

HB - 171

"An Act relating to creation of a water resources revolving loan fund; and providing for an effective date."

2/18/75

COMMITTEE REPORT

FINANCE

HOUSE

Mr. Speaker:

Date _____

COMMUNITY & REGIONAL
AFFAIRS

The Committee on _____ has had CS HB 171

under consideration. A Majority of the members of the Committee

() recommends it DO PASS

() recommends it DO NOT PASS

() recommends it DO PASS WITH ATTACHED AMENDMENT(S)

() recommends it BE REPLACED WITH CS FOR _____ AND THAT

CS FOR _____ DO PASS

() "and" recommends it BE REFERRED TO THE _____

COMMITTEE

() reports it back WITHOUT RECOMMENDATION

() "other"

Members signing the Majority report:

<u>Sam R. Carter</u>	<u>Do Pass</u>	<u>CS HB 171</u>
<u>William R. ...</u>	<u>Do Pass</u>	
<u>F. ...</u>		
<u>J. ...</u>		

Members NOT concurring in the Majority report:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

Sam R. Carter Chairman

AMENDMENT

OFFERED IN THE HOUSE:

By: ^{Community &} Regional Affairs Committee

To: Amend HOUSE BILL No. CS HB 171

SENATE BILL No. _____

PAGE: 2

LINE: 11

On page 2, line 11, after the word "commerce," insert
the words "the commissioner of natural resources,".

Joint Finance & CRA

March 19, 1975

Meeting was called to order at 3:00 for an informational meeting on HB 171.

Present were the House Finance and Community & Regional Affairs Committees and Staff. (See attached list of witnesses testifying.)

I. N.L. Pat Teague, City Manager, Ketchikan

Submitted statement.

II. Rocky Gutierrez, City Administrator, Sitka

Submitted statement.

III. Ole Johnson, Kodiak Electric, Kodiak

Submitted statement.

IV. Dr. Roger Kempel, City Attorneys office, Anchorage

Mr. Kempel stated that Anchorage gets 9 million/gals/day from wells in Anchorage. Ship Creek gives 10 1/2 million gals/day. They're approaching the end of the line with the wells because they are reducing the ground water table. An estimate by the U.S. Geological Survey says that with full developemnt of ground water resources water will last until 1976. Need a new alternative. Might be possible to either damn ship creek or put in an off stream storage, but the soil is not right for dams. Anchorage is quickly running out of water.

V. Jim eide, City Manager, Wrangell

Wrangell is 100% dependent on diesel generation. Fuel costs have gone up 160% in last few years. Utility rates were increased 44% last year--this year another 16%. The average cost for a home is \$43/month. Hydro power is dependable, cheaper, renewable and non polluting.

VI. H.D. Scougal, City Manager, Petersburg

Heating fuel--\$90/month for home
electricity---\$50/month for home

VII. Dick Ballard, Thomas Bay Power Authority (Chairman), Wrangell

Reiterated basically same opinions as others.

IX. Herb Lehfelt, City Manager, Valdez

All energy by diesel generators. Agrees with others.

X. Bill Boardman, Legislative Representaive, Southeastern Conference

He said financing was the problem. REA is not available. EDA as a funding agency is not available either. Same opinion as others

XI. R.W. Beck and Associates

Submitted written statements.

XII. Don Meyer, Bond Consultant

Urged passage. The problem is too big for communities to handle themselves.

XIII. Joseph Henry, Juneau Chamber of Commerce

Supports concept but the vehicle is not good. Advocates creation of Alaska Power Authority to develop hydro potential. Submitted proposed substitute. Mr. Boardman said they had already discussed the idea and decided it wouldn't work; it would add another state department and won't solve financing. Constitutionality of State guaranteeing loans.

XIV. Bill Ruddy, Atty of Thomas Bay Power Authority

Rejects power Authority idea. It would take three years to get going. Keep local control of projects.

Meeting was adjourned at 5:20.

Joe Harris's proposed
Statewide power authority bill

SEC. 1. Short Title. -- This chapter may be cited as the "Power Authority Act."

SEC. 2. Power Authority of the State of Alaska. -- There is hereby created a corporate municipal instrumentality of the State to be known as "Power Authority of the State of Alaska," in this chapter referred to as "the authority," which shall be a body corporate and politic, a political subdivision of the State, exercising governmental and public powers, perpetual in duration, capable of suing and being sued, and having a seal, and which shall have the powers and duties hereinafter enumerated, together with such others as may hereafter be conferred upon it by law.

It shall report annually to the governor and the legislature upon its operations and transactions.

It is an instrumentality of the State within the Department of Natural Resources, but has a legal existence independent of and separate from the State. It is not bound by the Alaska Administrative Procedures Act.

SEC. 3. Trustees. -- The authority shall consist of five trustees, who shall serve respectively for terms of one, two, three, four, and five years, to be appointed by the governor, subject to confirmation by a majority of the members of the legislature in joint session. Each trustee shall hold office until his successor has been appointed and qualified. At the expiration of the terms of each trustee and of each succeeding trustee the governor shall, subject to confirmation by a majority of the members of the legislature in joint session, appoint a successor who shall hold office for a term of five years, or until his successor has been appointed and qualified. In the event of a vacancy occurring in the office of a trustee by death, resignation or otherwise, the governor shall, subject to confirmation by a majority of the members of the legislature in joint session, appoint his successor, who shall hold office for the unexpired term. Three trustees shall constitute a quorum for the purpose of organizing the authority and conducting the business thereof.

The salaries of the trustees shall be established by the authority. In addition, each trustee shall receive his reasonable expenses in the performance of his duties hereunder, and may elect to become a member of the Alaska public employees retirement system on the basis of such compensation to which he shall be entitled.

SEC. 4. Officers and employees; expenses. -- The trustees shall choose from among their own number a chairman and vice-chairman. They shall from time to time select such employees, including engineering, marketing and legal skill, as they may require for the performance of their duties and shall prescribe the duties and compensation of each officer and employee. They shall adopt by-laws and rules and regulations suitable to the purpose of this title. As long as and to the extent that the authority is dependent upon appropriations for the payment of its expenses, it shall incur no obligations for salary, office or other expenses prior to the making of appropriations adequate to meet the same.

SEC. 5. Powers and duties of authority. -- Forthwith upon the appointment and organization of the trustees and subject to the conditions and limitations in this chapter contained, the authority, in cooperation where appropriate with the proper Canadian authorities and those of the United States as hereinafter directed, shall proceed with the improvement and development of hydroelectric power sites and facilities for the aid and benefit of commerce or navigation and for the development of the hydroelectric power inherent therein in accordance with the provisions of this title.

The authority is authorized to construct throughout the State or Canada where necessary (a) such hydroelectric projects, as it deems necessary or desirable to supplement the supply of electric power and energy, and (b) to supply low cost power and energy to high load factor manufacturers which will build new facilities in the State or expand existing facilities provided such power and energy is made available to them, and (c) to supply the needs of the State's municipal electric, rural electric cooperative and private electric utilities.

A high load factor manufacturer is one which normally utilizes a minimum electric demand of five thousand kilowatts and which will normally utilize energy at the rate of approximately five hundred forty kilowatt hours per month for each kilowatt of demand and of which the cost of electricity normally represents at least seven and one-half percent of its total product value.

The authority is authorized and directed:

1. To cooperate with the appropriate agencies and officials of the United States government to the end that any hydroelectric project undertaken under this title shall be consistent with and in aid of any plans of the United States for the improvement of commerce and navigation along any rivers and shall be so planned and constructed as to be adaptable to the plans of the United States therefor, so that the necessary channels, locks, canals, and other navigational facilities may be constructed and installed by the United States, in, through, and as part of such project, if any such are planned for execution in the period of construction.

2. To negotiate with the appropriate Canadian authorities and agencies respecting the improvement and development of any river or body of water under the jurisdiction of Canada for the aid and benefit of commerce or navigation and the development of hydroelectric power therefrom, and to plan and agree with them upon cooperative action to that end and upon the use, control and disposition of the facilities to be created and the hydroelectric power to be developed by any project constructed in such rivers. Such negotiations and agreements shall be conducted and concluded with due regard to the position of the United States in respect to international agreements, and any such agreements as may be reached with Canadian authorities or agencies may be submitted by the authority to the government of the United States for its approval, if it be advised that such approval is necessary or desirable.

3. To apply to the appropriate agencies and officials of the United States government and/or of Canada or its provinces for such licenses, permits or approval of its plans or projects as it may deem necessary or advisable, and in its discretion, and upon such terms and conditions as it may deem appropriate, to accept such licenses, permits or approvals as may be tendered to it by such agencies or officials and such federal or other public or governmental assistance as is now or may hereafter become available to it; and to enter into contracts with such agencies or officials or utility

companies relating to the construction or operation of any project authorized by this chapter. Neither the authority nor any trustee, officer or agent thereof shall have any power to waive or surrender for any purpose whatsoever any right of the State of Alaska, whether sovereign or proprietary in character, in and to the other waters of the State, power, channels, beds, or uses, or the right of the State to assert such rights at any future time; provided, however, that nothing herein contained shall be construed as limiting the power of the authority to accept licenses issued by the federal power commission pursuant to the provisions of the federal power act, as amended, and the terms and conditions therein imposed pursuant to law. If for any reason the authority shall fail to secure any such license, permit or approval as it may deem necessary or advisable, or shall decide not to make application therefor, it is authorized to institute suit, or to apply to congress for legislation, or take such other action in the premises as it may deem necessary or advisable, in the furtherance of the project and for the protection of its rights and those of the State.

