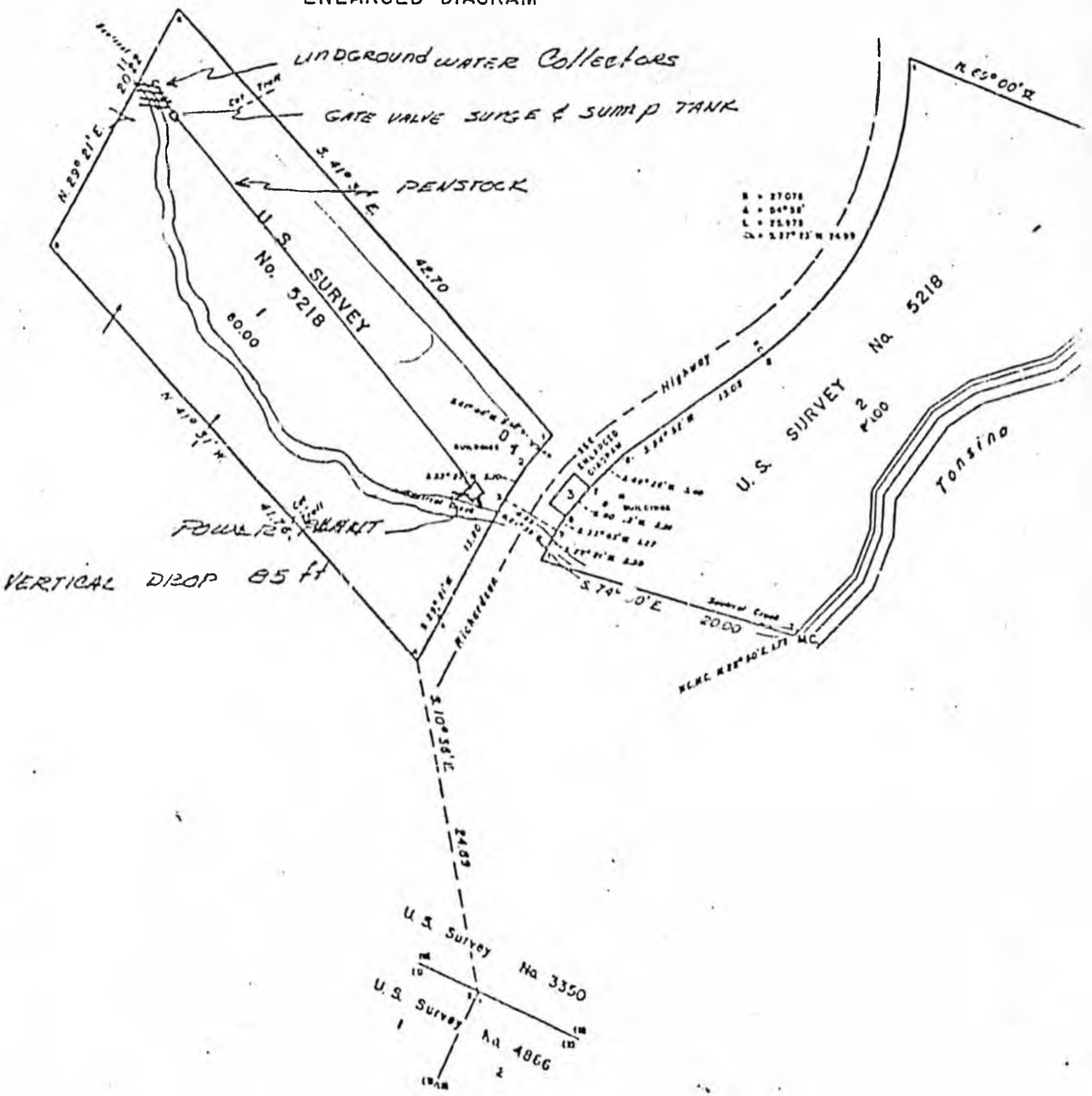

R 1 E
R 2 E 145°
R 3 E
R 4 E
Copper Center
Klutina
River
Landing Area
Campground
COPPER RIVER MERIDIAN
RICHARDSON HIGHWAY
Willow Creek
Willow Lake
Stuck Mtn
Willow Mountain
Rock Cr
Mount Du Relie
Pippin Lake
Squirrel Creek
Tonsina
Springs
EDGERTON HIGHWAY
Kenney Lake
River
Nadina
River
Dadina
Dadina Lake
COPPER RIVER
Willow Creek
Chetaslina
East Fork
Chetaslina
River
Lower Tonsina
1400 KW
Liberty Falls
Dust
Bernard Creek
Creek
Tonsina
Little Tonsina River
Kimball Pass
Quartz
O'Brien Creek
Liberty
Threemile

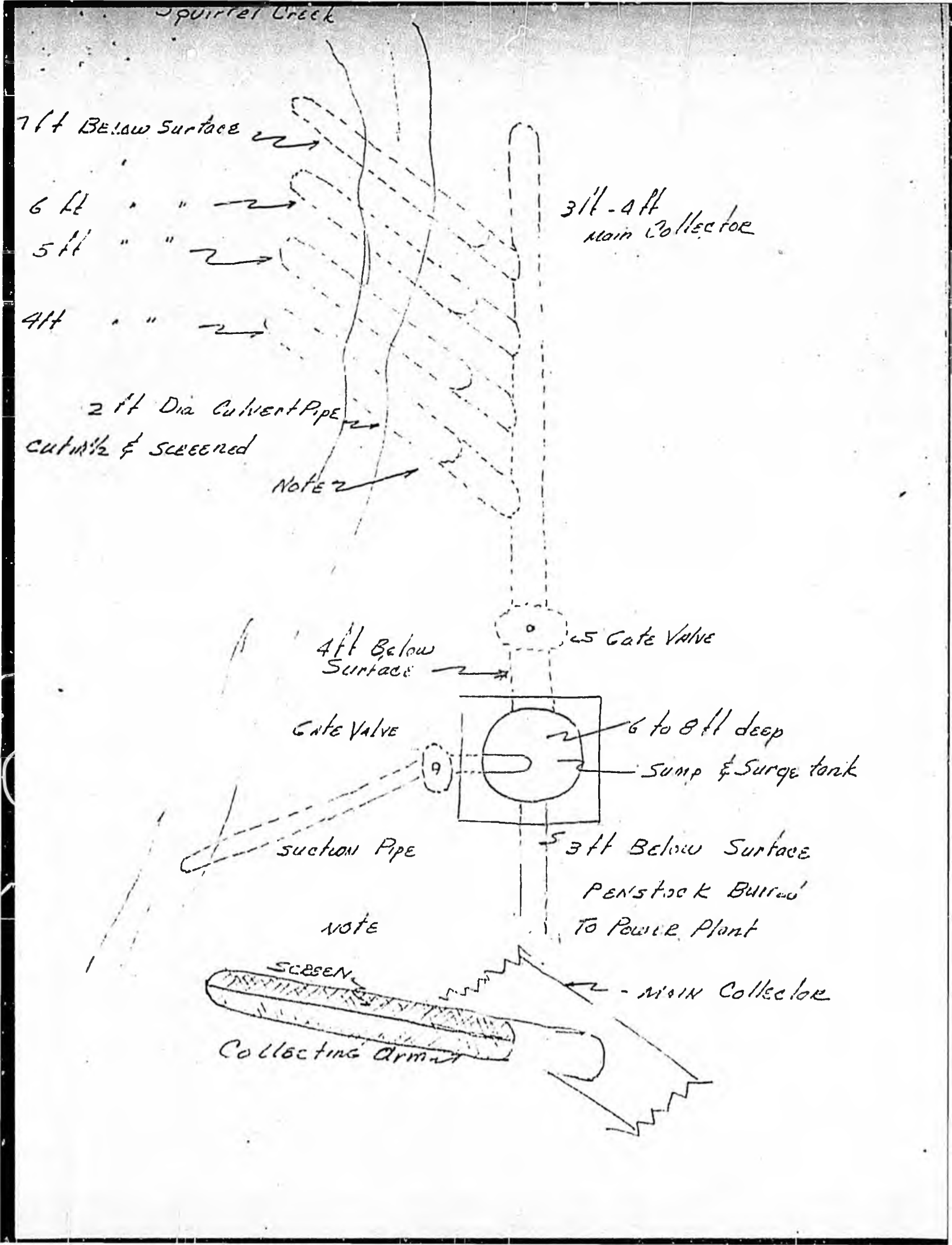
2 YR WATER FLOW STUDIES indicate That this stream will develop a min of 398 kw in the winter time. and up to 1,000 kw in the summer





ENLARGED DIAGRAM




Squirrel Creek
7 ft Below Surface
6 ft " "
5 ft " "
4 ft " "
2 ft Dia Culvert Pipe
cut in ½ & screened
Note
3 ft - 4 ft
Main Collector
4 ft Below
Surface
45 Gate Valve
Gate Valve
6 to 8 ft deep
Sump & Surge tank
Suction Pipe
3 ft Below Surface
Penstock Buried
To Power Plant
Note
Screen
Main Collector
Collecting Arm

LET'S FACE IT--WE HAVE A ONE-TIME BONANZA, A ONE-TIME OPPORTUNITY, A ONE-TIME CHANCE TO TAKE ALASKA FOREVER OUT OF THE BOOM AND BUST ERA AND INTO A PERMANENT YEAR-ROUND ECONOMY.

2/4/81 Wed. SB81, 25, 26

BY HELPING HOMEOWNERS AND BUSINESS THROUGH OUR LOAN PROGRAMS WE ARE HELPING TO EASE <u>TODAY'S</u> FINANCIAL BURDEN.

BY APPROPRIATING HUNDREDS OF MILLIONS TO REVENUE SHARING WE ARE HELPING TO BUILD BETTER COMMUNITIES AND EASE LOCAL TAX BURDENS.

BY BUILDING ROADS, HIGHWAYS, AIRPORTS AND OTHER CAPITAL IMPROVEMENTS WE ARE CATCHING UP WITH SOME LONG-STANDING NEEDS.

BY INVESTING MONEY IN THE PERMANENT FUND WE ARE PUTTING AWAY MONEY FOR A RAINY DAY--IT'S OUR SAVINGS ACCOUNT.

THROUGH DISTRIBUTION OF A FEW HUNDRED DOLLARS A YEAR TO EACH ALASKAN WE ARE PLACING SOME ADDITIONAL MONEY INTO THE ECONOMY TO STIMULATE CURRENT BUSINESS AND GIVE A SMALL MEASURE OF HELP TO PERSONAL BUDGETS.

ALL OF THESE ARE WORTHY PROGRAMS.

BUT WE ARE DOING PRECIOUS LITTLE TO BUILD FOR TOMORROW. WE ARE DOING VIRTUALLY NOTHING TO SEE TO IT THAT WHEN THE LAST DROP OF OIL IS PUMPED FROM PRUDHOE BAY, THAT THE JOBS WILL STILL BE HERE, THE ECONOMY WILL STILL BE SOUND, THAT PUBLIC NEEDS WILL STILL BE MET WITHOUT OUTRAGEOUS TAXES.

WHEN I LOOK THROUGH LAST YEAR'S BUDGET AND THE WAY THINGS SEEM HEADED THIS YEAR, IT SEEMS CLEAR THAT WE ARE BUILDING A 1980s BOOM AND A 1990s BUST.

WHAT IF WE ASKED PEOPLE WHETHER THEY WOULD RATHER HAVE BIGGER FOOTBALL STADIUMS OR A MULTI-BILLION DOLLAR ENERGY SOURCE FOR A JOB INTENSIVE ALUMINUM INDUSTRY?

I THINK I KNOW HOW THIS QUESTION WOULD BE ANSWERED.

ALASKA'S PUBLIC IS HUNGRY FOR THE KIND OF LEADERSHIP THAT WOULD SAY--WE'RE TAKING THE ONE-TIME HARVEST OF OIL REVENUES TO BUILD A SOUND ECONOMY FOREVER.

I BELIEVE THAT WE MUST, THIS YEAR, WITH THIS LEGISLATURE, CREATE WHAT AMOUNTS TO A LONG-TERM INVESTMENT STRATEGY THAT WILL INSURE THAT WHEN THE OIL IS GONE, A STRONG ALASKA WILL REMAIN.

THAT OPPORTUNITY IS WIDE OPEN FOR US.

ALASKA IS RICH IN ENERGY RESOURCES AT A TIME WHEN THE WORLD IS DESPERATE FOR ENERGY.

ALASKA HAS CAPITAL TO DEVELOP THOSE RESOURCES AT A TIME WHEN CAPITAL ELSEWHERE IS IN SHORT SUPPLY.

NO STATE IN HISTORY HAS HAD THE ECONOMIC OPPORTUNITY ALASKA HAS IN THE YEAR 1981.

MOST OF US WHO HAVE LIVED IN ALASKA FOR ANY LENGTH OF TIME ARE VICTIMS OF A LET-OTHERS-DO-IT MENTALITY. WE WAITED SO LONG FOR DECISIONS FROM THE DEPARTMENT OF INTERIOR OR THE CORPS OF ENGINEERS, OR THE CONGRESS. WE WAITED SO LONG FOR THE ENERGY COMPANIES TO CO EXPLORING. WE HAVE WAITED FOR LAND FREEZES TO END AND LAND BILLS TO PASS---FOR AS LONG AS WE CAN REMEMBER, EVENTS HAVE SEEMED BEYOND OUR CONTROL.

AND ALWAYS WE WERE ANCHORED BY DECADES OF UNMET NEEDS AND CHRONIC SHORTAGES OF CASH.

WELL, NOW THINGS ARE WITHIN OUR CONTROL. WE DON'T HAVE TO WAIT FOR ANYONE ANYMORE.

WE CAN DEVELOP ALL OF OUR HYDRO SOURCES. OURSELVES, WITH OUR OWN FUNDS, IN OUR OWN TIME.

WE CAN DEVELOP TIDAL POWER, SYNTHETIC FUELS, GEOTHERMAL, AND OTHER ENERGY SOURCES.

WE CAN BUILD THE TRANSPORTATION SYSTEM NECESSARY TO MOVE THE COAL AND OTHER RESOURCES, BY RAIL, BY ROAD, BY PIPELINE, OVER DOCKS AND THROUGH PORTS.

WE CAN INSURE THAT EVERY AREA IN ALASKA WILL HAVE CHEAP POWER FOREVER.

WE CAN BUILD AN ENERGY CLIMATE THAT WILL ATTRACT AN INDUSTRIAL BASE.

WHO WOULD USE ALL OF THE ENERGY? THAT'S A QUESTION THAT'S PROPERLY ASKED. AND IF WE WERE TO ANSWER THE QUESTION WITH A CONVENTIONAL COST-BENEFIT STUDY, THE RESULTS MIGHT SHOW AN ENERGY SUPPLY FAR IN EXCESS OF DEMAND.

BUT LET'S USE OUR HEADS. OIL WILL BE $50 A BARREL BY THE END OF THE YEAR. WHAT PRICE WILL IT BE IN FIVE TO TEN YEARS, WHEN MUCH OF WHAT WE DECIDE TODAY WILL BE ON THE LINE?

IN THE 1960s, A STUDY DETERMINED THAT RAMPART DAM ON THE YUKON WOULD NOT BE FEASIBLE BECAUSE ITS POWER WOULD COST TWO MILLS. THAT WAS CONSIDERED TOO HIGH A PRICE. THAT STUDY WAS MADE BY SOME OF THE BEST MINDS IN AMERICA. IF RAMPART HAD BEEN BUILT, IT WOULD HAVE BEEN COMING ON LINE SHORTLY AND IF IN THE INTERVENING PERIOD THE COSTS HAD SKYROCKETED FROM TWO MILLS TO THE EQUIVALENT OF $10 A BARREL OIL, IT WOULD STILL BE THE BARGAIN OF THE CONTINENT.

MEANWHILE, WE HAVE WATCHED THE AMERICAN ALUMINUM INDUSTRY GO TO AUSTRALIA BECAUSE IT RAN OUT OF POWER IN THE UNITED STATES.

IF WE DEVELOP OUR ENERGY THERE WILL NOT BE A SHORTAGE OF USERS IN A WORLD THAT IS ENERGY SHORT, WHERE ENERGY SUPPLIES ARE RUNNING OUT AT A TIME THAT MORE AND MORE NATIONS ARE DEVELOPING ENERGY-BASED ECONOMIES.

BY BUILDING OUR ENERGY BASE OURSELVES, WE CAN CONTROL THE PLACEMENT AND ENVIRONMENTAL ASPECTS OF THE INDUSTRIES THAT DO ARRIVE.

WE CAN KEEP OUT THE BLACK SMOKESTACKS TODAY FAR BETTER THAN WE WOULD BE ABLE TO DO UNDER PRESSURE OF TIGHT BUDGETS AND A DECLINING ECONOMY LATER.

LET ME GO BACK AND UNDERLINE SOMETHING I SAID EARLIER. WE ACT AS IF WE HAD AN UNLIMITED SUPPLY OF MONEY. WE DON'T. WE ARE MAKING CHOICES NOW AND IF WE'RE NOT CAREFUL, TODAY'S CHOICES WILL SHORTCHANGE TOMORROW.