4. To study the desirability and means of attracting industry to the State of Alaska.

5. To develop, maintain, manage and operate those parts of the hydroelectric projects owned or controlled by it in such manner as to give effect to the policy hereby declared (and all plans and acts, and all contracts for the use, sale, transmission and distribution of the power generated by such projects, shall be made in the light of, consistent with and subject to this policy), namely, that such projects shall be in all respects for the aid, improvement, and benefit of commerce or navigation in the State, and that in the development of hydroelectric power therefrom such projects shall be considered primarily as for the benefit of the people of the State as a whole and particularly the domestic and rural consumers to whom the power can economically be made available, and accordingly that sale to and use by ~~the~~ industry shall be a secondary purpose, to be utilized principally to secure a sufficiently high load factor and revenue returns to permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity. In furtherance of this policy and to secure a wider distribution of such power and use of the greatest value to the general public of the State; the authority shall in addition to other methods which it may find advantageous make provision so that municipalities, rural cooperatives or private utilities now or hereafter authorized by law to engage in the distribution of electric power may secure a reasonable share of the power generated by such projects, and shall sell the same or cause the same to be sold at prices representing cost of generation, plus capital and operating charges, plus a fair cost of transmission, all as determined by the trustees, and subject to conditions which shall assure the resale of such power to domestic and rural consumers at the lowest possible price. To that end, the authority may provide in any contract or contracts which it may make for the sale, transmission and distribution of the power that the purchaser, transmitter or distributor shall construct, maintain and operate, on such terms as the authority may deem proper, such connecting lines as may be necessary for transmission of the power from main transmission lines to such municipalities, cooperatives or utilities.

Contracts for the sale, transmission and distribution of power generated by such projects shall provide for the effectuation of the

foregoing policy and shall provide:

a. Payment of all operating and maintenance expenses of the project.

b. Interest on and amortization and reserve charges sufficient within fifty years of the date of issuance to retire the bonds of the power authority issued for the project.

c. Continuous control and operation of the project by the authority.

d. The effectuation of the policy declared in this sub-paragraph.

e. Full and complete disclosure to the authority of all factors of cost in the transmission and distribution of power, so that rates to consumers may be fixed initially in the contract and may be adjusted from time to time on the basis of true cost data, provided that in fixing such cost of transmission and distribution no account shall be given to any franchise value, going value or goodwill based upon the existence of the contract and the availability of the power for sale by the transmitting or distributing company or any company associated therewith.

f. Periodic revisions of the service and rates to consumers on the basis of accurate cost data obtained by such accounting methods and systems as shall be approved by the trustees and in furtherance and effectuation of the policy declared in this sub-paragraph.

g. That the rates, services and practices of the purchasing, transmitting and/or distributing public agencies or companies in respect to the power generated by such projects shall be governed by the provisions and principles established in the contract, and not by regulations of the public ~~service~~ ^{utilities} commission or by general principles of public ~~service~~ law regulating rates, services and practices.

h. The rate structures agreed upon in such contract may provide different rates for different localities, classes of consumers, and amounts of current consumed, and for changes in the rates resulting from variation in operating costs and fixed charges.

i. For the cancellation and termination of any such contract upon violation of the terms thereof by the purchasing, transmitting or distributing public agency or company, or any subsidiary or associate thereof.

j. For such security for performance as the authority may deem practicable and advisable, including provisions assuring the continuance of service by the purchasing, transmitting and/or distributing public agencies or companies and/or the use of their facilities for such service and/or the continuance of an outlet and adequate market for the power generated by such projects.

k. Such other terms not inconsistent with the provisions and policy of this title as the authority may deem advisable.

6. To develop, maintain, manage and operate its projects so as (i) to provide an adequate supply of energy for optimum utilization of its hydroelectric projects, (ii) to attract and expand high load factor industry, (iii) to provide for the additional needs of its municipal electric and rural electric cooperative and private utility customers and (iv) to assist in maintaining an adequate dependable electric power supply for the State.

~~Contracts for the sale, transmission and distribution of power and energy generated by such projects shall provide for the effectuation of the policy set forth in this chapter relating to such projects and shall provide:~~

~~a. Payment of all operating and maintenance expenses of the projects.~~

~~b. Interest on and amortization and reserve charges sufficient within fifty years of the date of issuance to retire the bonds of the authority issued for the projects.~~

~~c. For the cancellation and termination of any such contract upon violation of the terms thereof by the purchasing, transmitting or distributing public agency or company, or any subsidiary thereof.~~

~~d. That the rates, services and practices of the purchasing, transmitting and/or distributing agencies, electric cooperatives and private utilities in respect to the power and energy from such projects shall be governed by the provisions and principles established in the contract, and not by regulations of the public service commission or by general principles of public service law regulating rates, services and practices.~~

~~e. Such other terms not inconsistent with the provisions and policy of this title as the authority may deem advisable.~~

7. To proceed with the physical construction of any project authorized by this chapter, including the erection of the necessary dams, power houses and other facilities, instrumentalities and things necessary or convenient to that end, and including also the erection of such transmission lines as may be necessary to conduct electricity to industrial users located at or near the site; and including also the acquisition of transmission lines or the use of such transmission lines, available or which may be made available, to conduct electricity to such point or points at which the electricity is sold by the authority to any person, corporation or association, public or private, engaged in the business of distribution and sale of electricity to ultimate consumers or if the authority is unable to so acquire the ownership or use of such transmission lines, including also the erection by the authority of transmission lines necessary for such purposes; and thereafter to maintain and operate the project in accordance with the provisions and policy of this chapter. The authority is specifically authorized to undertake the construction of any project in one or more steps as it may find economically desirable or advantageous, and as it may agree with the appropriate Canadian and/or United States authorities. Whenever in this chapter reference is made to "project," it shall be understood to refer to such part of any project authorized by this chapter as may from time to time be in existence or immediately projected.

8. To exercise all the powers necessary or convenient to carry out and effectuate the purposes and provisions of this chapter; and as incidental thereto to own, lease, build, operate, maintain and dispose of real and personal property of every kind and character, to acquire real property and any or every interest therein for its lawful purposes by purchase, or by condemnation as hereinafter provided, to borrow money and secure the same by bonds or liens upon revenue from any property or contracts held or to be held by it, to sell water or electric power, and generally to do any and every thing necessary or convenient to carry out the purposes of this chapter, provided that the authority shall have no power at any time to pledge the credit of the State nor shall any of its obligations or securities be deemed to be obligations of the State nor shall the authority have the power to lease or sell any dam, or power house at the site.

9. Notwithstanding any limitations hereinbefore expressed, the authority is authorized and directed forthwith or from time to time as it shall deem advisable and within the limitations of the

appropriations made available for it to initiate and prosecute all inquiries, investigations, surveys and studies which it may deem necessary or desirable as preliminary to the effectuation of the other powers and duties conferred upon it by this chapter.

SEC. 6. Power to compel attendance of witnesses. -- For the purpose of exercising its powers and performing its duties hereunder and of securing such information as it may deem necessary hereunder, the authority shall have the power to compel the attendance of witnesses and the production of documents. The power hereby conferred upon the authority may be exercised by any one or more of the trustees if he or they are authorized so to act on behalf of the authority by resolution or by law. A subpoena issued under this section shall be regulated by the civil practice law and rules.

SEC. 7. Acquisition of property. -- If, for any of the purposes hereunder, including temporary construction purposes and the making of additions or improvements, the authority shall find it necessary or convenient for it to acquire any real property as herein defined, whether for immediate or future use, then the authority may find and determine that such property is required for a public use, and upon such due determination, such property shall be and shall be deemed to be required for such public use until otherwise determined by the authority and with the exceptions hereinafter specifically noted such determination of fact shall not be affected by the fact that such property has theretofore been taken for, or is then devoted to, a public use; but the public use in the hands or under the control of the authority shall be deemed superior to the public use in the hands of any other person, association or corporation. If the authority is unable to agree for the acquirement of any such property, or if the owner thereof shall be incapable of disposing of the same, or if, after diligent search and inquiry, the name and residence of any such owner cannot be ascertained, or if any such property has been acquired or attempted to be acquired and title or other rights therein have been found to be invalid or defective, the authority may acquire such property by condemnation under and pursuant to the provisions of this chapter.

1. When any real property within this State is sought to be acquired by condemnation, the authority shall cause a survey and map to be made thereof, and shall cause such survey and map to be filed in its office. There shall be annexed to such survey and map a certificate executed by the chief engineer of the authority, or by such other officer or employee as may be designated by the trustees, stating that the property or interest therein described in such survey and map are necessary for its purposes.

2. Upon filing such survey and map the authority may proceed to acquire the real property by eminent domain as set forth in AS 09.55.240-460, including the power of declaration of taking set forth in AS 09.55.420 et seq.

3. The authority may, at its option, acquire such real property within the State of Alaska, under the aforesaid eminent domain law or, in the event it is a licensee of the federal power commission it may acquire such real property as is necessary for its purposes through the exercise of the right of eminent domain as provided in section twenty-one of the federal power act, as amended.

4. The authority and its duly authorized agents and employees may enter upon any real property for the purpose of making the surveys or maps mentioned in this section, or for such other surveys or examinations of real property as may be necessary or convenient for the purposes of this chapter.

5. The term "real property" as used in this chapter is defined to include lands, structures, franchises and interests in land, including lands under water and riparian rights, and any and all other things and rights usually included within the said term, and includes also any and all interests in such property less than full title, such as easements, rights of way, uses, leases, licenses and all other incorporeal hereditaments and every estate, interest or right, legal or equitable, including terms for years and liens thereon by ways of judgments, mortgages or otherwise, and also all claims for damages for such real estate.

SEC. 8. Consent of State. -- The State of Alaska hereby consents to the occupation and use by the authority of any and all property of the State of whatever kind or character for any hydroelectric facility authorized herein, and hereby vests the authority with and delegates to it the rights to exercise any and every right and power of the State in connection therewith, whether proprietary or sovereign in character, which the State itself might exercise.

SEC. 9. Contracts negotiated by authority. -- Contracts negotiated by the authority as provided in sub-paragraph five or six of section five of this chapter shall be entered into and executed as follows:

1. After agreement upon the terms of any such contracts shall have been reached by the authority and its co-party or co-parties, the authority shall hold a public hearing or hearings upon the terms thereof. At least thirty days' notice of such hearing shall be given by publication once in each week during such period in each of six newspapers within the State to be selected by the authority. Copies of proposed contracts shall be available for public inspection during such period of thirty days at the office or offices of the authority and at such other places throughout the State as it may designate.

2. Following such public hearing, the authority shall reconsider the terms of the proposed contract or contracts and shall negotiate such changes and modifications in the contract or contracts as it then deems necessary or advisable.

3. When such contract or contracts are finally agreed upon in terms satisfactory to the authority and its co-party or co-parties, and which the authority believes to be in the public interest, the authority shall thereupon report the proposed contract or contracts, together with its recommendations and the record of the public hearings thereon to the governor of the State who shall within sixty days thereafter indicate his approval or disapproval thereof and give his reasons therefor.

4. If the governor shall approve such contract, then the same shall be executed by the chairman and secretary of the authority and it shall thereupon come into full force and effect and be binding upon the authority and all other parties thereto in accordance with its terms.

SEC. 10. Notes of the authority. -- The authority shall have the power and is hereby authorized from time to time to issue its negotiable notes in conformity with applicable provisions of the uniform commercial code for any corporate purpose and renew from time to time any notes by the issuance of new notes, whether the notes to be renewed have or have not matured. The authority may issue notes partly to renew notes or to discharge other obligations then outstanding and partly for any other purpose. The notes may be authorized, sold, executed and delivered in the same manner as bonds. Any resolution or resolutions authorizing notes of the authority or any issue thereof may contain any provisions which the authority is authorized to include in any resolution or resolutions authorizing bonds of the authority or any issue thereof, and the authority may include in any notes any terms, covenants or conditions which it is authorized to include in any bonds. All notes shall be general obligations of the authority payable out of any of its moneys or revenues, subject only to any contractual rights of the holders of any of its notes or other obligations then outstanding.

SEC. 11. Bonds of the authority. -- 1. The authority shall have power and is hereby authorized from time to time to issue its negotiable bonds in conformity with applicable provisions of the uniform commercial code for the purpose of financing any project authorized by this title, including the acquisition of any real or personal property or facilities deemed necessary by the authority.

2. In anticipation of the sale of such bonds the authority may issue negotiable bond anticipation notes in conformity with applicable provisions of the uniform commercial code and may renew the same from time to time but the maximum maturity of any such note, including renewals thereof, shall not exceed five years from the date of issue of such original notes. Such notes shall be paid from any moneys of the authority available therefor and not otherwise pledged, or from the proceeds of sale of the bonds of the authority in anticipation of which they were issued. Such notes shall not be issued in an amount in excess of the amount of bonds which the authority is authorized to issue, less the amount of any bonds or other notes theretofore issued and outstanding. The notes shall be issued in the same manner as the bonds. Such notes and the resolution or resolutions authorizing the same may contain any provisions, conditions or limitations which a bond resolution of the authority may contain.

3. Except as may be otherwise expressly provided by the authority, the bonds and notes of every issue shall be general obligations of the authority payable out of any moneys or revenues of the authority, subject only to any agreements with the holders of particular bonds or notes pledging any particular moneys or revenues.

4. The authority shall have power from time to time, whenever it deems refunding expedient, to refund any bonds by the issuance of new bonds, whether the bonds to be refunded have or have not matured, and may issue bonds partly to refund bonds then outstanding and partly for any other purpose hereinbefore described. Refunding bonds may be exchanged for the bonds to be refunded, with such cash adjustments as may be agreed, or may be sold with the proceeds applied to the purchase or payment of the bonds to be refunded.

5. The bonds may be issued payable in annual installments or may be issued as term bonds or the authority, in its discretion, may issue bonds of both types. The bonds shall be authorized by resolution of the trustees of the authority and shall bear such date or dates, mature at such time or times, not exceeding fifty years from their respective dates, bear interest at such rate or rates, payable annually or semi-annually, be in such denominations, be in such form, either coupon or registered, carry such registration privileges, be executed in such manner, be payable in lawful money of the United States of America at such place or places, and be subject to such terms of redemption, as such resolution or resolutions may provide. In the event that term bonds are issued, the resolution authorizing the same may make such provisions for the establishment and management of adequate sinking funds for the payment thereof, as the authority may deem necessary. The bonds or notes may be sold at public or private sale for such price or prices as the authority shall determine. Pending preparation of the definite bonds, the authority may issue interim receipts which shall be exchanged for such bonds.

6. Any resolution or resolutions authorizing any bonds or any issue of bonds may contain provisions, which shall be a part of the contract with the holders of the bonds to be authorized as to

(a) pledging all or any part of the revenues of the project or any revenue producing contract or contracts made by the authority with any individual, partnership, corporation or association to secure the payment of the bonds or of any particular issue of bonds, subject to such agreements with bondholders as may then exist;

(b) the rentals, fees and other charges to be charged, and the amounts to be raised in each year thereby, and the use and disposition of the revenues;

(c) the setting aside of reserves or sinking funds, and the regulation and disposition thereof;

(d) limitations on the right of the authority to restrict and regulate the use of any project;

(e) limitations on the purpose to which the proceeds of sale of any issue of bonds then or thereafter to be issued may be applied and pledging such proceeds to secure the payment of the bonds or of any issue of the bonds;

(f) limitations on the issuance of additional bonds; the terms upon which additional bonds may be issued and secured; the refunding of outstanding bonds;

(g) the procedure, if any, by which the terms of any contract with bondholders may be amended or abrogated, the amount of bonds the holders of which must consent thereto, and the manner in which such consent may be given;

(h) limitations on the amount of moneys derived from a project to be expended for operating, administrative or other expenses of the authority;

(i) defining the acts or omissions to act which shall constitute a default in the duties of the authority to holders of its obligations and providing the rights and remedies of such holders in the event of a default.

7. Notwithstanding any other provisions of this chapter, any such resolution or resolutions shall contain a covenant by the authority that it will at all times maintain rates, fees or charges

sufficient to pay, and that any contracts entered into by the authority for the sale, transmission or distribution of power shall contain rates, fees or charges sufficient to pay the costs of operation and maintenance of the project, the principal of and interest on any obligations issued pursuant to such resolution as the same severally become due and payable, and to maintain any reserves required by the terms of such resolution or resolutions.

8. It is the intention hereof that any pledge of revenues or other moneys or of a revenue producing contract or contracts made by the authority shall be valid and binding from the time when the pledge is made; that the revenues or other moneys or proceeds of any contract or contracts so pledged and thereafter received by the authority shall immediately be subject to the lien of such pledge without any physical delivery thereof or further act; and that the lien of any such pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the authority irrespective of whether such parties have notice thereof. Neither the resolution or any other instrument by which a pledge is created need be recorded.

9. Neither the members of the authority nor any person executing the bonds or notes shall be liable personally on the bonds or notes or be subject to any personal liability or accountability by reason of the issuance thereof.

10. The authority shall have power out of any funds available therefor to purchase bonds or notes. The authority may hold, pledge, cancel or resell such bonds, subject to and in accordance with agreements with bondholders.

11. Any bonds or notes issued by the authority are hereby made securities in which all public officers and bodies of this State and all municipalities and municipal subdivisions, all insurance companies and associations and other persons carrying on an insurance business, all banks, bankers, trust companies, savings banks and savings associations, including savings and loan associations, building and loan associations, investment companies and other persons carrying on a banking business, and all other persons whatsoever, except as hereinafter provided, who are now or may hereafter be authorized to invest in bonds or other obligations of the State, may properly and legally invest funds including capital in their control or belonging to them; provided that, notwithstanding the provisions of any other general or special law to the contrary, such bonds and notes shall not be eligible for the investment of funds, including capital, of trusts, estates or guardianships under the control of individual administrators, guardians, executors, trustees and other individual fiduciaries except when any such individual fiduciary shall be acting in such capacity with one or more corporate co-fiduciaries. The bonds and notes are also hereby made securities which may be deposited with and shall be received by all public officers and bodies of this State and all municipalities and municipal subdivisions for any purpose for which the deposit of bonds or other obligations of this State is now or may hereafter be authorized.

SEC. 12. Deposit and investment of moneys of the authority. -- All moneys of the authority from whatever source derived shall be deposited in a separate bank account or accounts. All deposits of such moneys shall, if required by the authority, be secured by

obligations of the United States or of the State of Alaska of a market value equal at all times to the amount of the deposit and all banks and trust companies are authorized to give such security for such deposits. The Commissioner of Administration and his legally authorized representatives are hereby authorized and empowered from time to time to examine the accounts and books of the authority, including its receipts, disbursements, contracts, leases, sinking funds, investments and any other matters relating to its financial standing.

Notwithstanding the provisions of this section, the authority shall have power to contract with the holders of any of its notes or bonds as to the custody, collection, securing, investment and payment of any moneys of the authority, or any moneys held in trust or otherwise for the payment of notes or bonds or in any way to secure notes or bonds, and to carry out any such contract. Moneys held in trust or otherwise for the payment of notes or bonds or in any way to secure notes or bonds and deposits of such moneys may be secured in the same manner as moneys of the authority, and all banks and trust companies are authorized to give such security for such deposits.

Moneys of the authority not required for immediate use may, in the discretion of the authority, be invested in obligations of the United States government or of the State of Alaska.

Subject to agreements with noteholders and bondholders and the approval of the Commissioner of Administration the authority shall prescribe a system of accounts.

SEC. 13. Agreement of the State. -- 1. The State of Alaska does hereby pledge to and agree with the holders of any obligations issued under this title, and with those parties who may enter into contracts with the authority pursuant to the provisions in sub-paragraph five or six of section five above, that the State will not limit or alter the rights hereby vested in the authority until such obligations together with the interest thereon are fully met and discharged and/or such contracts are fully performed on the part of the authority, provided that nothing herein contained shall preclude such limitation or alteration if and when adequate provision shall be made by law for the protection of the holders of such obligations of the authority or those entering into such contracts with the authority. The authority as agent for the State is authorized to include this pledge and undertaking for the State in such obligations or contracts.

2. Nothing in this chapter shall be construed as diminishing or enlarging any valid existing rights under any license heretofore issued pursuant to the provisions of the federal power act.

SEC. 14. Exemption from taxation. -- It is hereby found and declared that the projects authorized by this chapter are for the aid and improvement of commerce or navigation and that such aid and improvement of commerce or navigation and the development, sale and distribution of hydroelectric power is primarily for the benefit of the people of the State of Alaska, for the improvement of their health and welfare and material prosperity, and is a public purpose, and the authority shall be regarded as performing a governmental function in undertaking such projects and in carrying out the provisions of this chapter, and shall be required to pay no taxes or assessments upon any of the property acquired by it for such projects or upon its activities in the operation and maintenance

thereof, provided that nothing herein shall prevent the authority from entering into agreements to make payments in lieu of taxes or assessments.

The securities and other obligations issued by the authority, their transfer and the income therefrom shall, at all times, be free from taxation within this State. It is furthermore declared that the object and purpose of this chapter is that such projects shall be in all respects self-supporting.