WE DON'T HAVE A SURPLUS OF MONEY. WE MERELY HAVE HAD A SHORTAGE OF IDEAS ABOUT HOW TO INVEST THAT MONEY IN THE JOB OF BUILDING A BETTER ALASKA.

I BELIEVE WE MUST SET UP AN ENERGY DEVELOPMENT FUND.

THE MONEY WOULD GO TO ENERGY PROJECTS THROUGHOUT THE STATE--TO MAKE LOANS, TO PARTICIPATE IN JOINT VENTURES, TO INVEST OR HOLD EQUITY PURCHASES, TO DEVELOP PILOT PROJECTS, TO DO RESEARCH, ENGINEERING AND THE WHOLE RANGE OF WORK NEEDED TO DEVELOP OUR ENERGY SOURCES.

I HAVE JUST ONE MORE THING TO SAY ABOUT ALL OF THIS. IT CONCERNS AMERICA'S FUTURE.

DURING THE LAST YEAR WE WITNESSED THE DEPRESSING SPECTACLE OF AMERICA BEING HELD HOSTAGE BECAUSE OF ITS DEPENDENCE ON FOREIGN OIL. WE'VE BEEN HUMILIATED TIME AND AGAIN BY PETTY SHEIKS AND DICTATORS BECAUSE OF OUR DEPENDENCY ON FOREIGN OIL.

WE ARE TALKING ABOUT A REAL THREAT TO ALL OF US--THE THREAT THAT AMERICA WILL GET TOO WEAK, OR THAT OUR KIDS WILL WIND UP FIGHTING FOR OIL IN THE PERSIAN GULF, OR THAT OUR ECONOMY WILL BECOME SECOND RATE BECAUSE WE COULDN'T SWITCH ENERGY GEARS FAST ENOUGH--OR WORSE.

ALASKA CAN PLAY AN IMPORTANT ROLE IN HELPING AMERICA FILL THE ENERGY GAP. WE CAN DO SOMETHING VITAL FOR OUR COUNTRY AND FOR EVERYONE WHO BELIEVES IN AMERICA.

OUR CONTRIBUTION TO THE NATION, AND TO OURSELVES, CAN BE MONUMENTAL. ALL IT TAKES IS AN ABILITY TO LOOK PAST TODAY AND ACT.

Alaska State Legislature

BETTYE FAHRENKAMP, CHAIRMAN
VIC FISCHER, VICE-CHAIRMAN
BRAD BRADLEY
DICK ELIASON
DON GILMAN
BOB MULCAHY
ARLISS STURGULEWSKI

POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

Senate

Committee on Resources

February 4, 1981
1:30 p.m.

Butro Room
207 - Capitol

MEMBERS PRESENT

SENATOR FAHRENKAMP
SENATOR FISCHER
SENATOR BRADLEY
SENATOR ELIASON
SENATOR GILMAN
SENATOR MULCAHY
SENATOR STURGULEWSKI

Hearing: SB 8 — Making a special appropriation to the Alaska Power Authority for construction of the Susitna River Hydroelectric project.

SSSB 25 — Establishing a power project revolving loan fund in the Alaska Power Authority.

SB 26 — Making special appropriations to the power project revolving loan fund of the Alaska Power Authority.

The hearing was teleconferenced to Anchorage, Fairbanks and Mat-Su.

Terry Reikhart, Fairbanks, representing himself, testified on SB 8 stating that the feasibility study is proceeding smoothly. Since Susitna is a major project it is necessary to have as much information as possible before making a decision to proceed.

Patricia Anderson, Fairbanks, a biologist, stated that the Department of Fish and Games needs 5 years to conduct fish and wildlife studies and when completed they will provide good base line data.

Fred Dure, Anchorage, representing himself, stated that he was opposed to SB 8 and that consideration should be given to wildlife.

Chuck Smith, Mat-Su, representing himself, stated that Susitna has been studied for over 40 years that it is time to move on with the project because the area is approaching a power shortage. He indicated that the Alaska Power Authority brochure on Susitna answered all the questions previously raised by the environmentalists.

Kevin Herrin, Fairbanks, representing himself, stated that the feasibility study is needed to determine if the size of the project is appropriate. He indicated that adequate power is needed at a reasonable rate but producing more power was not the solution. He saw the solution as energy conservation.

Vivian Cartwright, Fairbanks, representing herself, stated that the social consequences, of building Susitna, may be high and may disrupt the rural life style of the area. She indicated that the positive points of building the dam are: 1. it would produce cheaper energy for urban areas; and, 2. it would produce short term employment.

Thomas Star, Anchorage, Municipal Light and Power, stated that he was infavor of all three bills. He indicated that it was wise to use non-renewable resource revenues to build useful long term hydro structures. These bills will provide funding for our future energy needs.

Dorothy Jones, representing the MatSu Borough, stated she strongly supported Susitna and all other hydro projects in the State because they are environmentally clean and also a good use of a renewable resource.

Jeff Wilson, Fairbanks, representing himself, stated that it is important to know the potential impacts of Susitna since the river provides fish for the Cook Inlet fisheries. He felt that the feasibility study needs to be completed before a decision was made.

Bob Huffman, Fairbanks, representing himself, stated that he was infavor of all three bills because they will assure that Alaska will have a viable energy future. Hydro is a renewable resource and once the projects are completed they will be virtually inflation free.

David Singlesign, Anchorage, representing himself, stated that the Sierra Club has not taken a position on the Susitna project because they are waiting for the completion of the feasibility study. He further stated that it is logical to study a project of this size in depth.

Bob Lohr, Anchorage, Energy Director RuralCap, stated that he supports the assistant program portion of SSSB 25 and SB 26 because without them the bush communities would be paying

close to 50¢ per KWH.

Jim Booska, Fairbanks, representing himself, stated that the present systems are overloaded and therefore, Susitna is needed as soon as possible. He said that he thought that Snettisham was completed, so what is the appropriation for Snettisham Phase II? (Answered later by Mr. Holdsworth).

Elexis Dvorson, Fairbanks, representing herself, stated that she would like to see the feasibility study completed and was particularly concerned about any potential impact on the Cook Inlet fisheries. She indicated that there were other energy options such as solar energy, and conservation.

Eric Meyers, Anchorage, representing the Alaska Public Interest Research Group, stated that by surpressing the cost of electricity it encourages consumption. He suggested that undue emphasis was placed on electricity when there are other energy needs. He suggested that $20 million be put into the audit and retro-fitting program.

Nancy Lee, Anchorage, representing herself, stated that the amount of money under consideration may not be needed and suggested that the feasibility study be completed first.

David Lacey, Fairbanks, representing himself, stated he was opposed to SB 8 because it creates a big Golden Valley Electric Authority and big government.

Roxie Palser, Fairbanks, stated she supported hydro electric projects because there have been changes in Alaska which have increased the need for hydro.

Jeff Bowman, Fairbanks, representing himself, stated he did not believe that the alternatives that are being studied are being given the same consideration as Susitna. He indicated that he thought that smaller projects may be more appropriate.

Doug McIntyre, Fairbanks, representing himself, stated he was opposed to SB 8 because the per capita cost was $10,000.

3:05 p.m. End of Teleconference.

Phil Holdsworth, Juneau, representing South Eastern Conference, stated that their policy statement #3 on hydro-electric fits SB 25. In reference to the previously asked question regarding Snettisham Phase II, he stated that the funds were to connect Lake Dorothy to the existing plant. The existing plant was built to take an extra turbine and flow from the lake and this comparatively small amount of money will increase the capacity.

Roland Shanks, Juneau, Alaska Environmental Lobby, stated that it is premature to appropriate money to start construction of the Susitna River Hydroelectric Project. That the decision to expend money for the Susitna Project should await the outcome of the studies. He indicated that it may be in the economic best interest of the State to foster an in-state economy based on energy conservation, retro-fitting and smaller more localized hydroelectric projects.

Dave Hutchens, Juneau, Executive Director, Alaska Rural Electric Cooperative Association, stated that there had been some missunderstanding about SB 8 because the Federal Energy and Regulatory Commission requires the feasibility studies to be completed prior to their issuance of a license. But, it is wise while the money is available from non-renewable income to put aside some of it so it can be used if and when Susitna is determined to be feasible. He stated that SB 25 and SB 26 use the revenue from non-renewable resources to finance permanent energy facilities at low interest rates so people across the state can benefit. He indicated that when these projects are completed 7/8 of the people in the state will be on hydro power. He further indicated that it will be years before Susitna is built but it can funded at todays cost with todays dollars. If it is proven infeasible the money becomes available for other projects in that area. He stated that the reason for such a large project like Sustina is it is economically more efficient.

Senator Jalmar Kerttula, President of the Alaska State Senate, stated that these bills represent a 8 year program. The basic philosophy behind the bills is: that the oil revenues are here today which can be used to build a sound economic base for the future. These projects represent a long term investment in the State's economic future. He stated that now is our chance to put the money aside because if for some reason there is a shortage of funds in the future even the money in the permanent fund will be spent.

Senator Mulcahy put forth the motion to move the bills, with individual recommendations, with an amendment to SB 26 correcting the typographical error on page three, and with a letter of intent with SB 8.

The Committee adjourned at 4:10 p.m.

Alaska
Environmental
Lobby

419 6th St., Suite 321
Juneau, Alaska 99801

586-2345

Testimony Before the Senate Resources
Committee Regarding SB 8, SSSB ~~35~~ 25, SB 26

I'd like to thank the committee for the opportunity to discuss this issue today.

We feel that the hydroelectric potential of Alaska is an important resource that can play a major role in the future of Alaska. It provides the opportunity to move away from an energy future tied to non-renewable fossil fuels and to develop clean renewable energy sources. But we feel that hydroelectric needs to be dealt with in the overall context of energy planning. We must determine the future we seek for our state before we can determine the proper energy source. Energy has become such an important commodity that it can shape the entire future of our state.

Last year a report by the House Research Agency identified 31 departments, divisions, offices, agencies, and authorities working on energy matters. This has led to overlap and duplication. We feel that the responsibilities need to be more clearly defined. We do not feel that there is a need for a super energy agency. We feel that it is important to maintain the separation in agencies to maintain a check and balance system. It is important that energy decisions receive close scrutiny and that they fit into the projected future of Alaska.

I think today we are addressing the issue of whether we want Alaska to remain a diverse self-reliant society or to move towards a centralized homogenious society.

I would like to make the following specific comments about the legislation you are considering today.

SB 8

We feel that it is very premature to appropriate money to start construction of the Susitna River Hydroelectric Project.

In the past the legislature has appropriated $31 million to study the feasibility of Susitna and the possible alternatives. The Governor has requested approximately $12 million to complete those studies. It does not seem a wise use of public money to fund studies of a project and then to fund that project before the studies are completed. The

Susitna issue has been debated many times, and we all know the arguments pro and con. We feel that the decision to expend money for the Susitna Project should await the outcome of the studies.

SSSB 25 and SB 26

I'll address these bills together since one establishes a revolving loan fund and the other appropriates the money.

The economic feasibility test established in Section 1 should be restructured to better reflect a truer economic perspective. A general inflation rate of 7% seems very low. While an escalation factor of 11% seems high.

In Section 2 a power project revolving fund is established. We believe that there may be preferable funding systems. We believe that the State money should be used to underwrite loans or to provide the equity needed to enter the conventional bond market. This system would provide us two important benefits. It would insure an objective fiscal review of the project by the bond underwriters. These are people who make their living investing other peoples money in large projects. This would bring the cold eye of an investment advisor to these projects. The bond market would also allow us to spread our money further. By not providing 100% financing to all the projects we could use less money to provide more projects. This would leave more money to fund the other capitol improvements needed in the state.

We are also concerned about the authority being able to fund projects without legislative approval. Because of the importance of Power Project decisions and the amount of money involved we feel that the legislature should retain that decision making power. Under this plan the legislature would lose control of almost $5 billion dollars and some of the most important decisions in the future of this State.

We also feel that this fund should be available to finance private energy sources or projects proposed by cooperatives or other groups.

We are also troubled by the "Loan Terms and Conditions." An interest rate of three percent over 100 years is tantamount to giving the money away. At current inflation rates the return to the State could drop as low as 5 cents on the dollar lent. Therefore this represents more of an appropriation than a loan. If this is viewed as an investment. It is not an investment that would be recommended by a prudent investment counselor. This makes the decision on these projects even more important.

This will also give an unfair competitive advantage to large projects. This will keep Alaska in its historic cycle of boom and bust. It will also foster large centralized projects. These projects have historically brought in large amounts of outside labor and material, and only minimally benefitting local economies. It may well be in the economic best interest of the State to foster an in-state economy based on energy conservation, retro-fitting and smaller more localized projects. Because of the funding system it would also lead to projects that far outstrip demand.

Again let me encourage you to decide this issue in the context of Alaska's future. Today we stand on the edge of the future. We possess the resources both natural and fiscal to enter that future as a strong, far-thinking state. If we invest those resources wisely to insure our future, and the future of Alaskans yet to be born.

National Hydropower Study
Alaska Region

With the need to find and assess alternate sources of energy, Congress directed the Corps of Engineers to conduct a study of potential hydroelectric power development throughout the country. The objectives of the National Hydropower Study are to:

- Assess the demand for electricity and define the need for hydropower.
- Define the physical limits to increasing hydropower production.
- Determine the feasible and acceptable increases in hydropower generation.
- Analyze existing policies affecting hydropower development and use.
- Assess potential environmental and socio-economic impacts
- In the study report to Congress, identify specific potential hydropower projects which warrant detailed study and make recommendations regarding needed policy changes.

SUMMARY OF FINDINGS

Demand for Electricity

According to projections by the Alaska Power Administration, the demand for electrical energy in Alaska will have increased from 3,066 million kilowatt hours in 1979 to 15,000 million kilowatt hours in the year 2000, an increase of nearly five times the present use. The demand is expected to increase in each of the six major subregions of the State. However, the greatest increase is expected in the more heavily populated areas of the State, specifically the Southcentral Railbelt region which includes the Anchorage-Cook Inlet and the Fairbanks areas and the Southeast Subregion.

Present Sources of Electricity

As of 1979, the existing electrical generating capability of power plants in Alaska was about 1,867 megawatts. The majority of electricity generated in the State was produced from energy supplied by fossil fuel. Natural gas was by far the major fuel, accounting for 56 percent of the year's output. Next came oil (18 percent), coal (10 percent), hydropower (10 percent) and others (6 percent).

Most of the electrical energy in Alaska is supplied by combustion turbines (65.2 percent), followed by internal combustion plants (19.2 percent), steam turbines (5.6 percent) and hydropower (10.1 percent). The combustion turbine is the predominant source of power in the more heavily populated Southcentral Subregion, whereas hydropower plants and steam turbines are the predominant sources of power in the Southeast and Yukon Subregions, respectively. The diesel fueled turbine is the primary source of electrical energy for the isolated bush villages of Alaska.

Until recently, the availability of low cost natural gas, particularly in the Anchorage area, accounted for the predominant use of combustion turbines. In addition, the Alaskan climate is conducive to the operation of combustion turbines.

There are more than 40 hydroelectric installations in Alaska. Most of the plants are small (less than 50 MW) and only of local community significance. Only 14 plants are large enough and in such locations to have an impact on the future power supply of the State. Twelve of these plants serve individual cities in the Southeast Subregion. The other two plants are in Southcentral Alaska and are part of the interconnected system serving the Anchorage-Cook Inlet area.

Screening Process

During the National Hydropower Study, the potential for additional hydropower generation was evaluated at 61 existing water resource project sites and 634 undeveloped sites within the State of Alaska. By means of a 4-stage screening process, the number of sites demonstrating potential economic feasibility and environmental acceptablility was reduced 59. A summary of the screening process displayed by major subregions of the State and the principal objectives of each screening stage is presented in Table 1.

Evaluation

In keeping with the objectives of the National Hydropower Study, the potential of hydropower in Alaska to meet the future electrical energy needs was determined from a regionalized assessment of economic and environmental factors.