SEC. 15. Repayment of State appropriations. -- All appropriations made by the State to the authority shall be treated as advances by the State to the authority, and shall be repaid to it without interest either out of the proceeds of securities, or other obligations issued by the authority for the construction of any project pursuant to the provisions of this chapter, or by the delivery of non-interest bearing obligations of the authority to the State for all or any part of such advances, or out of excess revenues from such project subject however to any pledges of such revenues made pursuant to any resolution or resolutions of the authority authorizing the issuance of obligations of the authority.

S T A T E M E N T

March 19, 1975

Mr. Chairman and Members:

My name is Leon Ole Johnson, I'm a 33 year resident of Kodiak. For the past 26 years, I've served as Manager of the Kodiak Electric Association. I appear in support of SB 185 and HB 171.

Kodiak Electric Association is the sole source of electric energy for Kodiak on environs as well as Port Lions. In this capacity we generate and destribute electrical power for both communities. Generation at both areas is by diesel. Our consumers total 2,300 including 19 seafood processing plants, requireing large amounts of power. Demand for power has multiplied 16 times in 25 years. Recent statistics show Kodiak as number two in the nation for landing and processing seafood.

I'm sure you are aware that every electric utility in our state is experiencing problems. Probably more problems in the past year then ever before. Our system is not an exception.

About 10 years ago it became evident that we look for an alternate to diesel as a power source. In 1966 and 1967 we spent in excess of a 1/2 million dollars doing necessary studies for funding and licensing a Hydro project called Terror Lake. At about the same time the 'tight' money market became a factor in our Federal government and our loan for the total project was turned down by the R.E.A. We tried to scale the project down to obtain financing, but this too was turned down because of the lack of money available to R.E.A.

Since that time we have continued generating with diesel at initial fuel costs of 13 - 14 cents per gallon. Early last year our ability to obtain sufficient quantities of fuel became a critical factor. This was followed by a series of price increases for diesel that at one time reached 34.9 cents per gallon at Kodiak and 42 cents at Port Lions in spite of our demand for 2.5 to 3 million gallons per year.

Other cost also 'skyrocketed' and as a result we suffered losses in excess of \$300,000 for 1974. In 1972 our *BUS-BAR* cost was 22 mils. These costs are now 39 - 40 mils per KWH. Fortunately we were able to absorb losses for 1974 but it left us with little or no reserves. It became quite apparent that we had better take a long hard look again at Hydro.

We found a completely new ball game. All of the work that had been done must now be augmented with additional studies if the project were to become a reality even on a reduced scale.

Underwriting the losses of 1974 preclude our financing further studies at this time. What could we do about it? Our solution was to install more high cost diesel generation to take care of load projections. ~~This~~ ^{To} this end we recently submitted a loan application to R.E.A. totaling almost 6 million dollars for 13,000 KW of diesel generating capacity. Lets not kid ourselves, the association, the directors or the manager are not going to pay for this - The consumers will foot the bill. We don't believe this can continue on, we need relief from high costs to produce power. We also know - its going to get worse if we don't find an alternate source of energy.

As a former city councilman and Mayor of our community I'm also concerned about our city water utility at Kodiak. The City has spent many millions of dollars to stay abreast of ~~wide~~ ^{WATER} demands for our community. Federal funds for this endeavor, available in the past are drying up. In a phone conversation with the Kodiak City Manager this morning he relates the interest in these bills and informs me that the City will soon be looking for funding, additions to their system.

We believe SB 185 and HB 171 is a way out of the del~~am~~ia we're in. It is a means of using a non renewable energy source of our State to create a renewable energy source with the use of water. It's not a gift but a financing tool to get the states utilities out of an ~~unturnable~~ ^{UNTOLEABLE} position. Thank you.

Leon 'Ole' Johnson

LOJ/bw

MEMO TO CHAIRMEN HUGH MALONE & SAM COTTEN

Regarding: Joint hearing on HB 171 (companion bill SB 185), "An Act relating to creation of a water resources revolving loan fund; and providing for an effective date"

TENTATIVE ORDER OF WITNESSES TO TESTIFY BEFORE THE JOINT COMMITTEES

- ✓ 1. N. L. "Pat" Teague, City Manager, Ketchikan
- ✓ 2. Rocky Gutierrez, City Administrator, Sitka
- ✓ 3. Ole Johnson, Kodiak Electric, Kodiak
- ✓ 4. Dr. Roger Kempfle--City of Anchorage
- ✓ 5. James Eide, City Manager, Wrangell
- ✓ 6. H. D. Scougal, City Manager, Petersburg
- ✓ 7. Dick Ballard, ^{cum.} Thomas Bay Power Authority, Wrangell
- ✓ 8. Mark Chisum, City Manager, Cordova
9. Herb Lehfelt, City Manager, Valdez

10. Bill Boardman, Legislative Representative, Southeastern Conference

11. R. W. BECK & ASSOCIATES (Analytical & Consulting Engineers)
 - A) James V. Williamson
 - B) Donald E. Bowes

12. Don Meyers (Marshall & Meyers), Bond CONSULTANT

5
MINUTE
BREAK AT
4 PM

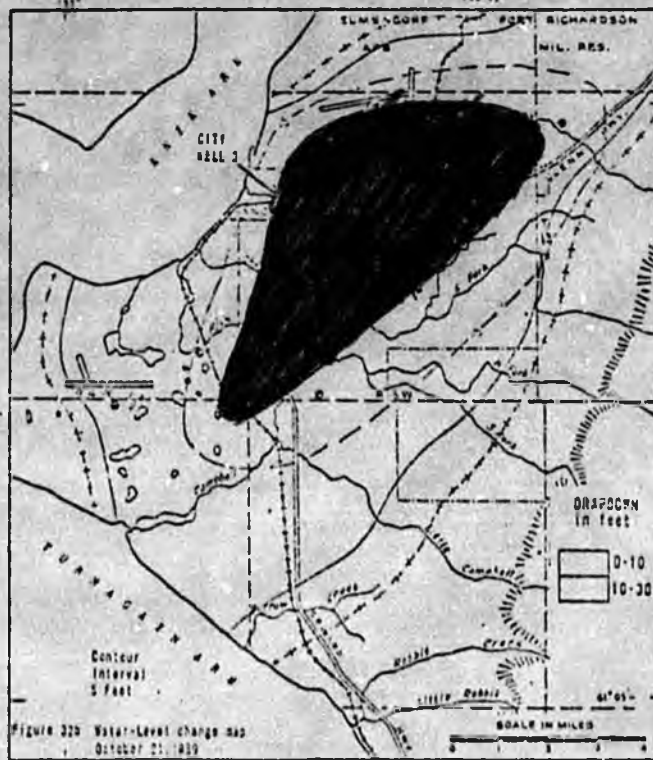
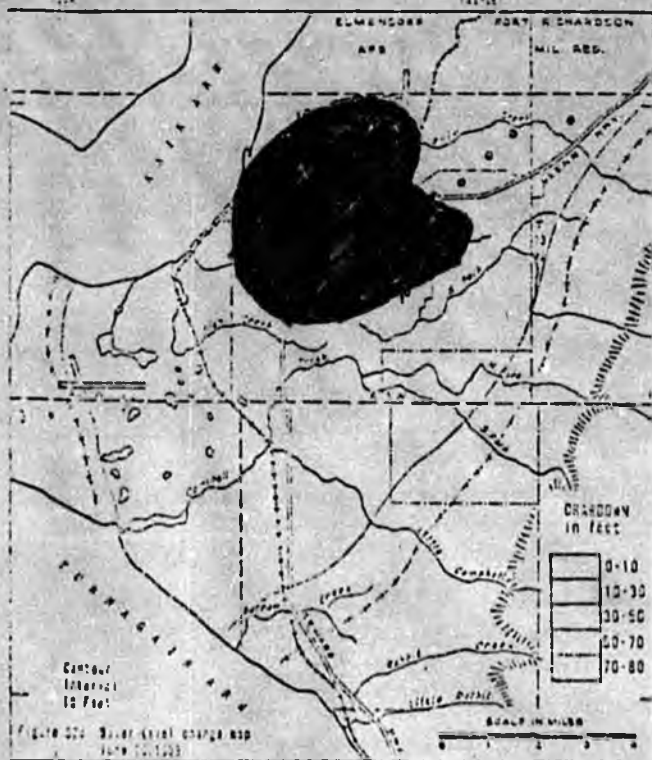
SUPPLEMENTAL EXHIBITS
TO THE TESTIMONY OF THE
CITY OF ANCHORAGE IN SUPPORT
OF THE CREATION OF A "WATER
RESOURCES REVOLVING LOAN FUND"