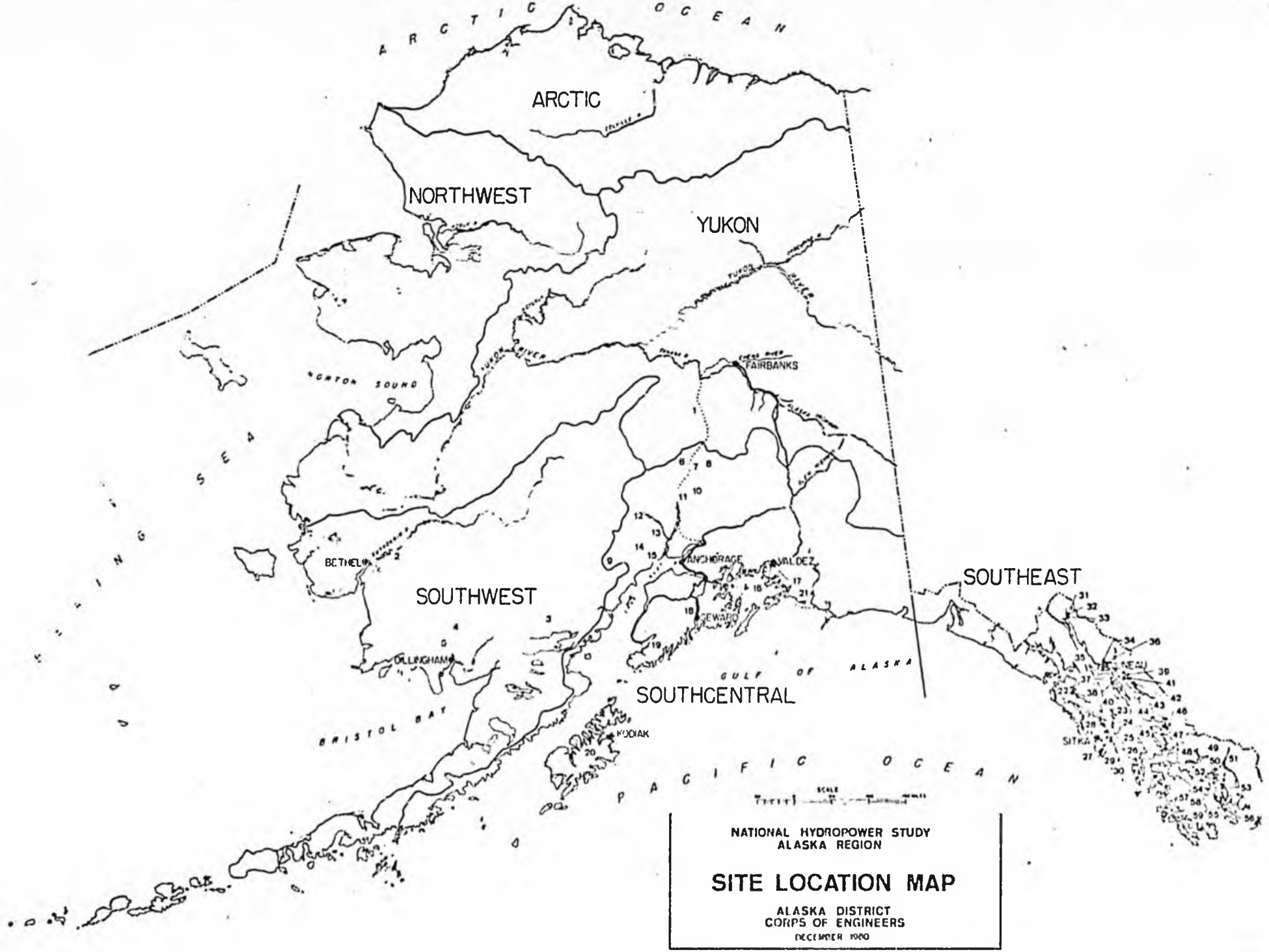
Generally, a project was considered economically feasible if the total average cost of the additional power capable of being produced by the project did not exceed 50 mils (5 cents) per kilowatt hour. In some instances, however, local considerations indicated that a project might be feasible with even higher costs. As shown in Table 1 (third screening) 21 existing projects and 144 undeveloped sites in Alaska are identified as having potential economic feasibility for the development of additional hydropower.

To determine what portion of the economically feasible hydropower projects might be acceptable for development, environmental, social and institutional impacts and marketability constraints were evaluated. Although specific criteria could not always be followed in making this determination, projects which would result in major adverse environmental or social impacts, including elimination of terrestrial and aquatic wildlife habitat and major dislocations of villages and transportation systems, were identified as being unacceptable for development. Also, projects whose development would violate present land use restrictions such as, wild and scenic rivers, national parks and wildlife refuges, or opposed by significant portions of the public were considered to be unacceptable.

Some of the undeveloped sites, although identified as having a substantial potential for producing additional hydropower, were eliminated for marketability reasons, in particular those projects located in the vast undeveloped regions of Alaska.

The results of the hydropower study indicate that 59 projects, including 10 existing sites and 49 undeveloped sites, were acceptable for development and warranted further, more detailed study. Detailed information on each of these sites is presented in Tables 2, 3, and 4. The map attached to Table 2 shows the general location of the sites. If these 59 sites were developed, they could produce as much as 3.56 million kilowatts of power and 15,432 million kilowatt hours of energy.

Table 5 provides a comparison by geographical subregion of the estimated electrical requirements for the year 2000 with the hydropower potential. A further comparison with the marketable hydropower potential, as determined by the Alaska Power Administration, would indicate that the development of these projects could meet the majority of the electrical needs for the Southcentral, Southeast, and Yukon Subregions.



NATIONAL HYDROPOWER STUDY
ALASKA REGION

SITE LOCATION MAP

ALASKA DISTRICT
CORPS OF ENGINEERS
DECEMBER 1980

Table 1
SUMMARY OF NATIONAL HYDROPOWER STUDY SCREENING RESULTS, ALASKA

OWER AREA / JBREGION	STAGE 1						STAGE 2			STAGE 3					
	Initial Inventory 1/			First Screening 2/			Second Screening 3/			Third Screening 4/			Fourth Screening 5/		
	Existing Projects	Undev. Sites	Total	Existing Projects	Undev. Sites	Total	Existing Projects	Undev. Sites	Total	Existing Projects	Undev. Sites	Total	Existing Projects	Undev. Sites	Tota
RCTIC	0	5	5	0	5	5	0	3	3	0	2	2	0	0	0
ORTHWEST	0	27	27	0	16	16	0	7	7	0	6	6	0	0	0
JKON	3	56	59	3	51	54	0	27	27	0	20	20	0	1	1
OUTHWEST	2	38	40	2	28	30	0	8	8	0	8	8	0	4	4
OUTHCENTRAL	14	196	215	12	138	150	9	43	52	3	40	43	0	16	16
OUTHEAST	42	312	349	40	189	229	30	114	144	14	70	84	10	28	38
LASKA TOTAL	61	634	695	57	427	484	39	202	241	17	146	163	10	49	59

/ Objective: Inventory all existing dams and previously identified undeveloped sites.
/ Objective: Identify total physical hydropower potential.
/ Objective: Identify physical hydropower potential showing possible economic feasibility.
/ Objective: Identify economically feasible hydropower potential.
/ Objective: Assess noneconomic factors (environmental, social, institutional) and identify feasible hydropower projects tha
ere identified for detailed study.

TABLE 2
NATIONAL HYDROPOWER STUDY
POTENTIAL HYDROPOWER SITES IDENTIFIED FOR DETAILED STUDY IN ALASKA

Map Index Number	Project Name	Site Ident Number	Name of Stream	Latitude	Longitude	Owner	Additional Capacity Potential (kW)	Additional Energy Potential (MWh)	Average Cost of Energy (mills/kWh
	Yukon								
1.	Browne	AK6NPA0427	Nenana River	64 11.0	149 15.0	undeveloped	200,000	566,000	48.99
	Southwest								
2.	Kisaralik	AK6NPA0012	Kisaralik River	60 26.4	160 5.5	undeveloped	30,000	131,000	56.72
3.	Tazimina	AK6NPA0032	Tazimina	59 58.0	154 33.0	undeveloped	51,000	224,000	17.00
4.	Grant Lake	AK7NPA00.8	Wood River	59 15.1	158 32.0	undeveloped	2,700	12,700	145.87
5.	Lake Elva	AK7NPA0155	Elva Creek	59 37.9	157 0.0	undeveloped	1,000	8,000	29.58
	Southcentral Railbelt								
6.	Chulitna	AK6NPA0181	Chulitna River	63 4.9	149 45.0	undeveloped	34,000	166,000	45.07
7.	Devil Canyon	AK6NPA0188	Susitna River	62 48.9	149 18.9	undeveloped	766,000	3,[illegible]10,000	11.53
8.	Watana	AK6NPA0222	Susitna River	62 48.9	148 30.9	undeveloped	792,000	3,480,000	17.97
9.	Chakachamna	AK7NPA0106	Chakachamna	61 13.0	152 22.0	undeveloped	366,000	1,300,000	12.30

TABLE 2
NATIONAL HYDROPOWER STUDY
POTENTIAL HYDROPOWER SITES IDENTIFIED FOR DETAILED STUDY IN ALASKA (cont)

Map Index Number	Project Name	Site Ident Number	Name of Stream	Latitude	Longitude	Owner	Additional Capacity Potential (kW)	Additional Energy Potential (MWh)	Average Cost of Energy (mills/kWh)
10.	Talkeetna	AK6NPA0216	Talkeetna River	62 28.0	149 22.0	undeveloped	90,000	406,400	23.32
11.	Keetna	AK6NPA0197	Talkeetna River	62 26.5	149 41.6	undeveloped	74,000	324,000	30.38
12.	Skwentna	AK6NPA0211	Skwentna River	61 51.9	152 7.0	undeveloped	98,000	490,000	30.02
13.	Yentna	AK6NPA0224	Yentna River	61 36.9	150 32.0	undeveloped	219,000	960,000	38.47
14.	Beluga Upper	AK6NPA0175	Beluga River	61 15.9	151 15.0	undeveloped	48,000	210,000	53.06
15.	Coffee	AK6NPA0108	Beluga River	61 12.0	151 10.0	undeveloped	37,000	160,000	50.41
16.	Solomon Gulch	AK7NPA0384	Solomon Gulch	61 30.9	146 15.9	undeveloped	12,000	65,000	25.57
17.	Allison Creek	AK7NPA0041	Allison Creek	61 7.1	146 10.2	undeveloped	8,000	180,000	46.50
18.	Snow	AK7NPA0283	Snow River	60 17.9	149 18.0	undeveloped	63,000	278,000	31.24
19.	Bradley Lake	AK7NPA0103	Bradley Creek	59 45.0	150 51.0	undeveloped	94,000	410,000	18.40
20.	Terror Lake	AK7NPA0166	Terror River	57 40.0	153 6.0	undeveloped	20,000	139,000	19.94
21.	Power Creek	AK7NPA0039	Power Creek	60 36.0	145 34.0	undeveloped	7,000	26,000	87.04
	Southeast								
22.	Pelican Creek	AK1NPA0346	Pelican Creek	57 34.7	136 7.8	Pelican Utility Co	1,000	1,700	75.57

TABLE 2
NATIONAL HYDROPOWER STUDY
POTENTIAL HYDROPOWER SITES IDENTIFIED FOR DETAILED STUDY IN ALASKA (cont)

Map Index Number	Project Name	Site Ident Number	Name of Stream	Latitude	Longitude	Owner	Additional Capacity Potential (kW)	Additional Energy Potential (MWh)	Average Cost of Energy (mills/kWh)
23.	Kasnyku Lake	AK7NPA0335	Kasnyku Falls	57 11.0	134 49.9	undeveloped	7,000	30,000	41.63
24.	Takatz Creek	AK7NPA0311	Takatz Creek	57 6.9	134 51.0	undeveloped	20,000	97,000	34.48
25.	Carbon Lake	AK7NPA0321	unnamed	57 1.9	134 28.1	undeveloped	10,000	49,000	58.16
26.	Milk Lake	AK7NPA0294	Milk Creek	56 58.0	134 47.0	undeveloped	7,000	33,000	39.10
27.	Diana Lake	AK7NPA0325	unnamed	56 53.0	135 3.0	undeveloped	8,000	35,000	35.65
28.	Green Lake	AK7NPA0332	Vodopad River	56 95.3	135 11.6	undeveloped	16,000	64,000	48.47
29.	Maksoutof	AK7NPA0291	Maksoutof	56 30.0	134 57.9	undeveloped	24,000	117,000	23.47
30.	Borodino Lake	AK7NPA0319	B.P. Walter	56 22.3	134 42.9	undeveloped	5,000	24,300	44.51
31.	Goat Lake	AK7NPA0357	Pitch Fork	59 31.3	135 11.0	undeveloped	10,000	46,000	33.80
32.	Dewey Lake	AKINPA0359	Dewey Creek	59 26.4	135 18.9	Alaska Power & Tele Co	1,000	1,300	83.39
33.	Dayebas Creek	AK4NPA0078	Dayebas Creek	59 17.2	135 2.0	undeveloped	5,000	18,200	65.95
34.	Gold Creek	AKHNPA0099	Gold Creek	58 17.9	134 23.9	Alaska Elec Light & Power Co.	2,000	9,000	34.90

TABLE 2
NATIONAL HYDROPOWER STUDY
POTENTIAL HYDROPOWER SITES IDENTIFIED FOR DETAILED STUDY IN ALASKA (cont)

Map Index Number	Project Name	Site Ident Number	Name of Stream	Latitude	Longitude	Owner	Additional Capacity Potential (kW)	Additional Energy Potential (MWh)	Average Cost of Energy (mills/kWh)
35.	Treadwell Ditch	AKMNPA0086	Treadwell	58 15.5	134 22.3	Alaska Treadwell	2,500	10,000	25.70
36.	Annex	AKINPA0098	Annex Creek	58 19.5	134 7.6	A.J. Ind.	1,800	3,000	57.18
37.	Lake Dorothy	AK5NPA0096	Dorothy Creek	58 14.0	134 3.0	undeveloped	34,000	150,000	15.24
38.	Speel Division	AK6NPA0082	Speel River	58 6.9	133 42.9	undeveloped	63,000	275,000	32.84
39.	Snettisham	AKJNPA0102	Long Lake	58 5.9	133 48.0	Alaska Power Administration	27,000	168,500	14.17
40.	Crater Lake	AK7NPA0356	Crater Creek	58 8.0	133 45.7	undeveloped	12,000	41,500	45.65
41.	Tease	AK7NPA0084	Tease Creek	58 5.9	133 40.2	undeveloped	16,000	70,000	29.42
42.	Upper Sweetheart	AK7NPA0143	Sweetheart	57 59.7	133 30.6	undeveloped	7,000	31,000	42.94
43.	Sweetheart	AK7NPA0083	Sweetheart	57 56.6	133 38.1	undeveloped	29,000	127,000	38.19
44.	Scenery Creek	AK7NPA0401	Scenery Creek	57 4.9	132 41.9	undeveloped	15,000	67,000	34.04
45.	Falls Lake	AK7NPA0417	Cascade Creek	57 1.1	132 45.1	undeveloped	44,000	190,000	18.20
46.	Thomas Bay	AK7NPA0310	Cascade Creek	57 3.3	132 45.2	undeveloped	50,000	217,000	18.47
47.	Ruth Lake	AK7NPA0400	Delt Creek	56 59.0	132 45.0	undeveloped	13,000	63,000	45.61

TABLE 2
NATIONAL HYDROPOWER STUDY
POTENTIAL HYDROPOWER SITES IDENTIFIED FOR DETAILED STUDY IN ALASKA (cont)

Map Index Number	Project Name	Site Ident Number	Name of Stream	Latitude	Longitude	Owner	Additional Capacity Potential (kW)	Additional Energy Potential (MWh)	Average Cost of Energy (mills/kWh
48.	Anita	AK6NPA0414	Zimovia Straight	56 15.5	132 26.5	undeveloped	3,200	14,000	54.60
49.	Harding River	AK7NPA0301	Harding River	56 16.1	131 38.9	undeveloped	18,000	85,000	60.44
50.	Tyee Creek	AK7NPA0408	Tyee Creek	56 12.0	131 33.0	undeveloped	30,000	133,000	27.66
51.	Swan Lake	AK7NPA0132	Falls Creek	55 35.9	131 21.0	undeveloped	22,000	85,000	58.33
52.	Mahoney Lake	AK7NPA0123	Mahoney Lake	55 25.0	131 31.1	undeveloped	14,400	56,000	30.42
53.	Upper Silvis	AKDNPA0139	Beaver Falls	55 22.8	131 30.9	City of Ketchikan	2,000	49,100	21.71
54.	Lake Connell	AKDNPA0141	Ward Creek	55 26.0	131 40.2	City of Ketchikan	2,000	10,400	56.45
55.	Ketchikan	AKINPA0138	Ketchikan Creek	55 21.5	131 37.0	City of Ketchikan	2,000	15,000	31.10
56.	Chester Lake	AKPNPA0097	Nichols Off	55 7.1	131 31.6	City of Metlakatla	2,500	5,200	48.75
57.	Black Bear	AK7NPA0104	Black Bear	56 32.9	132 0.5	undeveloped	5,000	22,000	44.36
58.	Lake Mary	AK7NPA0395	Old Franks Creek	55 26.0	132 29.0	undeveloped	9,600	42,300	49.80
59.	Mellen Lake	AK7NPA0255	Reynolds Creek	55 12.0	132 36.0	undeveloped	8,000	30,000	41.68

TABLE 3

The following tables provide physical data and environmental and social impacts of the proposed projects. The environmental and social impact codes can be identified through the following matrixes:

Description Matrix for Potential Environmental Concerns Code

Environmental Concern / Column No.	State/Nat'l Parks & Wilderness area Designated and Potential W&S R.	Resident Fish	Anadromous Fish	Wildlife Habitat	Endangered Species	Wetlands
Impact	1	2	3	4	5	6	7
Unknown	U	U	U	U	U	U	U
No	N	N	N	N	N	N	N
Yes	Y	Y	Y	Y	Y	Y	Y

Description Matrix for Potential Social Concerns Code

Social Concern / Column No.	Cultural/Historical Resources	Community Relocation Transportation Relocation	Farm Land	Local Comment	Environmental Group Comment	Other Group Comment	Utility Interest	State Comment
Impact	1	2	3	4	5	6	7	8	9
Unknown	U	U	U	U	U	U	U	U	U
No	N	N	N	N	N	N	N	N	N
Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y

SURVEY SITES
TABLE 4

SITE ID / DEP CODE / ACTV INV / GEOG. AREA	PROJECT NAME / PRIMARY CO. -NAME OF STREAM / OWNER / MAP REFERENCE	LATITUDE / LONGITUDE / OR.AREA (D M.M) (D M.M) (SQ.MI)	PROJ.PURP. / STATUS / AVE. Q (CFS)	DAM HT / F C STOR. / PWR. HD. (FT) (AC FT) (FT)	EXIST.CAP. / INC. CAP. / TOT. CAP. (KW) (KW) (KW)	EXIST.ENRG / INC.ENERGY / TOT.ENERGY (MWH) (MWH) (MWH)	ANUL. COST / ENERGY COST (1000 $) ($/MWH)	ENVIRONMENTAL IMPACT CODE / SOCIAL IMPACT CODE
AKJNPA0102	SNETTISHAM	58 5.9	H	10.0	47160	166500	1902.8	YNNNUNN
I 2	JUNEAU LUNG LAKE	133 48.0	OP	150000.	23300	0	0	
SOUTHEAST	AK POWER ADMIN.	30	447.0	800.0	70460	84250		NNNNYNYYY
	TAKU RIVERA-6							
AK6NPA0082	SPEEL DIVISION	58 6.9	H	325.0	0	0	9032.7	NNUUUUU
I 2	JUNEAU SPEEL RIVER	133 42.9	IS	910000	63000	275000	32.846	
SOUTHEAST	UNDEVELOPED	194	-2314.5	272.7	63000	275000		UNNUUUUUU
	TAKU RIVERA-5.							
AK7NPA0083	SWEETHEARTFALLS	57 56.6	H	150.0	0	0	4850.2	NNNUUUU
I 2	JUNEAU SWEETHEARTCRE	133 38.1	IS	206000	29000	127000	38.190	
SOUTHEAST	UNDEVELOPED	35	328.0	611.3	29000	127000		UNNUYYYYY
	SUMDUM D-5							
AK7NPA0084	TEASE	58 5.9	H	80.0	0	0	2059.9	NNUUUUU
I 2	JUNEAU TEASE CREEK	133 40.2	IS	22000	16000	70000	29.428	
SOUTHEAST	UNDEVELOPED	11	152.0	1032.9	16000	70000		UNNUYYYYY
	TAKU RIVERA-5.							
AKHNPA0086	TREADWELL DITCH	58 15.5	H	5.0	0	0	257. 0	NNUNUUU
I 2	JUNEAU THEADWELL DIT	134 22.3	IS	400	2500	10000	25.700	
SOUTHEAST	AK ELET LIGHT & POWER	13	75.0	517.4	2500	10000		UNNUUUUYU
	JUNEAU B-2,A-2							
AK7NPA0143	UPPER SWEETHEART	57 59.7	H	35.0	0	0	1316.7	NNUUUNU
I 2	JUNEAU SWEETHEARTCRE	133 30.6	IS	18000	7000	30660	42.945	
SOUTHEAST	UNDEVELOPED	3	45.0	1178.8	7000	30660		UNNUUUUUU
	SUMDUM D-5							
AK7NPA0103	BRADLEY LAKE	59 45.0	H	120.0	0	0	7547.5	NNYYYNY
I 2	KENAI-COOKIN BRADLEY CREEK	150 51.0	PA	363000	94000	410000	18.408	
SO CENTRAL	UNDEVELOPED	86	596.0	1053.9	94000	410000		NNNUYYYYY
	SELDOVIA D-3,C-3.							
AK7NPA0106	CHAKACHAMNA LAKE	61 13.0	H	5.0	0	0	19688	YNUUUUU
I 2	KENAI-COOKIN CHAKACHAMNA RA	152 22.0	IS	4015000	366000	1600000	12.305	
SO CENTRAL	UNDEVELOPED	1120	3646.0	792.2	366000	1600000		UNNUUUUUU
	TYONEK A-7.							
AK6NPA0108	COFFEE	61 12.0	H	120.0	0	0	8066.1	NNYYUUU
I 2	KENAI-COOKIN BELUGA RIVER	151 10.0	IS	0	37000	160000	50.413	
SO CENTRAL	UNDEVELOPED	860	2486.0	108.8	37000	160000		UNNUUUUUU
	TYONEK A-4.							

SURVEY SITES
TABLE 4

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AK6NPA0012 I 2 SOUTHWEST	KISARALIK RIVER BETHEL KISARALIK RIV UNDEVELOPED BETHEL B-3.	60 26.4 160 5.5 544	H ID 800.0	315.0 716000 264.7	0 30000 30000	0 131000 131000	7431.4 56.728	YYUUUUU UNNUUUUUU
AK7NPA0018 I 2 SOUTHWEST	GRANT LAKE BRISTOL BAY WOOD RIVER UNDEVELOPED DILLINGHAMD-7,D-8	59 45.9 158 32.0 37	H IS 96.0	56.0 52500 209.7	0 2700 2700	0 12672 12672	1848.5 145.87	UNUUUUU UNNUUUUUU
AK7NPA0155 I 2 SOUTHWEST	LAKE ELVA BRISTOL BAY ELVA CREEK UNDEVELOPED GOODNEWS BAY C-1	59 37.9 159 0.0 10	52.2	137.0 29000 259.7	0 1000 1000	0 8000 8000	2324.6 290.58	UNNNNNU NUUUUUUYU
AK7NPA0032 I 2 SOUTHWEST	TAZIMINA BRISTOL BAY TAZIMINA RIVE UNDEVELOPED ILIAMNA D S.	59 58.0 154 33.0 320	H IS 1440.0	45.0 148000 180.0	0 18000 18000	0 224000 224000	4809.8 17. 8	YNYYNNU UUNUUUUUU
AK5NPA0039 D 2 SO CENTRAL	POWER CREEK 1 CORDOVA-MCCA POWER CREEK UNDEVELOPED CORDOVA C-5.	60 35.1 145 32.4 21	H SP 251.0	25.0 0 359.6	0 5000 5000	0 26000 26000	2687.0 103.34	UUYYNUU UNNUYNUYY
AK1NPA0098 I 2 SOUTHEAST	ANNEX JUNEAU ANNEX CREEK ALASKA ELEC LGT AND PWR JUNEAU B-1	58 19.5 134 7.6 6	H DP -63.4	25.0 23400 755.0	3500 1750 5250	6000 3000 9000	171.52 57.176	UNUUUUU UUUUUUUUU
AK7NPA0356 D 2 SOUTHEAST	CRATER LAKE JUNEAU CRATER CREEK UNDEVELOPED TAKU A-6.	58 8.0 133 45.7 12	H IS 185.0	55.0 118000 979.0	0 11872 11872	0 41490 41490	1977.4 47.659	UUNNNUU NUUUYUUYY
AK4NPA0099 I 2 SOUTHEAST	GOLD CREEK5 JUNEAU GOLD CREEK ALASKA ELECTRIC LIGHT & POWE JUNEAU B-2	58 17.4 134 23.9 10	H DP -57.7	5.0 0 225.0	1600 2000 3600	6800 9968 15765	312.98 34.849	UUUUUUU UUUUUUUUU
AK5NPA0096 I 2 SOUTHEAST	LAKE DOROTHY JUNEAU DOROTHY CREEK UNDEVELOPED TAKU RIVERA-6.	58 14.0 134 3.0 11	H IS 112.0	5.0 165000 2347.6	0 34000 34000	0 150000 150000	2286.3 15.242	UUUUUUU UNNUYYYYY

SURVEY SITES
TABLE 4

SITE ID / DEP CODE / ACTV INV / GEOG. AREA	PROJECT NAME / PRIMARY CO. -NAME OF STREAM / OWNER / MAP REFERENCE	LATITUDE / LONGITUDE / DR.AREA (D M.M) (D M.M) (SQ.MI)	PROJ.PURP. / STATUS / AVE. Q (CFS)	DAM HT / F C STOR. / PWR. HD. (FT) / (AC FT) (FT)	EXIST.CAP. / INC. CAP. / TOT. CAP. (KW)	EXIST.ENRG / INC.ENERGY / TOT.ENERGY (MWH)	ANUL. COST / ENERGY COST (1000 $) ($/MWH)	ENVIRONMENTAL IMPACT CODE / SOCIAL IMPACT CODE
AK1NPA0136	KETCHIKAN LAKES	55 21.5	SH	33.0	4200	14800	159.52	NNUUUUU
I 2	KETCHIKAN KETCHIKAN CRE	131 37.0	OP	9200	1400	2140	74.545	
SOUTHEAST	CITY OF KETCHIKAN	11	-146.1	265.0	5600	16940		UNNUUUUUU
	KETCHIKAN B-5							
AK0NPA0141	LAKE CONNELL DAM	55 26.0	SO	85.0	0	0	590.24	NNUUUUU
I 2	KETCHIKAN WARD CREEK	131 40.2	OP	8300	2000	10456	56.450	
SOUTHEAST	KETCHIKAN PULP COMP'NY	13	174.0	149.8	2000	10456		UNNUUUUUU
	KETCHIAKANB-5,B-6							
AK7NPA0123	MAHONEY LAKE UPPER	55 25.0	H	25.0	0	0	1691.4	NNYNYNN
I 2	KETCHIKAN MAHONEY LAKE	131 31.1	IS	10200	14400	55590	30.426	
SOUTHEAST	UNDEVELOPED	2	48.0	1825.1	14400	55590		YNNNYNUYY
	KETCHIKAN B-5							
AK7NPA0132	SWAN LAKE	55 35.9	H	195.0	0	0	4958.7	NNYYNUU
I 2	KETCHIKAN FALLS CR REVI	131 21.0	IS	179000	22000	85000	58.338	
SOUTHEAST	UNDEVELOPED	36	464.0	274.7	22000	85000		YNNNYUUYY
	KETCHIKAN C-3.							
AK0NPA0139	UPPER SILVIS LAKE	55 22.8	H	60.0	2100	5000	286.20	NNUUUUU
D 2	KETCHIKAN BEAVER FALLS	131 30.9	OP	22000	2000	49111	5.8277	
SOUTHEAST	CITY OF KETCHIKAN	22	-574.9	265.0	4100	54111		UNNUUUUUU
	KETCHIKAN B-5							
AK7NPA0166	TERROR LAKE	57 40.0	H	70.0	0	0	2772.1	YNNYYNN
I 2	KODIAK TERROR RIVER	153 6.0	IS	0	20000	139000	19.943	
SO CENTRAL	UNDEVELOPED	17	99.0	1148.8	20000	139000		YNNYYNUYY
	KODIAK C-4.							
AK6NPA0175	BELUGA UPPER	61 15.9	H	180.0	0	0	11143	NNUYUUU
D 2	MATANUSKA-SU BELUGA RIVER	151 15.0	IS	0	48000	210000	53. 66	
SO CENTRAL	UNDEVELOPED	840	2484.0	141.8	48000	210000		UNNUUUUUU
	TYONEK B-4.							
AK6NPA0181	CHULITNA HURRICANE	63 4.9	H	230.0	0	0	7482.3	NNUUUUU
I 2	MATANUSKA-SU CHULITNA RIVE	149 45.0	IS	0	34000	166000	45. 74	
SO CENTRAL	UNDEVELOPED	795	2622.0	206.7	34000	166000		UNYUUUUUU
	HEALY A-6.							
AK6NPA0188	DEVIL CANYON NPA PROPOSAL	62 48.9	HRC	635.0	0	0	39324	NYNNNUN
D 2	MATANUSKA-SU SUSITNA RIVER	149 18.9	FP	1050000	776000	3410000	11.532	
SO CENTRAL	UNDEVELOPED	5810	9227.0	574.4	776000	3410000		UNNNYNUYY
	TALKEETNA MTS D-5 D-4.							

SURVEY SITES
TABLE 4

SITE ID / DEP ACTV / CODE INV / GEOG. AREA	PROJECT NAME / PRIMARY CO. -NAME OF STREAM / OWNER / MAP REFERENCE	LATITUDE / LONGITUDE / DR.AREA (D M,M) (D M,M) (SQ.MI)	PROJ.PURP. / STATUS / AVE. Q (CFS)	DAM HT / F C STOR. / PWR. HD. (FT) (AC FT) (FT)	EXIST.CAP. / INC. CAP. / TOT. CAP. (KW) (KW) (KW)	EXIST.ENRG / INC.ENERGY / TOT.ENERGY (MWH) (MWH) (MWH)	ANNL. COST / ENERGY COST (1000 $) ($/MWH)	ENVIRONMENTAL IMPACT CODE / SOCIAL IMPACT CODE
AK6NPA0197 I 2 SU CENTRAL	KEETNA MATANUSKA-SU TALKEETNA RIV UNDEVELOPED TALKEETNA MTS B-6	62 26.5 149 41.6 1250	H IS 2400.0	360.0 910000 285.7	0 74000 74000	0 324000 324000	9843.7 30.362	UNKNOWN UNKNOWN
AK6NPA0211 D 2 SU CENTRAL	SKWENTNA (HAYES) MATANUSKA-SU SKWENTNA RIVE UNDEVELOPED TYONEK B-6.	61 51.9 152 7.0 950	H IS 2624.0	560.0 0 290.7	0 960 0 98000	0 890000 890000	14713 30. 27	UNKNOWN UNKNOWN
AK6NPA0216 I 2 SU CENTRAL	TALKEETNA 2 MATANUSKA-SU TALKEETNA RIV UNDEVELOPED TALKEETNA MTNS B-5.	62 28.0 149 22.0 850	H IS 1650.0	575.0 0 369.6	0 90000 90000	0 806446 806446	9467.0 23.341	UNKNOWN UNKNOWN
AK6NPA0222 D 2 SU CENTRAL	MATANA NUAPROPOSAL MATANUSKA-SU SUSITNA RIVER UNDEVELOPED TALKEETNA MTS D-4,3,2 C-2,1.	62 48.9 148 30.9 5180	HRC FP 8137.0	810.0 9624000 659.3	0 792000 792000	0 3480000 3480000	62568 17.979	UNKNOWN UNKNOWN
AK6NPA0224 D 2 SU CENTRAL	YENTNA MATANUSKA-SU YENTNA RIVER UNDEVELOPED TYONEK C-2.	61 36.9 150 32.0 6400	H IS 17611.0	120.0 0 81.9	0 219000 219000	0 960000 960000	3690 38.479	UNKNOWN UNKNOWN
AKPNPA0097 I 2 SOUTHEAST	CHESTER LAKE OUTER KETCHI NICI FST METLAKATLA POWER & L ... KETCHIKAN A-5	55 7.1 131 3..6 2	H OP 26.0	12.0 300 749.2	0 2500 2500	0 5221 5221	254.55 48.755	UNKNOWN UNKNOWN
AK7NPA0104 I 2 SOUTHEAST	BLACK BEARLAKE PRINCE OF WA BLACK BEARCRE UNDEVELOPED CRAIG C-3	56 32.9 132 0.5 1	H IS 13.5	28.0 6900 1 58.5	0 5000 5000	0 22000 22000	976. 0 44.367	YNYYYNN UNNNYUYYY
AK7NPA0395 I 2 SOUTHEAST	LAKE MARY PRINCE OF WA OLD FRANKSCRE UNDEVELOPED CRAIG B-2	55 26.0 132 29.0 27	H IS 240.0	30.0 95000 2-4.7	0 9600 9600	0 42500 42500	2104.9 49.809	UNKNOWN UNKNOWN
AK7NPA0255 I 2 SOUTHEAST	MELLEN LAKE PRINCE OF WA PEYNOLDS.CREE UNDEVELOPED SITKA D-3.	55 12.0 132 36.0 6	H IS 62.0	35.0 0 864.1	0 8900 8000	0 30000 30000	1250.4 41.682	UNKNOWN UNNNNNNNN