HB 171

SB 185

March 18, 1975

WELL PUMPDOWN OF GROUND WATER LEVEL



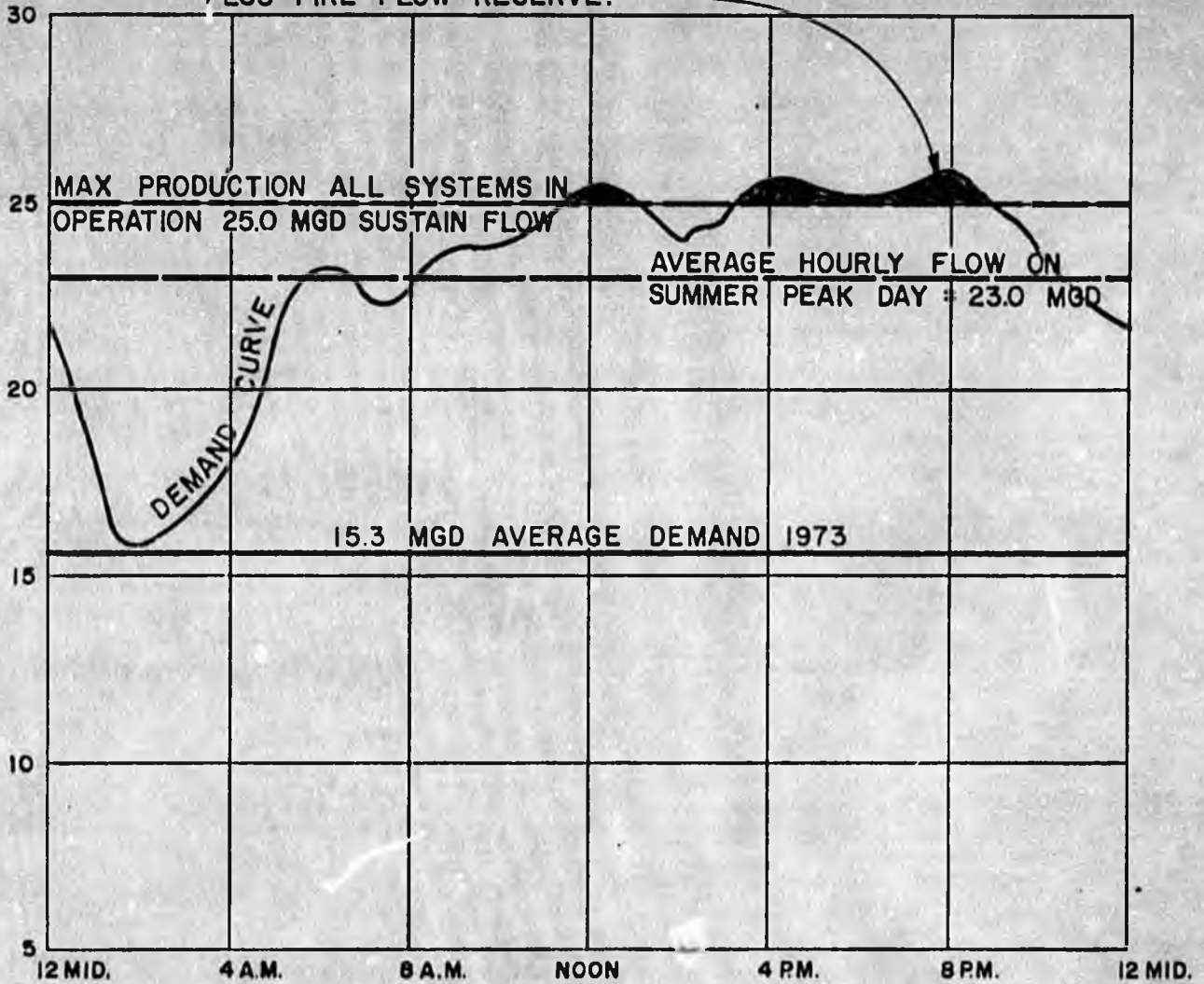
—10— The contours show the areal drawdown, or change in feet, in confined water levels on the indicated dates from the static water levels in 1955.

⊙ High-capacity well pumping

• Observation well

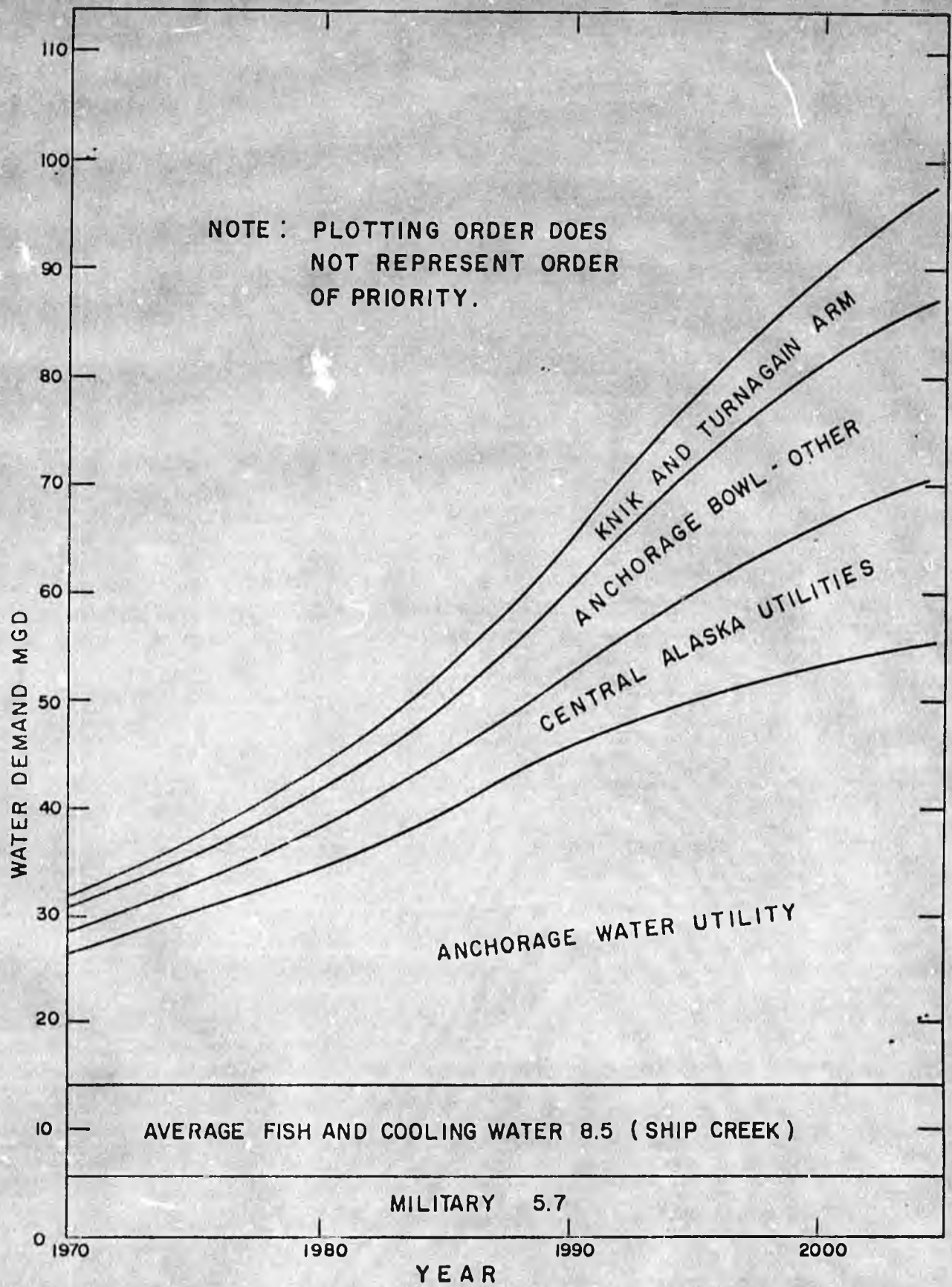
*** Transitional area where principal confining beds thin out.

DISTRIBUTION STORAGE REQUIRED
TO MEET DEMAND DURING THIS PERIOD
PLUS FIRE FLOW RESERVE.



TYPICAL PEAK DAY
24 HOUR DEMAND CURVE - JULY 1973

ADAPTED FROM [103]



MEAN ANNUAL
PROJECTED WATER DEMANDS

My name is F. "Rocky" Gutierrez, and I am the Administrator of the City and Borough of Sitka. The testimony I am about to offer at this hearing relative to SB 185 and HB 171 is perhaps repetitious to some of you in attendance, but the gospel never changes.

I believe that it is the responsibility of our State government to enact responsible legislation which will provide local units of government with the means to assist themselves. The proposed legislation contained in SB 185 and HB 171 is unique in this day and age of give-away programs, in that the loans will be repaid in full. It is the responsibility of our State to insure the energy requirements of its citizens are met, now and in the future, regardless of geographic location. Our State is in an enviable position to assist in insuring its citizens will be provided with a non-depletable source of electric energy. I would like to share my thoughts on this matter with you.

There are many municipalities throughout our State, which generate electricity with diesel, even though they have excellent and feasible hydro sites available. For instance, Petersburg, Wrangell, Ketchikan and Sitka in Southeast Alaska. Diesel is expensive and an expendable resource. Alaska is fortunate in that it can, for a large part, create a non-depletable source of energy out of oil, if only a small percentage of the funds derived from the sale of same are made available for the construction of hydroelectric plants. I urge the legislature to take a hard look at this concept; we would merely be exchanging

an expendable resource for a non-depletable resource, making money on the exchange, and providing a firm source of energy for our citizens today and in the future.

Since Sitka has approached the capacity of its existing hydroelectric facility, we have done some serious investigation regarding the direction we should proceed. I will illustrate the findings of the proposed Sitka hydroelectric when compared to diesel generation.

The proposed Sitka hydro plant would have an installed capacity of 15,000 kw, capable of producing 78,000,000 kWhr annually at a current estimated construction cost of \$39,000,000. We will make the assumption that we already have diesel generators capable of producing the same amount of energy as the proposed hydro, so we are dealing only with fuel cost. Using a production ratio of 13.5 kWhr/gal, the required consumption of diesel fuel over the next 20 years, to produce an equivalent amount of energy to the hydro plant production, would be 116,000,000 gallons or 2.8 million barrels of oil.

Further assuming there is no escalation of fuel costs (which there has been since I put this illustration together) and fuel remains available, it would cost \$40,600,000 over the next 20 years just for fuel, which surpasses the cost of the proposed hydro in less than 20 years. Of course, the hydro will last 75 to 100 years, and the savings go up astronomically. Alaska can ill afford to use diesel fuel, if not required, when we can at current prices receive a 5 to 1 return by its non-use.

There are those who claim the contents of SB 185 and HB 171 is special legislation. I fail to see where the proposed legislation favors one geographical location, individual or municipality over the other. We are interested in putting our resources to work for Alaskans. A good example of Alaska utilizing its natural resources for its people is demonstrated in those villages, town and cities where our natural gas is available. The citizens in these areas avail themselves of the cheapest source of power and heat in our State -- why should hydro energy be different?

It is imperative that this session of the legislature effectuate legislation which will provide low interest, long term loans for the construction of feasible hydroelectric projects. We must not lose sight of the fact our new found wealth is energy in the form of oil, and a small percentage of that wealth must be invested to replace our energy exports if the citizens of Alaska are to be insured their immediate and future energy requirements are met.

Testimony of N.L. Teague, Ketchikan City
Manager, at joint legislative hearing before
the Community and Regional Affairs Committee
and House Finance Committee, March 19, 1975,
at 3:00 P.M.