SURVEY SITES
TABLE 4

SITE ID / PROJECT NAME / PRIMARY CO. -NAME OF STREAM / OWNER / MAP REFERENCE	LATITUDE / LONGITUDE / DR.AREA (D M.M) (D M.M) (SQ.MI)	PROJ.PURP. / STATUS / AVE. Q (CFS)	DAM HT / F C STOR. / PAR. HD. (FT) (AC FT) (FT)	EXIST.CAP. INC. CAP. TOT. CAP. (KW) (KW) (KW)	EXIST.ENRG INC.ENERGY TOT.ENERGY (MWH) (MWH) (MWH)	ANUL. COST ENERGY COST (1000 $) ($/MWH)	ENVIRONMENTAL IMPACT CODE / SOCIAL IMPACT CODE
DEP ACTV CODE INV GEOG. AREA							
AK7NPA0283	SNOW	60 17.9	H	310.0	0	0	8685.5	NNUUUUU
I 2	SEWARD SNOW RIVER	349 18.0	IS	0	63000	278000	31.242	
SO CENTRAL	UNDEVELOPED	AS	710.0	652.3	63000	278000		UNNUUUUUU
	SEWARD B-7.							
AK7NPA0319	HONOUINO LAKE	56 22.3	H	5.0	0	0	1081.7	NNUUUUU
I 2	SITKA BIG PORT WALT	134 42.9	IS	28000	5000	24300	44.515	
SOUTHEAST	UNDEVELOPED	3	66.0	479.5	5000	24300		UNNUUUUUU
	PORT ALEXANDER B-3.							
AK7NPA0321	CARBON LAKE	57 1.9	H	65.0	0	0	2849.8	NNUUUUU
I 2	SITKA UNNAMED	134 28.1	IS	56880	10000	49000	58.160	
SOUTHEAST	UNDEVELOPED	27	483.0	259.7	10000	49000		UNNUUUUUU
	SITKA A-5.							
AK7NPA0325	DIANA LAKE	56 53.0	H	5.0	0	0	1318.0	NNUUUUU
I 2	SITKA UNNAMED	135 3.0	IS	0	8000	35000	37.658	
SOUTHEAST	UNDEVELOPED	4	56.0	1473.5	8000	35000		UNNUUUUUU
	PORT ALEXANDER D-4.							
AK7NPA0332	GREEN LAKE	56 95.50	H	200.0	0	0	3101.9	NNNNNNN
I 2	SITKA VODOPAD RIVER	135 11.60	UC	132000	16600	64000	48.467	
SOUTHEAST	UNDEVELOPED	28	291.0	344.6	16600	64000		NNNUYYYYY
	PORT ALEXANDER D-4							
AK7NPA0335	KASNYKU LAKE	57 11.0	H	20.0	0	0	1248.8	NNUUUUU
I 2	SITKA KASNYKU FALLS	134 49.9	IS	0	7000	30000	41.626	
SOUTHEAST	UNDEVELOPED	5	70.0	650.3	7000	30000		UNNUUUUUU
	SITKA A-5.							
AK7NPA0291	MAKSOUTOF RIVER	56 30.8		80.0	0	0	2747.1	NNUUUUU
I 2	SITKA MAKSOUTOF RIV	134 57.9	IS	0	24000	117000	23.479	
SOUTHEAST	UNDEVELOPED	24	375.0	569.4	24000	117000		UNNUUUUUU
	PORT ALEXANDER C-3.							
AK7NPA0294	MILK LAKE	56 58.0	H	30.0	0	0	1290.3	NNUUUUU
I 2	SITKA MILK CREEK	134 47.0	IS	0	7000	33000	39.101	
SOUTHEAST	UNDEVELOPED	11	230.0	665.3	7000	33000		UNNUUUUUU
	PORT ALEXANDER B-3							
AK1NPA0346	PELICAN CREEK	57 34.7	H	22.0	500	2000	128.36	NNUUUUU
I 2	SITKA PELICAN CREEK	136 7.8	OP	200	1000	1700	75.507	
SOUTHEAST	PELICAN UTIL. CO.	12	150.0	120.0	1500	4700		UNNUUUUUU
	SITKA D-7							

SURVEY SITES
TABLE 4

SITE ID / PROJECT NAME / PRIMARY CO. -NAME OF STREAM / OWNER / MAP REFERENCE	LATITUDE / LONGITUDE / DR.AREA (D M.M) (D M.M) (SQ.MI)	PROJ.PURP. / STATUS / AVE. Q (CFS)	DAM HT / F C STOR. / PWR. HD. (FT) (AC FT) (FT)	EXIST.CAP. INC. CAP. / TOT. CAP. (KW) (KW)	EXIST.ENRG INC.ENERGY / TOT.ENERGY (MWH) (MWH)	ANUL. COST ENERGY COST (1000 $) ($/MWH)	ENVIRONMENTAL IMPACT CODE SOCIAL IMPACT CODE
AK7NPA0311	TAKATZ CREEK	57 6.9	H	205.0	0	0	3344.6	YNNNNUU
I 2	SITKA TAKATZ CREEK	134 51.0	IS	145800	20000	97000	34.480	
SOUTHEAST	UNDEVELOPED	10	160.0	990.0	20000	97000		UNNUUUUUU
	SITKA A-3.							
AK0NPA0078	DAYEBAS CREEK	59 17.2	H	15.0	0	0	1199.6	UNNNYUU
I 2	SKAGWAY-YAKU DAYEBAS CREEK	135 2.0	IS	0	5000	18190	65.951	
SOUTHEAST	UNDEVELOPED	11	85.5	344.6	5000	18190		UNNUUUUYU
	SKAGWAY B-1							
AK7NPA0359	DEWEY LAKES	59 26.4	HS	20.0	375	1000	108.40	NNUUUUU
I 2	SKAGWAY-YAKU DEWEY CREEK	135 18.9	OP	410	1000	1300	83.385	
SOUTHEAST		7	30.0	400.0	1375	2300		UNNUUUUUU
	SKAGWAY B-1							
AK7NPA0357	GOAT LAKE	59 31.3	H	15.0	0	0	1555.2	NNUUUUU
I 2	SKAGWAY-YAKU PITCHFORK FALS	135 11.0	IS	6000	10000	46000	33.208	
SOUTHEAST	UNDEVELOPED	4	29.0	1866.1	10000	46000		UNNUUUUUU
	SKAGWAY C-1.							
AK7NPA0041	ALLISON CREEK	61 7.1	H	1.0	0	0	837.10	YNUYNNN
I 2	VALDEZ-CHIT- ALLISON CREEK	146 10.2	IS	19980	4000	18000	46.505	
SO CENTRAL	UNDEVELOPED	5	49.0	1168.8	4000	18000		UUNNYYYYY
	VALDEZ A-7							
AK7NPA0384	SOLOMON GULCH	61 30.9	H	10.0	0	0	1662.1	YNNNYUU
I 2	VALDEZ-CHII- SOLOMON GULCH	146 15.9	IS	0	12000	65000	25.571	
SO CENTRAL	UNDEVELOPED	18	138.0	607.3	12000	65000		NNNUYUUYY
	VALDEZ A-7							
AK7NPA0310	THOMAS BAY	57 3.3	H	3.0	0	0	4016.4	YNNNNNN
I 2	WRANGELL PET CASCADE CREEK	132 45.2	IS	97500	50000	217417	18.473	
SOUTHEAST	UNDEVELOPED	18	226.0	1443.5	50000	217417		UNNNYYYYY
	SUMDUM A-2A-3							
AK5NPA0414	ANITA	56 15.5	H	68.0	0	0	772.64	NUUUUUU
I 2	WRANGELL-PET ZIMOVIA STRAI	132 26.5	IS	15500	3230	14150	54.605	
SOUTHEAST	UNDEVELOPED	2	27.0	1005.9	3230	14150		UUNUUUUUU
	PETERSBURGH-2.							
AK7NPA0301	HARDING RIVER	56 16.1	H	190.0	0	0	5137.6	YNUUUUU
I 2	WRANGELL-PET HARDING RIVER	131 58.9	IS	200000	18000	85000	60.443	
SOUTHEAST	UNDEVELOPED	65	725.0	259.7	18000	85000		UYNUUUUUU
	BRADFIELD CANAL A-5							

SURVEY SITES
TABLE 4

SITE ID	PROJECT NAME	LATITUDE	PROJ.PURP.	DAM HT	EXIST.CAP.	EXIST.ENRG	ANUL. COST	ENVIRONMENTAL
	PRIMARY CO. -NAME OF STREAM	LONGITUDE	STATUS	F C STOR.	INC. CAP.	INC.ENERGY	ENERGY COST	IMPACT CODE
DEP ACTV	OWNER	DR.AREA	AVE. Q	PWR. HD.	TOT. CAP.	TOT.ENERGY		
CODE INV	MAP REFERENCE	(D M.M)		(FT)	(KW)	(MWH)	(1000 $)	
GEOG. AREA		(D M.M)		(AC FT)	(KW)	(MWH)	($/MWH)	SOCIAL
		(SQ.MI)	(CFS)	(FT)	(KW)	(MWH)		IMPACT CODE
AK74PA0400	KUTH LAKE	56 59.0	H	210.0	0	0	2873.6	NNUUUUU
I 2	ARANGELL-PET DELT CREEK	132 45.0	IS	0	13000	63000	45.613	
SOUTHEAST	UNDEVELOPED	8	61.0	1447.5	13000	63000		UNNUUUUUU
	PETERSBURGO-3.							
AK74PA0401	SCENERY CREEK	57 4.9	H	10.0	0	0	2280.7	NNUUUUU
I 2	ARANGELL-PET SCENERY CREEK	132 41.9	IS	60000	15000	67000	34. 41	
SOUTHEAST	UNDEVELOPED	21	202.8	619.3	15000	67000		UNNUUUUUU
	SUMDUM A-2,A-3.							
AK74PA0408	TYEE CREEK	56 12.0	H	100.0	0	0	3678.2	NNUUUUU
I 2	ARANGELL-PET TYEE CREEK	131 33.0	IS	105000	30000	152940	27.668	
SOUTHEAST	UNDEVELOPED	14	163.0	1356.6	30000	152940		UNNUUUUUU
	PRADFIELD CANAL A-5.							
AK67PA0427	MRUNF	64 11.0	H	230.0	0	0	27731	NNUUUUU
I 2	YUKON-KOYUKU NENANA RIVER	149 15.0	IS	0	200000	566000	46.995	
YUKON	UNDEVELOPED	2450	4692.0	206.7	200000	566000		UYYUNNNNN
	FAIRHANKS A-5.							

TABLE 5

Regional Requirements versus Hydroelectric Potential

REGION	ESTIMATED REQUIREMENT		HYDROELECTRIC POTENTIAL		MARKETABLE HYDROELECTRIC POTENTIAL 1/	
	MW	GWh	MW	GWh	MW	GWh
Southcentral	2,541	10,560	2,728	12,004	2,587	11,184
Yukon	675	2,072	200	566	200	566
Southeast	349	1,131	549	2,486	152	668
Southwest	134	358	85	376	30	131
Remainder of State	301	879	0	0	0	0
	4,000	15,000	3,562	15,432	2,969	12,549

1/ Marketable Projects by Year 2000. Source: Alaska Power Administration

JAN 2 3 1981

UNIVERSITY OF ALASKA, FAIRBANKS
Fairbanks, Alaska 99701
School of Agriculture and Land Resources Management
Agricultural Experiment Station

October 30, 1980

Dear Questionnaire Recipient:

The University of Alaska is preparing a tentative recreation plan for the proposed Susitna River hydroelectric project. This plan is one phase of a preliminary investigation of various aspects of the Susitna proposal that is being carried out for the Alaska Power Authority. No decision has been reached on the feasibility of the power project but, if it proceeds, we intend to develop the best possible plan for public recreational use of the project's lands and waters. We need your suggestions during the investigative process if our plan is to properly reflect the interests and desires of all potential users of the area. Please will you assist by completing the enclosed questionnaire?

The goal of this questionnaire is to determine how you would like the project area to be developed for recreation. Each part of the form has its own instructions. Please begin by reviewing the introductory information and accompanying map. Then go on to carefully consider the merits of each of the 5 proposed approaches to recreation development and the possible access routes that have been suggested. Evaluate each of these possible approaches and routes according to your own interests remembering that none of the approaches are tied to a specific access route.

We think you will find the experience of answering this questionnaire to be quite interesting since it provides an opportunity for you to make a direct contribution to planning a potentially new state recreation area. If you wish to comment on any topic not covered by the form, write your suggestions on a separate sheet of paper and return them with the completed questionnaire in the enclosed stamped, self-addressed envelope. Your answers will be considered completely confidential and will only be used to produce totals and averages. Thank you for your cooperation.

Sincerely,

J. K. Feyhl

J. K. Feyhl
Project Coordinator

JKF:ks

PART I—BACKGROUND INFORMATION ON PROPOSED SUSITNA HYDROELECTRIC PROJECT

1. Location: The proposed Susitna River hydroelectric project is located on the upper Susitna River, approximately 125 air miles northeast of Anchorage and 150 miles southwest of Fairbanks as shown on the map below.

2. Dams: Two dams are being considered for the Susitna River; a 635-foot-high concrete dam in Devil Canyon and a 810-foot-high earth-filled dam between Tsusena and Deadman Creeks (hereinafter referred to as the Watana dam). Of the alternatives being considered, it is possible that this scheme or some modification of this scheme would be recommended. A preliminary plan of recreational use of the projects land and water will be based upon this scheme with the understanding that modification will occur depending upon the outcome of other phases of the Susitna study.

3. Reservoirs: If built, these dams would create two reservoirs, the Devils Canyon reservoir being approximately 30 miles in length and no more than ½ mile in width, covering an area of approximately 6500 acres to a maximum depth of 650 feet. The Watana reservoir being approximately 50 miles long and range from ½ mile to 5 miles wide, covering an area of approximately 55,000 acres to a maximum depth of 800 feet.

4. Present Land Use: The project area is presently used by trappers, white water enthusiasts and guided hunters. Scattered private cabins are present on most of the larger lakes in the upper Susitna basin. In addition, mining claims have been filed on many of the tributary streams within the drainage. Access to the area is presently limited largely to aircraft, although there is access by river from the east. Because of the hazardous nature of much of the Susitna River within the project area, it receives relatively light use by boats, canoes, and other watercraft.

PART II—POSSIBLE RECREATION DEVELOPMENT APPROACHES

Please review the five possible development approaches described on the pages that follow and indicate the acceptability of each approach independently. If you feel some modifications can improve the acceptability of an approach, include your suggestions in the space provided. The key given below explains the type of development represented by the various symbols used on each of the maps.

(1)  Visitor Center: services would probably include information, natural history and resources interpretive displays, tour schedules, gift shop/bookstore, restrooms, and a parking area all designed and operated to meet the needs of the majority of visitors. The most strategic location for a visitor center would be along the Parks Highway.

(2)  Information: interpretive displays and oral and written information concerning facilities and services available to the public in sheltered locations.

(3)  Picnic Area: would likely include picnic tables, a picnic shelter, a drinking water source, restrooms, and a parking area.

(4)  Campground (Primitive/Boat-in): these sites would be relatively small and include 5-10 campsites spread over an area of 2 to 3 acres. Facilities available would probably be: picnic tables, pit toilets, bear-proof food caches, and boat tie-ups where necessary.

(5)  Campground (Developed): improved campsites consisting of parking spurs for vehicles, trailers and motor homes, picnic tables, fireplaces, and complete water and sanitary facilities.

(6)  Campground (Group): organizational campground that could be either developed or primitive depending on location. Developed group facilities would include tent sites, tables, fireplaces, campfire circle, parking, restrooms, water supply and cooking shelters. Minimal facilities would be available at the primitive, backcountry group campgrounds.

(7)  Boat Ramp: a concrete boat ramp providing accesss to a reservoir; including parking for vehicles and boat trailers.

(8)  Docking/Marina: simple docking facilities providing mooring and docking space. A developed marina would also offer parking and docking space for boats and storage of vehicles and boat trailers, on-shore restrooms, water and electric services, boat sanitary dump station, and boat fuel, as well as rentals and supplies. Developed marinas would probably be constructed only at major developments near the damsites.

(9)  Store: groceries, dry goods, and souvenirs.

(10)  Service Station: full service for all types of recreation area users' vehicles.

(11)  Lodging: complete overnight accommodations.

(12)  Food Service: restaurants and other food outlets that may or may not be associated with lodging facilities.

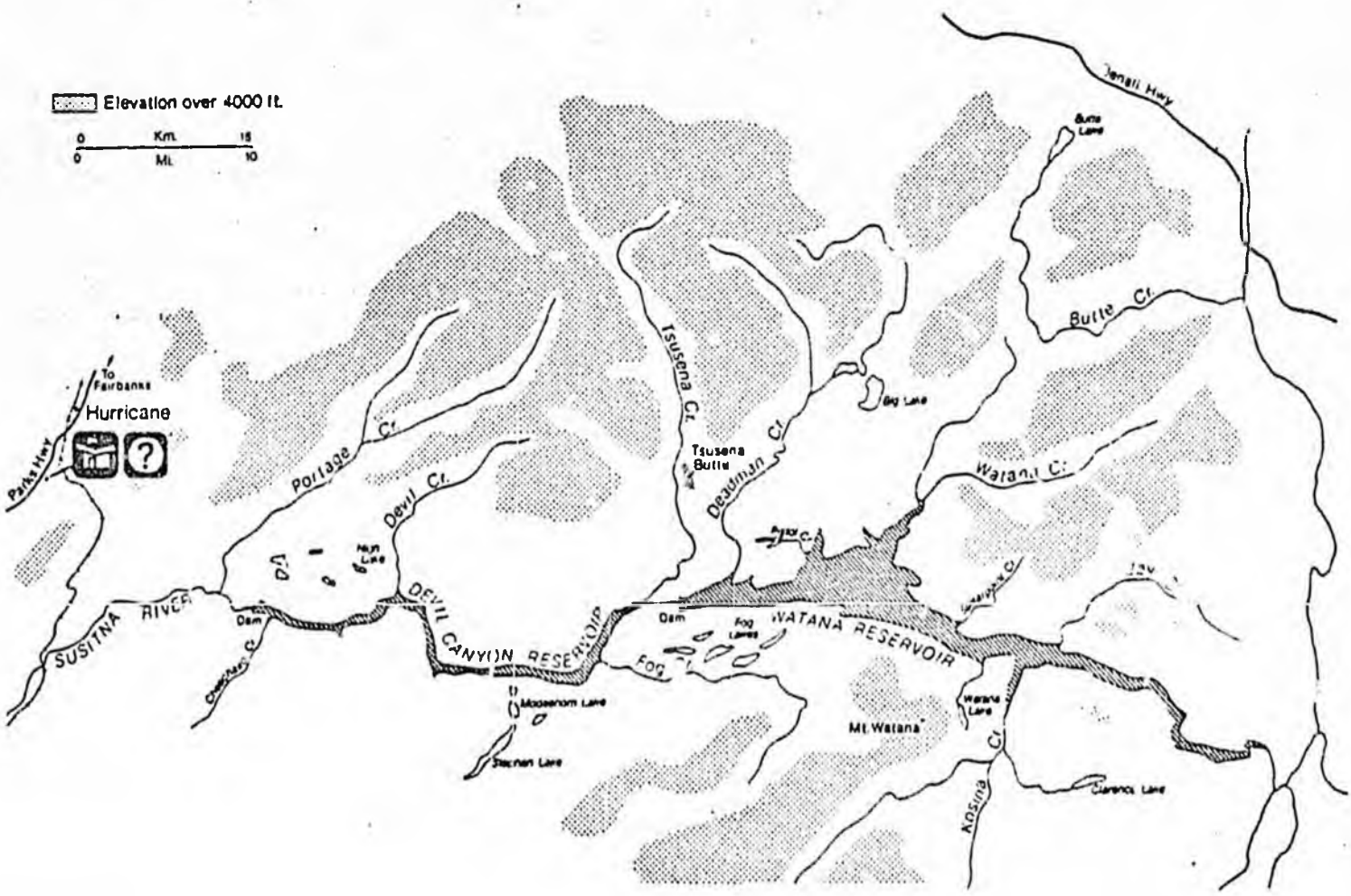
(13)  Float Plane Access: suitable access, shelter, mooring and aviation fuel supplies provided at areas used heavily by aircraft.

(14)  Guided Boat Tour: would probably be tied in with a bus tour originating at a visitor center or overnight accommodations complex. It might include a one-day tour of the Devil Canyon Reservoir.

(15)  Scenic Trail: short, (one or two mile) day-use trails to scenic areas or interesting natural features.

APPROACH "A"—A MINIMALLY DEVELOPED AND MANAGED WILDERNESS

This approach could be used in the event that public access by road to the Susitna reservoir areas is restricted or not permitted at all. In this case, development will probably be limited to a visitor information center on the Parks Highway. Access by float plane would likely be extended to include the reservoirs. Access by canoe, kayak, and riverboat via the upper Susitna, Maclaren, and Tyone rivers would continue. Land use within the project area would probably be much the same as at present with management limited to fish and game management and the regulation of mining activities.



QUESTIONS:

1. Do you find this plan to be (check only one).
   - ☐ Not acceptable?
   - ☐ Acceptable?
   - ☐ Acceptable with modifications?

2. If any modifications (additions or deletions) are suggested, mark the location with an "X" and briefly describe the proposed modifications below:

   Deletions _____

   _____

   Additions _____

   _____

OFFICE USE ONLY

[ ] 1–4

[ ] 5–10

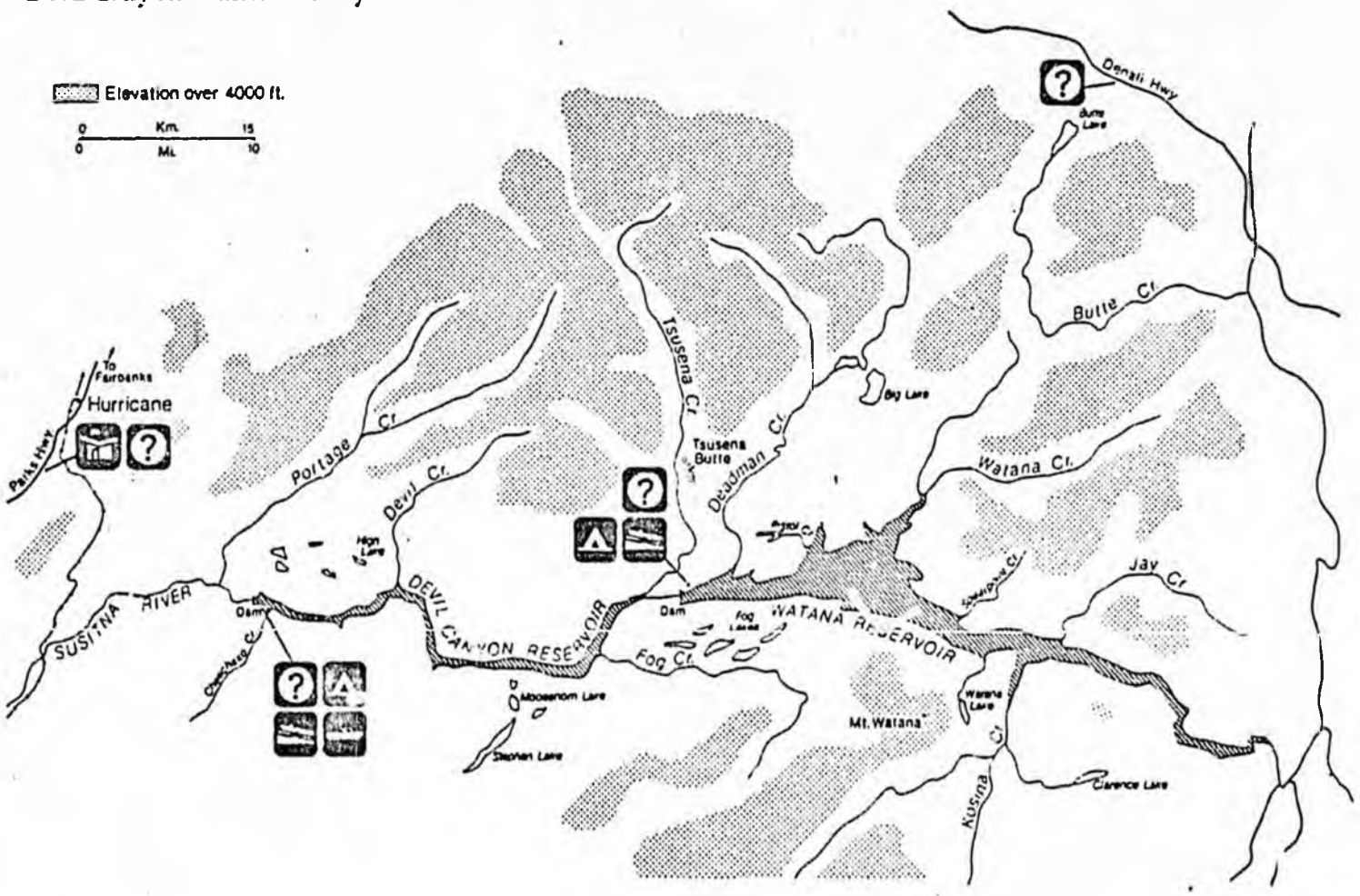
[ ] 11

[ ] 12, 13

[ ] 14, 15

APPROACH "B"—MANAGED WILDERNESS WITH LIMITED ACCESS

In the event that road access to both reservoirs is possible, the area could be managed as a wilderness recreation area, with development limited to minimal interpretive services, primitive campgrounds, and simple boat ramps at both damsites. These ramps would facilitate access by boat to the reservoir shorelines and adjacent areas for camping, hunting, fishing, and other backcountry activities. As in Approach "A", a visitor center would be built on the Parks Highway. Information would be provided on the Denali Highway should access be available at this location (see access map). A tour boat service would be offered at the Devil Canyon damsite for day tours of the reservoir.



QUESTIONS:

1. Do you find this plan to be (check only one).
   - ☐ Not acceptable?
   - ☐ Acceptable?
   - ☐ Acceptable with modifications?

2. If any modifications (additions or deletions) are suggested, mark the location with an "X" and briefly describe the proposed modifications below:

   Deletions _____

   _____

   Additions _____ _____

   _____

OFFICE USE ONLY

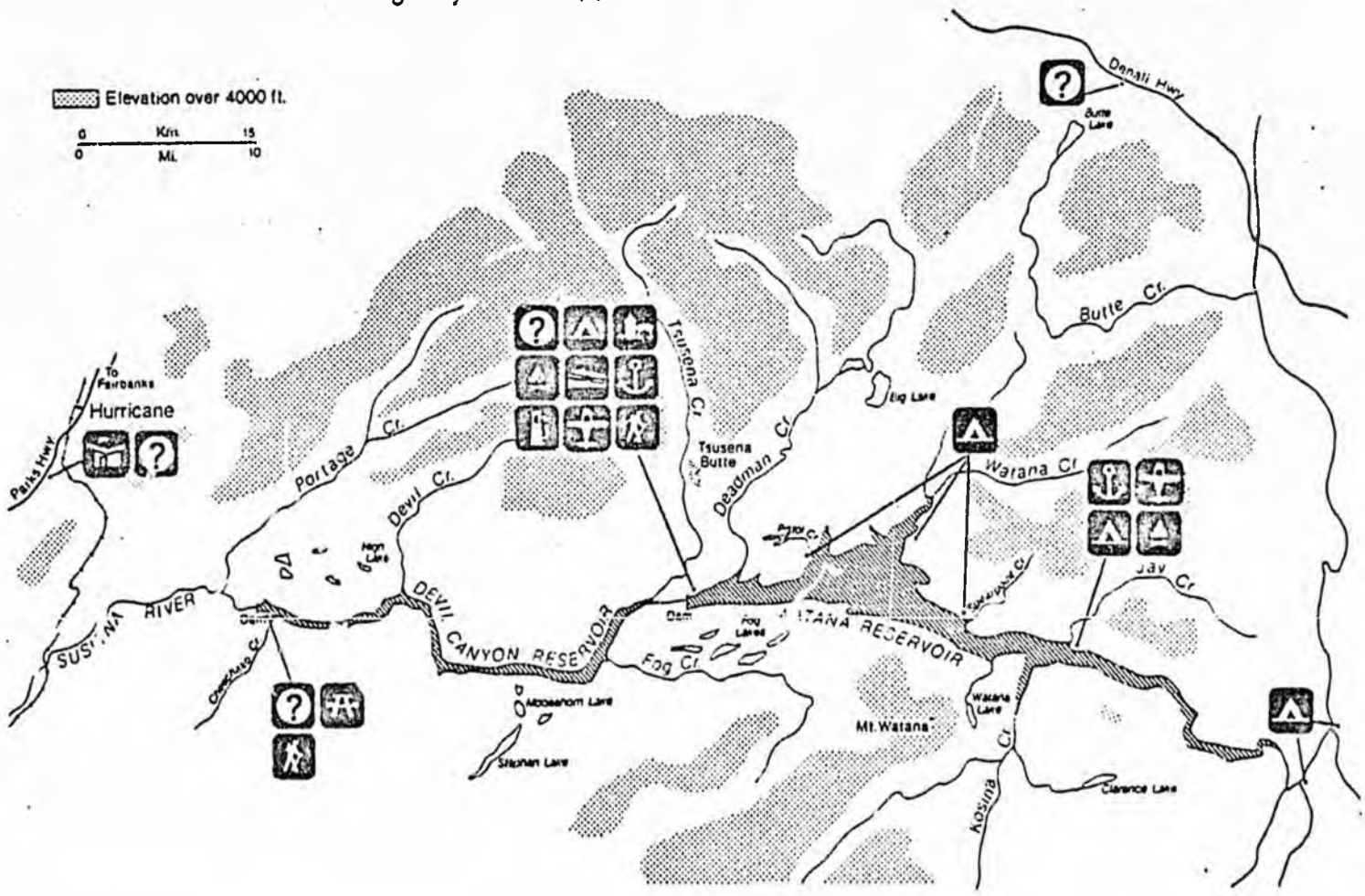
[ ] 16

[ ] 17, 18

[ ] 19, 20

APPROACH "C"—WATANA RESERVOIR DEVELOPMENT

One possible approach to more extensive recreational development is to offer highly developed facilities at the Watana damsite and only minimal interpretive services at the Devil Canyon damsite. In addition to the services offered at both reservoirs in Approach "B", there would be greater development at the Watana damsite to accommodate increased visitor use. Simple backcountry campsites would be provided at selected locations around the Watana reservoir, with additional improvements being made at the mouth of Jay Creek. More intensive resource management would be necessary around the Watana reservoir but the remaining project area would still be managed as wilderness. As in Approaches "A" and "B", visitor information would be available at highway entrance(s).



QUESTIONS:

1. Do you find this plan to be (check only one).
   - ☐ Not acceptable?
   - ☐ Acceptable?
   - ☐ Acceptable with modifications?

2. If any modifications (additions or deletions) are suggested, mark the location with an "X" and briefly describe the proposed modifications below:

   Deletions _____

   _____

   Additions _____

   _____

OFFICE USE ONLY

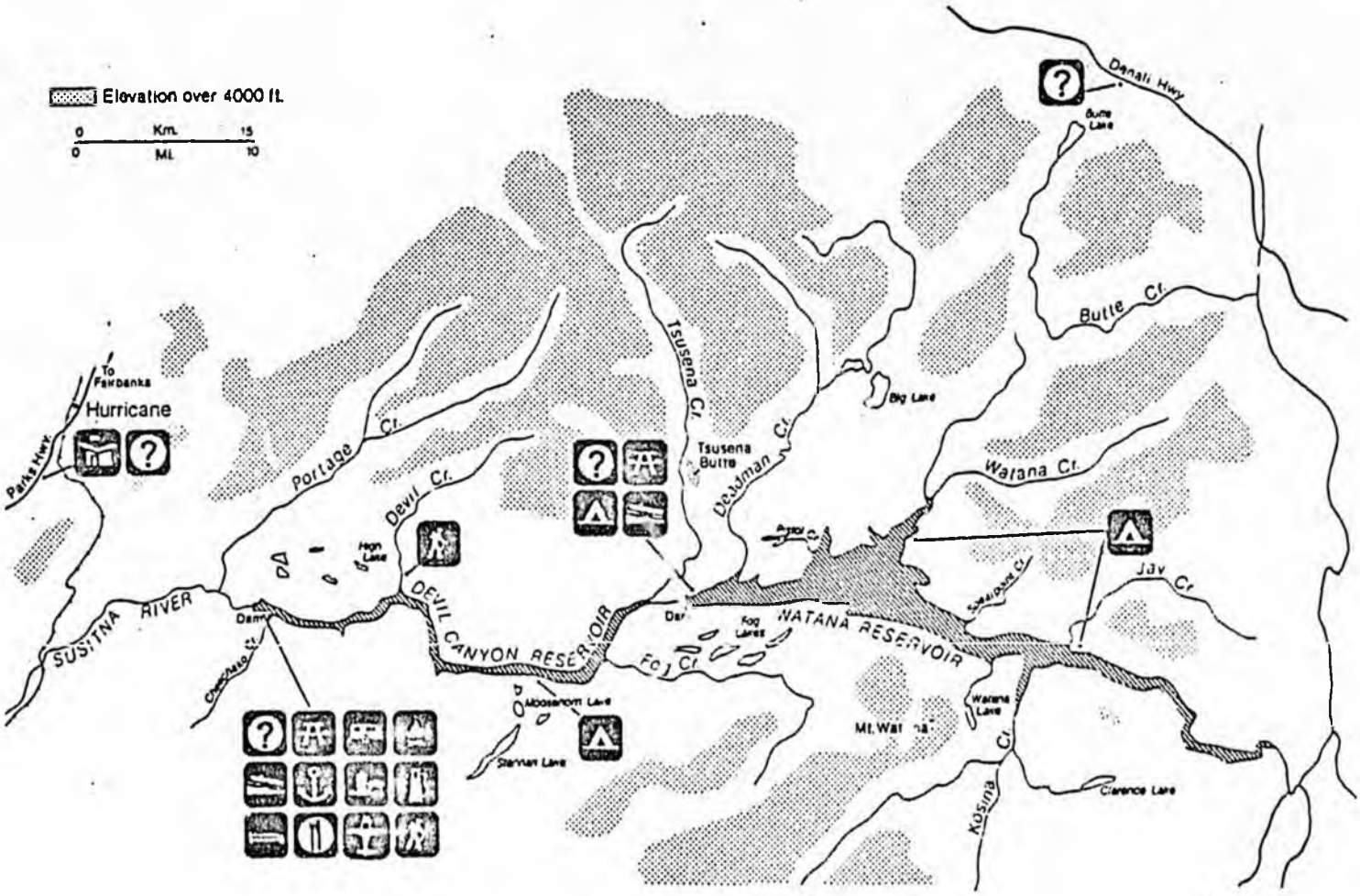
[ ] 21

[ ] 22, 23

[ ] 24, 25

APPROACH "D"—DEVIL CANYON RESERVOIR DEVELOPMENT

In this approach highly developed facilities would be offered at the Devil Canyon reservoir and damsite and only minimal facilities at the Watana damsite. The Devil Canyon area would be developed and managed intensively to provide a diversity of recreational opportunities, while the Watana reservoir area could be developed and managed in a manner that would maintain its wilderness character.