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE

MY NAME IS N. L. TEAGUE, I AM CITY MANAGER OF KETCHIKAN, WITH A
TENURE OF JUST SIX SHORT WEEKS. HAVING BEEN IN ALASKA BEFORE,
IT HAS BEEN MY DESIRE TO RETURN, FOR THIS STATE HAS GREAT AND
UNIQUE ATTRIBUTES. A BEAUTIFUL COUNTRY CONTAINING VERY PROUD
PEOPLE WITH A WILLINGNESS AND DESIRE TO BE SELF-SUFFICIENT,
YET ALWAYS WILLING TO ASSIST THEIR FELLOW MAN WHEN ASSISTANCE
IS REQUIRED. THIS CONCEPT APPEARS PREVALENT THROUGHOUT THE
WHOLE STATE, AND BECAUSE OF THE GREAT VASTNESS, THE PIONEERING
SPIRIT IS STILL GREATLY PREDONINANT. I NOW RESIDE AND REPRESENT
A COMMUNITY LOCATED IN SOUTHEAST ALASKA THAT HAS BEEN A
 VIABLE PORTION OF THE ECONOMIC STRUCTURE OF
THE STATE OF ALASKA IN THE PAST. THERE HAS NOW BEEN MINERAL
WEALTH DISCOVERED TO THE NORTH WHICH WILL BRING NEW REVENUE TO
THE STATE OF ALASKA; NOT TO THE EXTENT THAT WILL ENABLE
FINANCING OF ANY AND ALL PROJECTS, BUT WILL PROVIDE FUNDING FOR
AREAS OR ITEMS CONSIDERED OF GREAT CONCERN. THE HEARING TODAY
BEFORE THIS GROUP IS ON PROPOSED LEGISLATION, THAT IF ADOPTED,
WOULD INVEST DOLLARS DERIVED FROM THE AREA CONTAINING THE
MINERAL WEALTH INTO AREAS WHERE IDENTIFIABLE PROBLEMS EXIST
AND RETURN ON THE INVESTMENT CAN BE EXPECTED. WE ALL REALIZE
THAT THE MINERAL WEALTH OF THE STATE BELONGS TO ALL THE PEOPLE
OF THE STATE, AND THIS ASPECT SHOULD BE KEPT IN MIND WHEN

PRIORITIES ARE SET AND DISTRIBUTION OF FUNDING IS MADE. LONG TERM POWER GENERATION, AVAILABILITY, AND SUFFICIENT POTABLE WATER RESOURCES ARE OBVIOUSLY AMONG THESE PRIORITIES.

KETCHIKAN HAS BY NECESSITY, BEEN RELIANT UPON DIESEL GENERATED POWER, AND AS SUCH HAS BEEN SUBJECTED TO THE EVER INCREASING PRICES OF DIESEL OIL. THOSE WITH GREATER EXPERTISE THAN I ESTIMATE THESE COSTS TO CONTINUE ON AN UPPER TREND AND BECOME AN EVEN MORE UNREALISTIC METHOD OF GENERATING POWER. THIS METHOD OF GENERATION WAS AT ONE TIME SUPPLEMENTED BY A HYDRO ELECTRIC GENERATING FACILITY SUPPORTED LOCALLY THROUGH DOLLARS AND EFFORTS OF LOCAL CITIZENS THEREBY PROVIDING POWER AT ONE-THIRD THE COSTS OF THAT REQUIRED BY UTILIZING DIESEL FIRED GENERATION. AN UNFORTUNATE LANDSLIDE CAUSED DAMAGE TO THIS FACILITY AND IT HAS NOW BEEN DETERMINED THAT MANY DOLLARS AND MUCH TIME WILL BE REQUIRED TO PLACE THIS FACILITY BACK ON LINE TO ASSIST IN THE FINANCIAL CRUNCH OF DIESEL GENERATION AND POWER RELIABILITY. THE DIESEL GENERATION NOW IN EXISTANCE IS NOT ONLY EXTREMELY EXPENSIVE BUT IS MECHANICALLY UNRELIABLE AS THE FIRST LINE SOURCE OF ELECTRIC POWER GENERATION, WITH RESIDENTS PAYING FROM FORTY DOLLARS TO OVER ONE HUNDRED DOLLARS A MONTH FOR POWER. IT WOULD SEEM ONLY APPROPRIATE THAT THE POWER THEY RECEIVE BE PROVIDED TO THEM ON A CONSISTANT BASIS WHICH IS

UNFORTUNATLY NOT THE CASE. POWER OUTAGES DUE TO MECHANICAL FAILURE ARE NOT UNCOMMON, POWER SURGES DOING DAMAGE TO CERTAIN ELECTRIC HOUSEHOLD EQUIPMENT HAS BEEN EXPERIENCED, AND YET THE PRICE OF THIS SERVICE CONTINUES TO RISE. THE CONCEPT OF THE LEGISLATION ON WHICH TESTIMONY IS BEING GIVEN TODAY IS CONSISTENT WITH THE, "HELPING THOSE WHO HELP THEMSELVES", CONCEPT SO READILY IDENTIFIABLE IN THIS STATE. THE ~~AREAS~~^{AREAS} IN NEED ARE NOT ASKING FOR A GRANT OR HANDOUT, BUT AN OPPORTUNITY TO UTILIZE A SHARE OF THE MINERAL REVENUE TO INVEST IN POWER AND WATER FACILITIES TO BENEFIT PEOPLE OF THIS STATE WITH THE CONDITION OF REPAYMENT IN FUTURE YEARS. THE CONCEPT OF THIS LEGISLATION HAS GREAT MERIT, AND SHOULD RECEIVE VERY SERIOUS CONSIDERATION. THIS LEGISLATIVE CONCEPT CAN BE REALISTICALLY DEFINED AS AN INVESTMENT IN THE FUTURE. INVESTING DOLLARS INTO FACILITIES SO OBVIOUSLY BENEFICIAL TO SO MANY BY UTILIZATION OF A RENEWABLE RESOURCE WITH CONDITION THAT THE MONEY BE RETURNED TO THE STATE SHOULD RECEIVE VERY FAVORABLE CONSIDERATION AND QUITE HIGH PRIORITY. THE ESTABLISHMENT OF A WATER RESOURCE REVOLVING LOAN FUND IS NOT JUST GOOD BUSINESS, BUT IS GREATLY BENEFICIAL TO THE PEOPLE OF ALASKA. IT ALLOWS LOCAL DECISIONS TO BE MADE BY THOSE LOCALLY RESPONSIBLE, THEREBY COMPLIMENTING THE PREMISE ON WHICH ALASKAN COMMUNITIES WERE

ORIGINALLY FOUNDED. IT IS LENDING A HAND TO THOSE WILLING TO ASSUME THE RESPONSIBILITY OF SOLVING THEIR PROBLEMS AND ALSO WILLING TO RETURN THOSE DOLLARS TO THE ORIGINAL SOURCE WITH INTEREST. ALL MEASURES PRESENTED TO THIS LEGISLATURE MUST OBVIOUSLY BE VIEWED ON A PRIORITY BASIS, HOWEVER, SOUND AND ACCEPTABLE FINANCIAL CONCEPTS SHOULD BE PREVALENT GUIDELINES WHEN MATTERS OF THIS NATURE ARE CONSIDERED. IF MODIFICATION IS NECESSARY, CONSIDERATION SHOULD BE GIVEN TO THE MAGNITUDE OF THE PROBLEM, THAT THE PASSAGE OF TIME IS COSTLY, AND THE PREPARATION FOR ADDRESSING THE CONCERN SHOULD BEGIN AS SOON AS POSSIBLE.

OTHER TESTIMONY GIVEN TODAY WILL DEAL WITH SPECIFICS AND OTHER POSITIVE ASPECTS OF THIS LEGISLATION.

I APPRECIATE THE OPPORTUNITY TO PRESENT THIS POINT OF VIEW ON A LEGISLATIVE FINANCIAL CONCEPT THAT CONTAINS VERY LONG RANGE BENEFITS TO THE PEOPLE OF THIS STATE.

X X X X X X X X X X

*Presented to House Joint Conference
3/19/75. J.V. Williamson, Partner
R.W. Beck and Associates*

STATE OF ALASKA
WATER RESOURCES REVOLVING LOAN FUND
ESTIMATE OF FUND REQUIREMENT

To assist in the drafting of a Bill for creation of a water resources revolving loan fund, a broad estimate has been made of potential fund requirements from 1975 into the mid-1980's. Projects which are included are those considered to be essential to providing reliable and economic power in the areas of the State which have hydroelectric potential, and which would otherwise be dependent in the future on diesel generation. These areas are generally in Southeastern Alaska, but projects at Kodiak are included together with assumptions for other miscellaneous hydro generation, and water supply projects. The list is not intended to be all-inclusive; it simply enables a reasonable assumption of the order of magnitude of loans and their timing to be developed.

The estimates are generally based on preliminary costs developed and presented at the Southeastern Conference in Skagway in October, 1974. Estimated project costs are of course very broad. Costs have been escalated to the various projected schedules using the escalation rates shown in Table A. In this table the cost of a typical 15,000 kW diesel installation, with 6% financing and coming on-line in January 1980, is compared to a similar hydro installation assuming both 6% and 3% financing. As can be seen the cost of power from such a new hydro installation with 3% financing is about one-half of the diesel costs (29.5-mills/kWh versus 56.6 mills/kWh). As shown graphically in Table B, the cost differential becomes significantly more marked with time since the major cost of the hydro is the uniform debt service, while the principal cost of the diesel generation is fuel which can be assumed to continue to escalate.

To develop an estimate of revolving loan fund requirements over the next ten years or so, schedules have been developed in Table C, for a typical hydroelectric installation, assuming average and accelerated programs. The average schedule assumes that an FPC license application can be prepared (incomplete) in 8 or 9 months and it will take two years for receipt of the license (this is currently typical). This shows that from the beginning of project investigations it takes six years for the project to be completed. The accelerated schedule assumes that the FPC license will be received in 18 months after application (which is optimistic), and that other items of work are accelerated. It results in shaving a year off the schedule so that the project would be completed in five years. In either case it is essential that access road construction starts about two years ahead of receipt of the FPC license; if not at least one, and possibly two, more years would be added to the schedule. Since the hydrogeneration is needed by all utilities now, while the earliest practicable date for completion is generally the end of 1980, it is essential that project investigations and the related financing proceed immediately. Hence there is great urgency for passage of the Bill creating a loan fund.