QUESTIONS:

1. Do you find this plan to be (check only one).
   - ☐ Not acceptable?
   - ☐ Acceptable?
   - ☐ Acceptable with modifications?

2. If any modifications (additions or deletions) are suggested, mark the location with an "X" and briefly describe the proposed modifications below:

   Deletions _____

   _____

   Additions _____

   _____

OFFICE USE ONLY

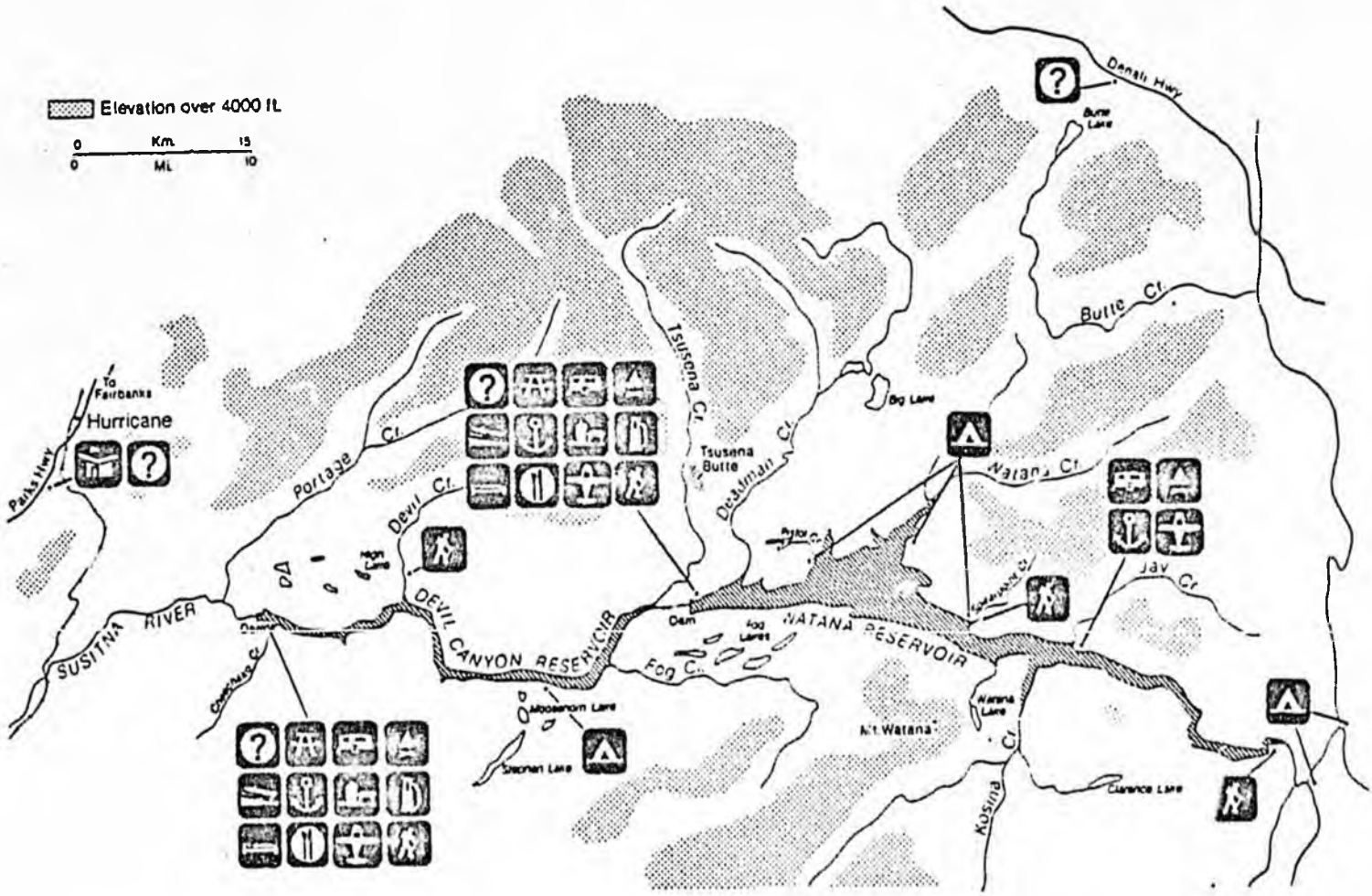
[ ] 26

[ ] 27, 28

[ ] 29, 30

APPROACH "E"—HIGHLY DEVELOPED AND MANAGED THROUGHOUT

This approach involves a high level of recreational development and offers a wide variety of recreation activities around both reservoirs. Complete visitor facilities would be located at the damsites, with additional improvements made at the Jay Creek site, and backcountry boat-in campsites built at 5 locations. Intensive resource management would be necessary throughout much of the recreation area to reduce conflicts between uses and to maintain the quality of the environment.



QUESTIONS:

1. Do you find this plan to be (check only one).
   - ☐ Not acceptable?
   - ☐ Acceptable?
   - ☐ Acceptable with modifications?

2. If any modifications (additions or deletions) are suggested, mark the location with an "X" and briefly describe the proposed modifications below:

   Deletions _____

   _____

   Additions _____

   _____

OFFICE USE ONLY

[ ] 31

[ ] 32, 33

[ ] 34, 35

OFFICE USE ONLY

PART III–WHICH APPROACH, KINDS OF ACTIVITY, AND LEVEL OF SERVICE WOULD BE BEST FOR YOU?

Now that you have had an opportunity to read the background information and review 5 different approaches to recreation development at the Susitna River project, please think about which approach would best serve your needs.

1. Rank the five approaches in order of each one's value to you personally. (Number 1 being of greatest value and Number 5 of least value).

RANKING

APPROACH "A"–A MINIMALLY DEVELOPED AND MANAGED WILDERNESS ..... _____
APPROACH "B"–MANAGED WILDERNESS WITH LIMITED ACCESS ..... _____
APPROACH "C"–WATANA RESERVOIR DEVELOPMENT ..... _____
APPROACH "D"–DEVIL CANYON RESERVOIR DEVELOPMENT ..... _____
APPROACH "E"–HIGHLY DEVELOPED AND MANAGED THROUGHOUT ..... _____

2. Now, please list the main kinds of recreational activities in which you would take part in at the Susitna project if it were developed according to the approach which you ranked first in Question 1 above. Then for each activity you checked, please give the number of years of experience for that activity.

Recreational Activity	Years of Experience		Recreational Activity	Years of Experience
☐ All terrain vehicle use			☐ Motorcycling	
☐ Backpacking			☐ Picking wild foods	
☐ Boating–motorized			☐ Picnicking	
☐ Boating -nonmotorized			☐ Photography	
☐ Camping			☐ Rock hounding	
☐ Dog-sledding			☐ Sightseeing	
☐ Fishing			☐ Skiing	
☐ Flying			☐ Snow-mobiling	
☐ Four-wheel driving			☐ Snow-shoeing	
☐ Hiking			☐ Other activities	
☐ Horseback riding				
☐ Hunting				

[ ] 36
[ ] 37
[ ] 38
[ ] 39
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[ ] 41 [ ] 42
[ ] 43 [ ] 44
[ ] 45 [ ] 46
[ ] 47 [ ] 48
[ ] 49 [ ] 50
[ ] 51 [ ] 52
[ ] 53 [ ] 54
[ ] 55 [ ] 56
[ ] 57 [ ] 58
[ ] 59 [ ] 60
[ ] 61 [ ] 62
[ ] 63 [ ] 64
[ ] 65 [ ] 66
[ ] 67 [ ] 68
[ ] 69 [ ] 70
[ ] 71 [ ] 72
[ ] 73 [ ] 74
[ ] 75 [ ] 76
[ ] 77 [ ] 78
[ ] 79 [ ] 80
[ ] 81 [ ] 82
[ ] 83 [ ] 84

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3. Please indicate the level of services you would like to be offered at the reservoirs. (Check only one). [ ] 85

- ☐ Minimal (only an access road to the reservoir is adequate).
- ☐ Some simple boat launching ramps, parking areas, and campgrounds provided but with minimum supervision by operating personnel.
- ☐ Small marina, visitor center, and improved campgrounds for RV's. More personnel provided for supervision of operations, maintenance, information services, and on-water safety.
- ☐ Large marina, boat storage, restaurant facility, motels, and gift shops provided plus the substantial numbers of personnel needed to staff such facilities and assist visitors.

4. Now, please indicate the approximate amount of money (if any) you would be prepared to pay each day for the level of service checked in Question 3 above for each of the amenities listed. Check $0 if you are not willing to pay for a service or N/A (not appropriate) if you don't feel the service is appropriate for the level of development that you prefer.

Primitive Campsite (pit toilets only) [ ] 86
(Check only one).

☐ $0	☐ $6.00-$10.00
☐ $1.00-$2.00	☐ more than $10.00
☐ $3.00-$5.00	☐ N/A

Developed Campsite (water and sanitary facilities) [ ] 87
(Check only one).

☐ $0	☐ $6.00-$10.00
☐ $1.00-$2.00	☐ more than $10.00
☐ $3.00-$5.00	☐ N/A

Simple Boat Launching Ramp [ ] 88
(Check only one).

☐ $0	☐ $6.00-$10.00
☐ $1.00-$2.00	☐ more than $10.00
☐ $3.00-$5.00	☐ N/A

Small Marina (with minimal services) [ ] 89
(Check only one).

☐ $0	☐ $6.00-$10.00
☐ $1.00-$2.00	☐ more than $10.00
☐ $3.00-$5.00	☐ N/A

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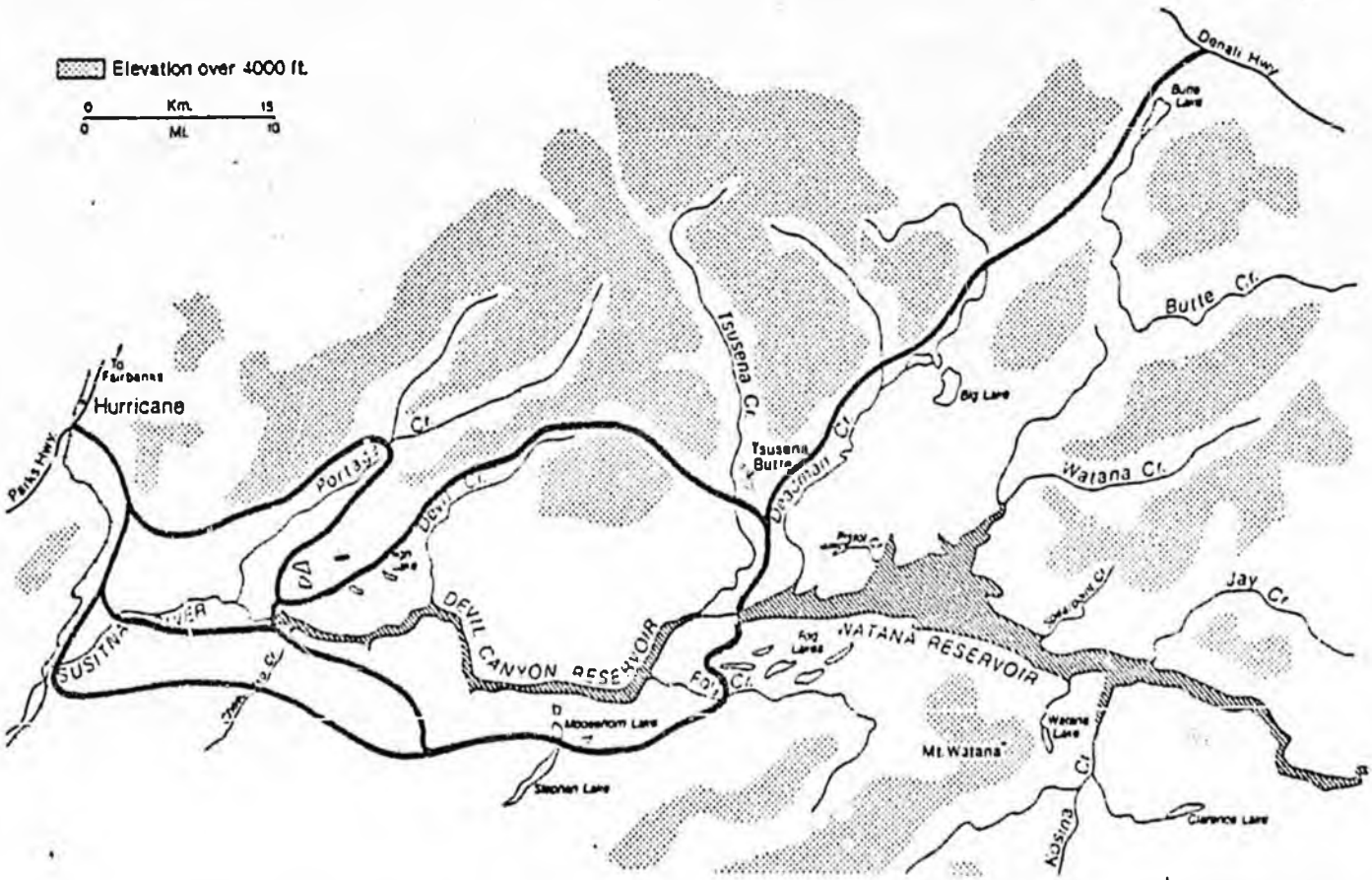
PART IV–GENERAL DESIRABILITY OF FACILITIES

Now, not thinking in terms of any particular approach to recreational development at the Susitna project, please check the desirability of each of the following facilities.

Facility	Very Desirable	Desirable	Not Desirable	Undecided	
Paved, high-speed roads					[ ] 90
Paved, lower speed roads					[ ] 91
Gravel roads					[ ] 92
Bicycle trails					[ ] 93
Nature trails					[ ] 94
Short hiking trails (a mile or two)					[ ] 95
Long distance hiking trails (several miles)					[ ] 96
Off-road vehicle trails					[ ] 97
Recreational vehicle campgrounds					[ ] 98
Less developed campgrounds accessible by auto					[ ] 99
Organizational/group campgrounds					[ ] 100
Boat-in campgrounds					[ ] 101
Simple boat launching ramps					[ ] 102
Full service marinas					[ ] 103
Canoe trails					[ ] 104
Float plane moorings					[ ] 105
Auto-oriented picnic grounds					[ ] 106
Group picnic shelters					[ ] 107
Restaurant/dining facilities					[ ] 108
Motel accommodations					[ ] 109
Vistior centers					[ ] 110
Scenic overlooks					[ ] 111
Amphitheater for nature talks					[ ] 112
Boat tours					[ ] 113

PART V—PROPOSED ACCESS ROUTES

Several routes as shown in the map below have been proposed for access to the Susitna reservoirs. Final selection of access routes will be made on the basis of environmental impact studies, cost analysis, public input and level of site development. The degree to which recreational facilities might be developed may also influence route selection. A final access plan would probably include only a single route to each of the damsites but it is possible that separate routes, one from the Parks Highway and the other from the Denali Highway, might be included. Please review this map and answer the succeeding question.



If road access is developed to the Devil Canyon and Watana damsites, where should the routes begin to each of the damsites?

a. Devils Canyon damsite:
- ☐ Denali Highway
- ☐ Parks Highway
- ☐ No preference
- ☐ No public access by road

b. Watana damsite:
- ☐ Denali Highway
- ☐ Parks Highway
- ☐ No preference
- ☐ No public access by road

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PART VI—BACKGROUND INFORMATION

OFFICE USE ONLY [ ] 115

Please check the appropriate response for each of the following questions.

1. In which region of the state do you live?
   - ☐ Anchorage area
   - ☐ Fairbanks area
   - ☐ Railbelt (between Anchorage and Fairbanks)

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2. How would you classify the place where you live?
   - ☐ Urban
   - ☐ Rural
   - ☐ Remote rural
   - ☐ Other (Explain) _____

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[ ] 118

COMMENTS

IN THE SPACE BELOW, PLEASE WRITE ANY COMMENTS OR SUGGESTIONS YOU MAY HAVE CONCERNING THIS QUESTIONNAIRE (If you need more space, please attach another sheet of paper).

THANK YOU FOR YOUR ASSISTANCE

If you accidentally misplace the return envelope provided, please mail to:

Susitna Recreation Project
School of Agriculture and Land Resources Management
University of Alaska
Fairbanks, Alaska 99701

Alaska State Legislature

Senate

JUNEAU, ALASKA

PRELIMINARY BILL SUMMARY

BILL NUMBER: SB 8

SPONSOR(S): Kerttula, Fahrenkamp, Kelly and Dankworth

OTHER COMMITTEE REFERRALS: Finance

TITLE: "An Act making a special appropriation to the Alaska Power Authority for construction of the Susitna River Hydroelectric project;

and providing for an effective date"

FISCAL IMPACT (if known): the bill calls for an appropriation of $48,000,000.

BRIEF SUMMARY OR HIGHLIGHTS: The appropriation is from the general fund for the construction of the first phase of the Susitna project.

MINUTES
SENATE FINANCE COMMITTEE
April 28, 1980
8:35 a.m.

ATTENDANCE

Vice Chairman Hohman called the meeting to order at 8:35 a.m. All committee members were present with the exception of Chairman Sackett. Also in attendance were Executive Director of Alaska Power Authority Mr. Eric Yould; General Manager of Anchorage Municipal Light and Power Mr. Tom Stahr; Representative McKinnon; Administrative Assistant to Senator Ziegler Guy Van Doren; Administrative Assistant to Senator Hohman Bob Kocsis; Senator Ferguson; Commissioner of Environmental Conservation Ernst Mueller; Environmental Conservation Solid Waste Management Director Dick Williams; Mr. George Sildes representing Earth Resources Company; Senator Stimson; Administrative Assistant to Senate Finance Garrey Peska; and representatives from the press Joe LaRocca.

SB 294

Vice Chairman Hohman advised that the first order of business would be consideration of SENATE BILL NO. 294 (An Act relating to the Susitna River hydroelectric project; and providing for an effective date). Senator Kerttula then requested that Mr. Eric Yould, Executive Director of the Alaska Power Authority present testimony on the bill.

Mr. Yould stated that he would suggest four amendments to the bill. They were:

1. Page 1, line 12: Delete the word "two"
2. Page 1, line 25: Change "January 30" to "March 30"
3. Page 2, line 17: Change "shall" to "may"
   Page 3, line 23: Change "shall" to "may"
4. Page 3, line 24: After "fund" insert "or other appropriate means approved by the legislature."

General discussion of the amendments and the bill followed. Senator Sumner pointed to the letters in the file from Cook Inlet. Senator Kerttula stated that the letters should be converted into letters of intent. Senator Sumner moved that the staff write the letters into letters of intent. Vice Chairman noted no objections, and so ordered the motion.

SB 294
LETTER OF INTENT

Senator Kerttula moved that Mr. Yould's fourth amendment be amended to read: after "fund" insert "or other funding sources as approved by the legislature." There being no objection, it was so ordered. Senator Kerttula moved amendments 1, 2 and 3 (above). No objection, so ordered.

SB 294 am

Senator Kerttula moved and asked unanimous consent that the bill be passed from committee with a "do pass" recommendation. There being no objection, it was so ordered. All members signed the committee report "do pass", with the exception of Chairman Sackett, who was absent.

SB 294 am
MOTION

The next order of business was consideration of SENATE BILL NO. 323 (An Act making a special appropriation to Department of Health and Social Services for homemaker health aide services). Vice-Chairman Hohman requested that Senator Ray speak on the bill. Senator Ray stated that the monetary request should be $1,046.0 rather than $2,500.0. The committee discussed the possibility of putting the legislation in the appropriation bill. It was decided that the bill would be held over to explore that possibility. Senator Sumner moved that the bill be held over. There being no objection, it was so ordered.

SB 323

SB 323
RET'D TO FIL

SENATE BILL NO. 356 (An Act relating to rural residential loans.) was next considered. Vice-Chairman Hohman asked that testimony be given. Mr. Peska stated that Chairman Sackett had introduced the bill last year as some communities were excluded from getting loans from the Housing Financing Corporation. The bill was intended to correct the problem.

SB 356

Discussion followed concerning the definition of "community" and "rural". Senator Ray moved that the bill be held over until more firm definitions were made. .There being no objection, it was so ordered.

SB 356
RET'D TO FIL

The committee then took up consideration of SENATE BILL NO. 418 (An Act relating to electric or telephone cooperative associations), which had been assigned to Senator Kerttula. Senator Kerttula stated that last year legislation had been adopted having to do with easements; however, some problems were encountered. Hence, the introduction of this bill.

SB 418

Senator Ray moved the following amendment: Page 1, line 11: Delete "lines" and insert "line easements". There being no objection, it was so ordered.

SB 418 am

Senator Sumner moved and asked unanimous consent that the bill be moved from committee with a "do pass" recommendation. There being no objection, it was so ordered. All members signed the committee report "do pass", with the exception of Chairman Sackett, who was absent.

MOTION
SB 418 am

The next order of business was consideration of SENATE BILL NO. 575 (An Act authorizing the issuance and sale of an additional $15,987,000 in revenue bonds for international airports).

SB 575

BILL SUMNER
Alaska State Senator
DISTRICT T-E

DURING SESSION:
POUCH V
JUNEAU, ALASKA 99811
(907) 465-3791

OUT OF SESSION:
1018 WEST 6TH AVENUE
SUITE 418
ANCHORAGE, ALASKA 99501
(907) 272-4841

COMMITTEES:
RESOURCES
CHAIRMAN
FINANCE
RULES
COMMITTEE ON COMMITTEES
JOINT INTERIM COMMITTEE
ON GAS PIPELINE FINANCING

April 22, 1980

Garrey:

Attached is a letter from Roy Huhndorf proposing an amendment to SB 294, the Susitna Hydroelectric bill. I responded to him and informed him the bill is now in Finance and that I had forwarded the letter to Senator Sackett....

Thanks.

Cheryl.

Cheryl Frasca
Bill Sumner's Office

CIRI COOK INLET REGION INC.

March 31, 1980

Senator Bill Sumner
Alaska State Senate
Pouch V
Juneau, AK 99811

Re: Senate Bill 294

Dear Senator Sumner:

Thank you for affording me the opportunity to comment on Senate Bill No. 294, "An Act relating to the Susitna River Hydroelectric project; and providing for an effective date." As you may be aware, Cook Inlet Region, Inc. and certain Cook Inlet Region Village Corporations are participating in the feasibility analysis for the Susitna Hydropower project and have executed an agreement with the Alaska Power Authority authorizing the Authority to enter upon Cook Inlet Region and Village lands to perform activities necessary for the study.

Included in our agreement with the Alaska Power Authority is a clause requiring the Authority and its agents to employ Alaska Natives enrolled in Cook Inlet Region, Inc. or the Cook Inlet Village Corporations and to afford them a preference on award of contracts, commitments or other activities where authorized by law in accordance with the Alaska Plan to Provide Equal Employment Opportunity in the Construction Industry, approved by the U. S. Department of Labor on March 31, 1972. (See attachment.) I recommend that Senate Bill No. 294 be revised to include a section providing that:

Letter of intent

It is the intent of the legislature that the ~~policy of the~~ State of Alaska ~~to~~ implement meaningful training and employment opportunities for minorities, and in particular, Alaska Natives, during the construction and operation of the Susitna River Hydroelectric Project, as authorized by law. Accordingly, the Alaska Power Authority

shall afford minorities, including, in particular, Alaska Natives, and Alaska Native business entities, a preference in the award of contracts and sub-contracts in connection with the administration of those activities authorized herein.

I would appreciate your continuing to keep me posted on the status of Senate Bill No. 294. Thank you for your attention to this matter.

Sincerely yours,

COOK INLET REGION, INC.

Roy M. Huhndorf
President

RMH:JEB:cae
Attachment

SB 294

STATE OF ALASKA
THE LEGISLATURE

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM March 8, 1980

SUBJECT: Sectional analysis of SB 294
(Work Order Number 8296)

TO: Senator Jalmar M. Kerttula

FROM: Kenneth E. Vassar KEV:jm
Legislative Counsel

You have requested an analysis of the provisions of Senate Bill 294 (relating to the Susitna River hydroelectric project). My analysis follows.

The bill consists of additions to the sections of AS 44.56, which is the chapter creating the Alaska Power Authority. The new sections would go into a new article in that chapter which would be entitled "Article 6. Susitna River Hydroelectric Project."

The first section of the new article, sec. 44.56.300, describes the Susitna River hydroelectric project as including two dams and related reservoirs as well as other items which are more particularly described in the Alaska District United States Army Corps of Engineers publication entitled "Plan of Study for Susitna Hydropower Feasibility Analysis" and dated June, 1978.

The next section, 44.56.310, states the purpose of the project, which is to generate, transmit and distribute electric power to Homer, Seward and Fairbanks in a manner which will minimize power costs, minimize adverse social and environmental impacts, enhance environmental values to the extent possible, and safeguard both life and property.

Section 44.56.320 requires a preliminary report to be prepared and submitted to the governor and the legislature no later than January 30, 1981. The report will include proposed

phases for the construction of the project, the expected completion date of each phase of the project, the expected cost of each phase of the project, the necessary federal and state permits to be obtained, the expected dates for obtaining the permits, and any other information the Alaska Power Authority considers appropriate.

This section also prohibits the authority from entering into any contracts with regard to the project until the legislature approves, by joint resolution, the preliminary report. The preliminary report is in addition to any other reports the authority is required to provide under AS 44.56.180 - 44.56.-224.

Section 44.56.330 requires the authority to enter into a contract to begin construction on the project within one year after its preliminary report is approved by the legislature.

Section 44.56.340 requires annual reports which will bring the legislature and the governor up to date on the current status of the project and will explain any deviations between the expected dates and costs described in the preliminary report and the actual dates and costs. The report will be submitted to the governor and the legislature no later than January 30.

The last section, 44.56.350, provides that the project is financed by legislative appropriations.

Finally, the Act has an immediate effective date.

KEV:ljb

Alaska State Legislature

POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

Senate

Committee on Resources

MEMORANDUM

TO: SENATE RESOURCES COMMITTEE MEMBERS

FROM: JIM PALMER
SENATE RESOURCES COMMITTEE STAFF

RE: MATERIALS ON SB 8, SB 25, SB 26. (SUSITNA POWER PROJECT)

DATE: FEBRUARY 3, 1981

Attached is background information and material on SB 8, SB 25, SB 26, and the Susitna project.

Materials which have been included are:

(1) a memorandum by the Legislative Affairs Agency analyzing the sponsor substitute for SB 25.

(2) a questionnaire from the University of Alaska which contains some overview information on the Susitna project.

(3) a draft report on this project prepared by Arlon Tussing to the legislature. The report is dated April 1980.

(4) a paper prepared by the Corps of Engineers entitled the "National Hydroelectric Study, Alaska Region."

(5) copies of legislation and background material on SB 294. SB 294 was a bill introduced and passed into law during the last session of the legislature. Since it dealt with the Susitna project, the staff felt that this information might be of assistance to the committee members.

Abstract of
SENATE RESOURCES COMMITTEE
HEARING
on

SENATE BILL 294
"An Act relating to the Susitna River hydroelectric project"

Friday, February 16, 1980

Court House
303 K Street, Room 422
10 a.m.

The hearing was called to order by Senator Jay Kerttula. Also present on the panel were Senators Pat Rodey, Mike Colletta and Ed Dankworth.

The following individuals offered testimony on Senate Bill 294:

EARL MILLER

Benefits of the Susitna project are conducive to attracting industry and an abundance of energy will be a good economic base. Believes it is an excellent project and supports it 100%, along with SB 385 (special appropriation to the Alaska Power Authority for a transmission line).

DR. WILLIAM WOOD, Mayor, City of Fairbanks

Urged prompt action on SB 294. Also believes that the interest established by SB 385 is one of the top pieces of legislation that will bring the greatest benefit to Alaskans. SUGGESTION: also include in the purpose of the project, other communities as well as the "entire railbelt area"; would like the passage of this piece of legislation to be a binding commitment that when the legislature adopts the Phase 1 construction plan, it mandates issuance of all permits on a timely basis.

CHUCK SMITH, Matanuska-Susitna Borough

Urged action now on the project and requested prompt funding by the state.

VINCE O'REILLY, Mayor, City of Kenai

Urged prompt, full bringing-on-stream of the project and that the state take advantage of inflation by working out a financing plan. SUGGESTION: page 3, lines 22 - 24 states that financing shall be by appropriations from the general fund. He suggests that "or by any other appropriate source, either private or governmental" be added. (Written comments also included in record).

DOROTHY JONES, Assembly Member, Matanuska-Susitna Borough

Urged prompt passage of both SB 294 and SB 385.

LEE WAREHAM, Co-Chairman, Susitna Power Now

Urged that both projects be undertaken as quickly as possible. It is important to note that these projects may not decrease energy costs, but they will stabilize energy costs into the next century. Potential of hydroelectic power is the replacement of 15,200,000 barrels per year.

STEVE LEVI, Resource Development Council

Urged that action be taken on the two bills now.

MIKE GRAVEL, United States Senator

It is critical that the legislature go ahead with the initial funding of the project because if it doesn't, nothing will happen. Such action will be indicative of the state's firm, long-term committment to the project. At the federal level, it looks like efforts will be successful in getting tax exempt bond status for hydroelectric projects which will mean approximately $400 million the first 10 years. SUGGESTION: establishment of a state revolving fund that the Alaska Power Authority could borrow from for hydroelectric projects.

JOHN CARLSON, Mayor, North Star Borough

Urged prompt action not only because of the inflation free benefits for future energy, but also because of the employment opportunities the project will create at a time when jobs are so badly needed. (Written comments also submitted).

ART KENNEDY

Encouraged action on the Susitna project as well as exploration and development of other hydroelectic projects in the state.

IKE WALDROP, Business Manager, I.B.E.W.

Urged Susitna as a replacement for the state's reliance on fossil fuels.

MALCOLM CHLEK, General Manager, Matanuska Electric Association

Stressed that it is important that efforts are made to acquire competitive financing with a sensitivity to front-end costs so that the cost to consumers doesn't

skyrocket.

WILLARD JOHNSON, Mayor Pro-Tempore, City of Palmer

Presented a resolution by the Palmer City Council urging prompt implementation of the project. (Written comments were also submitted).

ERIC YOULD, Director, Alaska Power Authority

Previously the state had considered Susitna a federal project and four months ago the state decided that it would be a private sector project by the state. Project studies are now underway which are necessary in order to be licensed by FERC. An engineering firm has been contracted with for the field studies. That firm has sub-contracted with Alaskan firms and as a result, Alaskans are already benefiting by being put to work on the project's studies.

JEFF WELTY, Fairbanks Environmental Center

Commented that there are other sources of energy to develop other than hydroelectric that would minimize impact on life-styles. Concerned that passage of the bill gives a go-ahead on the project, even though the feasability studies have not been completed. Does not believe there is any need for the intertie in the next 10 years and that it is a back door approach to getting the Susitna project underway. Urged, instead, funding of Golden Valley Electric Association's use of waste heat from pump stations as well as studying other possible hydroelectric sites.

RON LARSEN, Mayor, Matanuska-Susitna Borough

Urged prompt action in getting the project underway.

BUD DYE, Resource Development Council

Susitna is supported by over 80% of the Resource Development Council's membership and should be a top priority for action. Also urged support of the Bradley Lake Project. The safest investment the state can make is to take the money made from oil and put it into a project such as hyrd-oelectric power.

MIKE MIKKEL, Council Member, City of Fairbanks

Believes the project can be completed without harm to the environment -- just as we are seeing with the Trans Alaska Pipeline.

GEORGE SULLIVAN, Mayor, Municipality of Anchorage

Urged prompt action on both the project and its funding. Because the Fuel Use Act of 1978 disallows the burning of gas in future facilities, Anchorage's low cost electricity will not be forever and asks that Anchorage be added to those cities benefiting from the project.

TOM STAHR, General Manager, Anchorage Municipal Light and Power

An early decision on the project's go-ahead is essential -- because the Fuel Use Act of 1978 disallows burning gas, a utility can get permission from the federal government to use gas on a temporary basis -- if they can PLAN on Susitna.

DAVID MC DONALD, Business-Manager, Laborers Union

The state must recognize that large amounts of money which our fossil fuels are bringing should be diverted to developing hydroelectric power. An excess of power will result in an economic attractiveness for new businesses, resulting in jobs. While the project may not now have any economic savings to the state, it is important for the legislature to address its other responsiblities.

DAVE HUTCHENS, Alaska Rural Village Electric Cooperatives

The Alaska Rural Village Electric Cooperative has 35,000 consumers in its area that would be affected by Susitna. Urges prompt action on both SB 294 and the intertie. Commented that while there may be other sources of energy, Susitna is probably the best and there is no reason the state should settle for any other than the best. SUGGESTION: page 2, lines 7 - 9 should include the interim recommendations of the feasibility study underway. On financing, urged flexibility for options be written into the bill.

RODERICK MC DONNEL, Alaska Support Industry Alliance

The membership of the Alaska Support Industry Alliance endorses the Susitna project as a reflection of responsible development.

WRITTEN COMMENTS

The following individuals submitted written comments:

-- James F. Palin, Copper Valley Electric Association

-- Leon T. Brown, Jr., Vice President, Brown's Electric Supply Company

-- Robert Martin, Jr., P.E., General Manager, Tlingit and Haida Regional Electrical Authority

-- Roger Connolly

-- Austin G. Ward

-- Edward A. Merdes, Attorney-at-Law

-- R. L. Hufman, General Manager, Golden Valley Electric Association

-- H. Glenzer, Jr., Manager, Associated General Contractors

-- Dick Norman, General Manager, Pictures, Inc.

-- Ted Smith, Alaska Fuel Service