STATE OF ALASKA
WATER RESOURCES REVOLVING LOAN FUND
ESTIMATE OF FUND REQUIREMENT

A proposed projected schedule for various projects, assuming about a 6% annual electrical load growth, is shown in Table D. The estimated requirements from the loan fund, including investments less debt service repayment, are shown in this table. As can be seen by about 1985 the loan fund will have accumulated loan amounts, less debt service repayment, totalling about \$300,000,000 which would increase to more than \$400,000,000 some two years later. Prior to royalties being received from the North Slope Oil (1977) the loaned amounts would add up to about \$23 million. Large commitments occur in 1979 and 1980 (\$76 and \$79 million) which are not exceeded on annual basis again until 1986.

Table E demonstrates the effect on the loan requirements of a schedule delayed so that loans from the fund are limited until 1977. The only expenditures incurred during the next three years would be those for completion of the Lake Silvis Plant, construction of the Blind Slough Project Expansion, and investigations and FPC licensing of other projects, for a total of about \$9 million. Of this the costs of project investigations and FPC licensing would be less than \$4 million. The estimated cumulative loan amounts less debt service requirement from Tables D and E (proposed, and delayed schedule) are shown in Table F.

The additional cost of the delayed schedule compared to the proposed schedule is shown in Table G, based on 1975 dollars. As can be seen the delay will result in Ketchikan and Sitka having to install additional diesel generation, and an overall increase in costs to the various municipalities of about \$16 million. Obviously it just makes good economic sense for the State to budget the additional \$14 million expenditures over the next three years for the loan fund, even if it had to borrow it, rather than the municipalities incurring an additional expenditure of \$16 million if the program is delayed.

WATER RESOURCES REVOLVING LOAN FUND

COMPARISON OF ANNUAL COSTS OF TYPICAL
15,000-KW DIESEL AND HYDROELECTRIC INSTALLATIONS
COMING ON-LINE IN JANUARY 1980

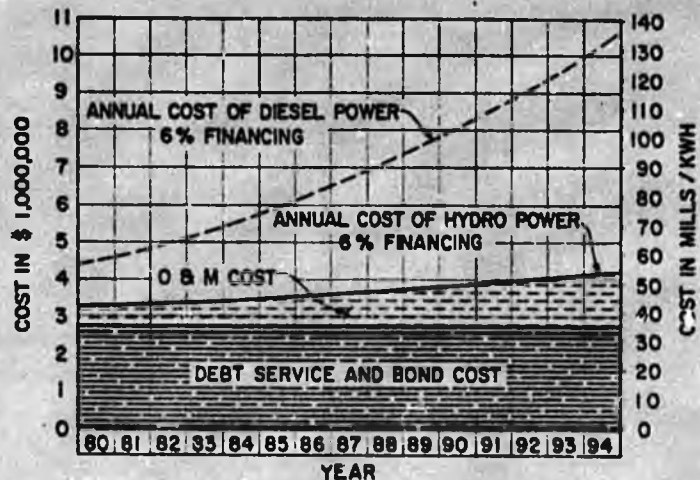
	<u>Diesel Installation</u>	<u>Hydroelectric Installation</u>	<u>Hydroelectric Installation</u>
Dependable Capacity, kW	15,000	15,000	15,000
Average Annual Energy Generated, kWh	78,000,000	78,000,000	78,000,000
Estimated Investment Cost per kW	\$524	\$2,600	\$2,487
Total Investment Cost	\$ 7,860,000	\$39,000,000	\$37,300,000
Annual Costs:			
Debt Service and Bond Cost	\$ 668,000	\$ 2,769,000	\$ 1,753,000
Operation and Maintenance	470,000	546,000	546,000
Fuel Costs at 42 Mills/kWh	<u>3,276,000</u>	-	-
	\$ 4,414,000	<u>\$ 3,315,000</u>	<u>\$ 2,299,000</u>
Cost of Power, Mills/kWh	56.6	42.5	29.5

ASSUMPTIONS:

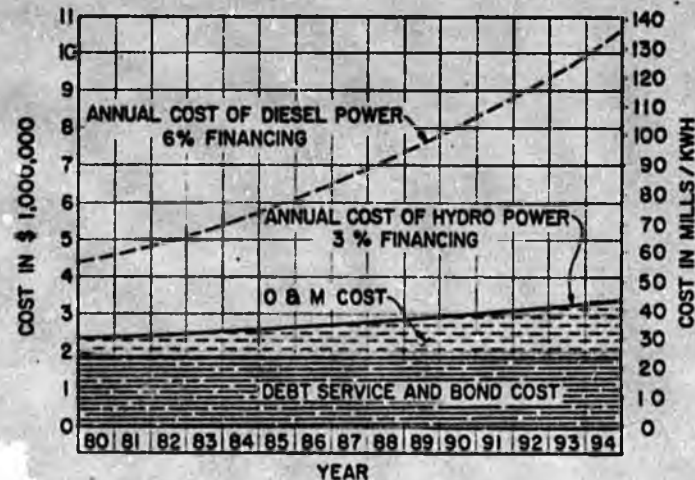
Project Completion	Jan. 1980 (Bid July 1978)	Jan. 1980 (Bid Apr. 1977)	Jan. 1980 (Bid Apr. 1977)
Escalation for Capital Investment	7%	1974=20%; 1975=10%; 1976=8%; 1977& Beyond = 7%	1974=20%; 1975=10%; 1976=8%; 1977 & Beyond = 7%
Escalation for O&M Cost	7%	7%	7%
Escalation for Fuel Costs	1974-80=10%; and Beyond = 7%	-	-
Financing	6%, 25 Years	6%, 50 Years	3%, 50 Years
Bond Costs as % of Investment Cost	0.7%	0.7%	0.7%
O&M Costs as % of Investment Cost	5.4%	1.4%	1.4%

WATER RESOURCES REVOLVING LOAN FUND

COMPARISON OF COST OF POWER FOR TYPICAL
DIESEL AND HYDRO INSTALLATION

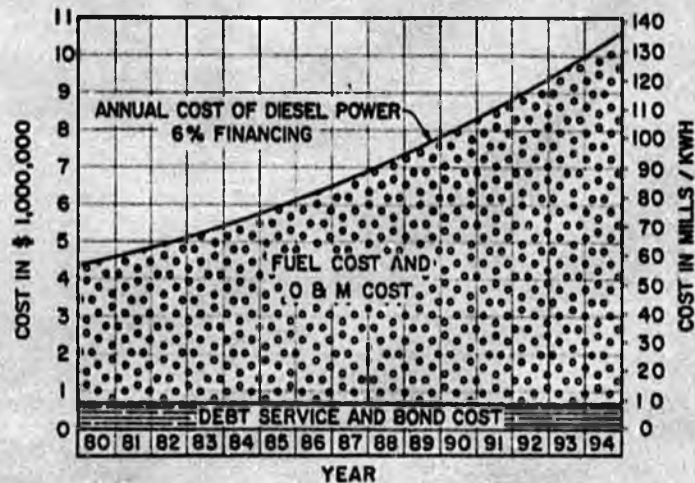


Cost of Power, Jan. 1980 = 42.5 Mills / kWh



Cost of Power, Jan. 1980 = 29.5 Mills / kWh

15,000 KW HYDROELECTRIC INSTALLATION



Cost of Power, Jan. 1980 = 56.6 Mills / kWh

15,000 KW DIESEL INSTALLATION

WATER RESOURCES REVOLVING LOAN FUND
TYPICAL SCHEDULE FOR HYDROELECTRIC PROJECT CONSTRUCTION

AVERAGE SCHEDULE

Y E A R

ITEM OF WORK	1 (1975)	2 (1976)	3 (1977)	4 (1978)	5 (1979)	6 (1980)
Evaluation Report	-----					
FPC License Application		Prepare Incomplete	Apply Perfect Application	Receive License		
Feasibility Report		-----				
Final Design			Access Road	Major Equip.	Bid Drawings	Detail Drawings
Access Road			-----	-----		
Major Equipment				Order		Deliver Rotating Parts
Major Construction					-----	On-Line Dec. 1980
Transmission					-----	-----
ESTIMATED EXPENDITURES	\$100,000	\$300,090	\$3,000,000	\$5,500,000	\$14,700,000	\$16,300,000

ACCELERATED SCHEDULE

Y E A R

ITEM OF WORK	1 (1975)	2 (1976)	3 (1977)	4 (1978)	5 (1979)	6 (1980)
Evaluation Report	-----					
FPC License Application		Prepare Incomplete	Apply Perfect Application	Receive License		
Feasibility Report		-----				
Final Design		Access Road	Major Equip.	Bid Drawings	Detail Drawings	
Access Road		-----	-----			
Major Equipment			Order		Deliver Rotating Parts	
Major Construction				-----	-----	
Transmission				-----	-----	On-Line Dec. 1979
ESTIMATED EXPENDITURES	\$150,000	\$2,100,000	\$3,650,000	\$12,000,000	\$13,200,000	

WATER RESOURCES REVOLVING LOAN FUND

**BROAD ESTIMATE OF FUND REQUIREMENTS
BASED ON PROPOSED SCHEDULE**

PROJECT	ASSIGNED CAPACITY (M)	ASSIGNED ON-LINE DATE	ESTIMATED CAPITAL INVEST. \$1,000	ESTIMATED INVESTMENT REQUIREMENTS AND DEBT SERVICE REPAYMENT (), IN \$1,000														
				1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
SIXA																		
Green Lake	15,000	Dec. 79	31,100	100	2,100	3,650	12,000	13,200	(1,240)	(1,240)	(1,240)	(1,240)	(1,240)	(1,240)	(1,240)	(1,240)	(1,240)	
Blue Lake Unit 3	4,000	Dec. 86	4,300								200	300	1,600	2,000	(1,100)	(1,120)		
PETERSBURG - WANGTALA																		
Blind Slough	2,600	Dec. 77	4,100	600	1,750	1,750	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	
Thomas Bay, Stage I	12,000	Dec. 80	35,000	100	300	3,000	4,500	13,000	14,100	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	
Thomas Bay, Stage II	13,000	Dec. 87	64,100							200	300	4,600	7,200	24,400	27,000	(2,360)		
KEYPHEKAY																		
Lake Silvia Rehabilitation	2,100	Dec. 75	900	900	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	
Swan Lake	13,000	Dec. 80	39,900	100	300	3,000	4,500	13,200	14,800	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	
Lake Grace	20,000	Dec. 86	79,800							200	600	3,000	10,000	23,000	29,000	10,000	(3,190)	
SODIAK																		
Terror Lake, Stage I	12,000	Dec. 80	35,000	100	300	3,000	4,500	13,000	14,100	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	
Terror Lake, Stage II	3,000	Dec. 83	9,300					200	200	1,500	3,500	3,900	(370)	(370)	(370)	(370)	(370)	
Terror Lake, Stage III Diversions	13,000	Dec. 86	13,000								300	1,000	6,700	7,000	(600)	(600)		
NEPLAVATLA																		
Project A	3,000	Dec. 80	9,000	30	200	1,000	2,000	2,750	3,000	(360)	(360)	(360)	(360)	(360)	(360)	(360)	(360)	
Project B	3,000	Dec. 88	13,300							100	400	2,000	3,500	4,300	5,000			
ASSIGNED MISC. HYDRO. PROJECTS																		
Project A	13,000	Dec. 81	42,700	100	150	150	3,200	4,800	16,300	18,000	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	
Project B	13,000	Dec. 87	64,100							200	300	4,800	7,200	24,400	27,000	(2,360)		
ASSIGNED MISC. WATER SUPPLY PROJECTS																		
Project A		Dec. 80	30,000			300	2,000	13,300	14,200	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	
Project B		Dec. 83	30,000							300	2,000	13,300	14,200	(1,200)	(1,200)	(1,200)	(1,200)	
SUBTOTAL INVESTMENT REQUIREMENTS				310,000	2,100	5,100	15,650	32,700	73,650	78,700	19,700	4,800	12,300	33,000	64,100	90,300	68,300	3,000
SUBTOTAL DEBT SERVICE REPAYMENT				(68,343)	-	(35)	(33)	(193)	(193)	(1,433)	(7,393)	(9,103)	(9,103)	(9,473)	(9,473)	(10,673)	(12,433)	(19,763)
CUMULATIVE LOANED AMOUNT LESS DEBT SERVICE REPAYMENT				421,653	2,100	7,165	22,980	35,483	130,940	208,203	220,310	218,203	219,600	143,123	299,750	379,373	434,420	421,433
					1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988

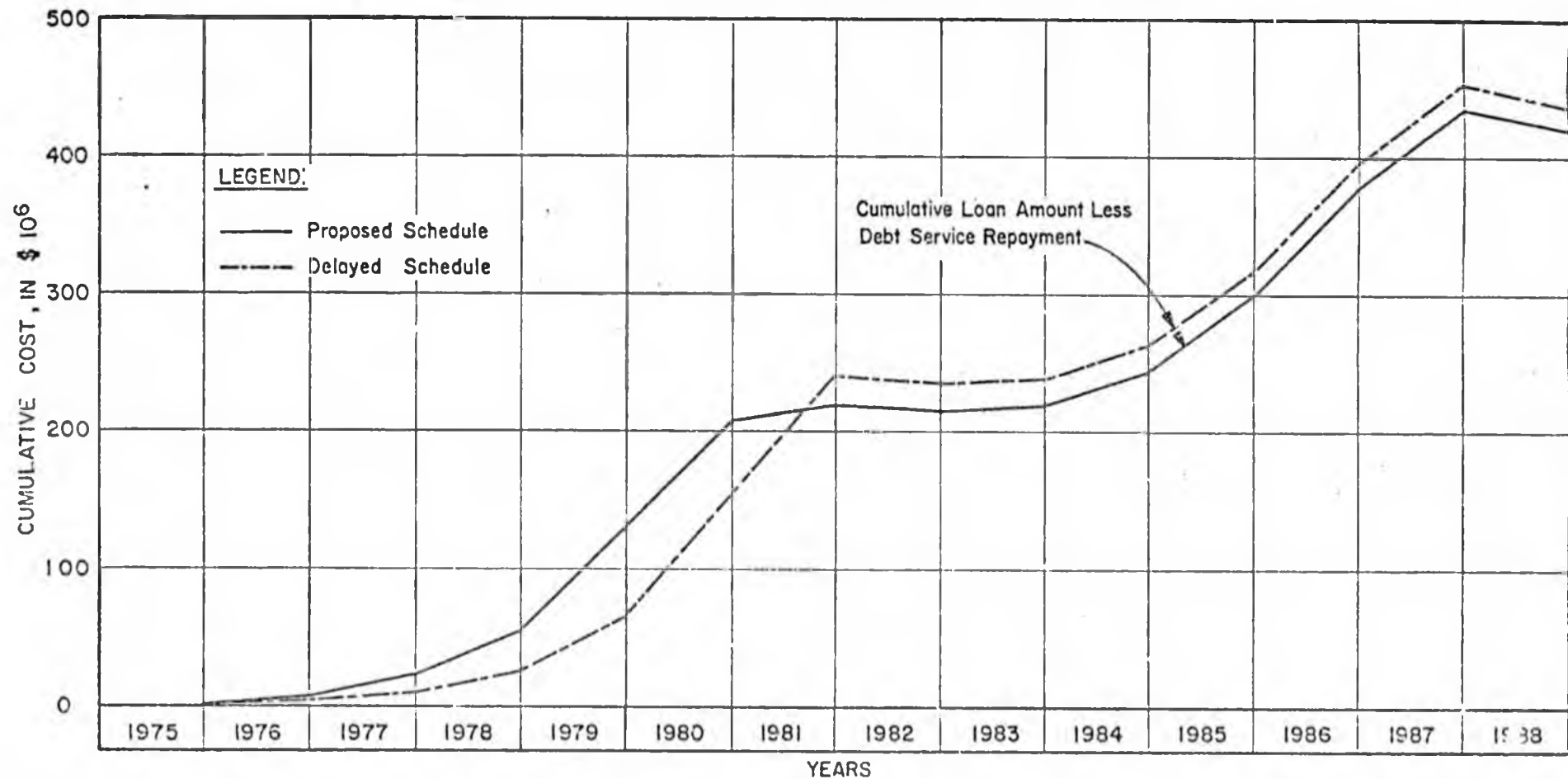
WATER RESOURCES REVOLVING LOAN FUND

BROAD ESTIMATE OF FUND REQUIREMENTS
BASED ON DELAYED SCHEDULE

PROJECT	ASSUMED CAPACITY KW	ASSUMED ON-LINE DATE	ESTIMATED CAPITAL INVEST. \$1,000	ESTIMATED INVESTMENT REQUIREMENTS AND DEBT SERVICE REPAYMENT (), IN \$1,000														
				1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
<u>SITKA</u>																		
Green Lake	15,000	Dec. 81	35,600	150	300	250	2,300	4,900	13,700	14,000	(1,420)	(1,420)	(1,420)	(1,420)	(1,420)	(1,420)	(1,420)	
Blue Lake	4,000	Dec. 86	4,500								200	500	1,800	2,000	(180)	(180)		
<u>PETTERSBURG - FRANGELL</u>																		
Blind Slough	2,600	Dec. 77	4,100	600	1,750	1,750	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	(160)	
Thomas Bay, Stage I	12,000	Dec. 81	37,500	100	300	250	3,050	4,800	13,900	15,100	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	
Thomas Bay, Stage II	15,000	Dec. 87	64,100								200	500	4,800	7,200	24,400	27,000	(2,560)	
<u>KETCHIKAN</u>																		
Lake Silvia Rehabilitation	2,100	Dec. 75	900	900	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	
Swan Lake	15,000	Dec. 81	42,700	100	300	250	2,950	4,800	16,300	18,000	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	
Lake Grace	20,000	Dec. 86	79,800								200	800	5,000	10,000	25,000	29,000	(3,150)	
<u>KODIAK</u>																		
Terror Lake, Stage I	12,000	Dec. 81	37,500	100	300	250	3,050	4,800	13,900	15,100	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	
Terror Lake, Stage II	3,000	Dec. 83	9,300					200	200	1,500	3,500	3,900	(370)	(370)	(370)	(370)	(370)	
Terror Lake, Stage III	Diversions	Dec. 86	15,000								300	1,000	6,700	7,000	(600)	(600)		
<u>METLAKA</u>																		
Project A	3,000	Dec. 81	9,600	50	200	200	1,000	2,100	2,900	3,150	(380)	(380)	(380)	(380)	(380)	(380)	(380)	
Project B	3,000	Dec. 86	15,500								100	400	2,000	3,500	4,500	5,000		
<u>ASSUMED MISC. HYDRO. PROJECTS</u>																		
Project A	15,000	Dec. 81	42,700	100	150	150	3,200	4,800	16,300	18,000	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	(1,710)	
Project B	15,000	Dec. 87	64,100								200	500	4,800	7,200	24,400	27,000	(2,560)	
<u>ASSUMED MISC. WATER SUPPLY PROJECTS</u>																		
Project A		Dec. 80	30,000			200	2,100	13,900	14,200	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)	
Project B		Dec. 85	30,000							300	2,000	13,500	14,200	(1,200)	(1,200)	(1,200)	(1,200)	
SUBTOTAL INVESTMENT REQUIREMENTS				322,900	2,100	3,300	3,300	17,650	39,900	91,400	85,050	4,800	12,500	35,000	64,100	90,300	63,500	5,000
SUBTOTAL DEBT SERVICE REPAYMENT				(84,675)		(35)	(35)	(195)	(195)	(195)	(1,395)	(9,615)	(9,615)	(9,985)	(9,985)	(11,185)	(11,965)	(20,275)
COMPLATIVE LOANED AMOUNT LESS DEBT SERVICE REPAYMENT				438,225	2,100	3,365	8,630	26,085	65,790	156,995	240,650	235,835	238,720	263,735	317,850	396,985	453,500	438,225

NOTE: If the delayed schedule is adopted it would be necessary for cities such as Ketchikan and Sitka to provide new diesel generation to meet anticipated load demands. It is estimated that Ketchikan will need an additional 6,400 kW diesel by January 1980 and Sitka will need a 4,000 kW diesel by January 1981.

WATER RESOURCES REVOLVING LOAN FUND
BROAD ESTIMATE OF FUND REQUIREMENTS



Proposed Schedule	2.1	7.2	23.0	55.5	130.9	208.2	220.5	216.2	219.6	245.1	299.8	379.4	436.4	421.7
Delayed Schedule	2.1	5.4	8.6	26.1	65.8	157.0	240.7	235.8	238.7	263.7	317.9	397.0	435.5	438.2
	0.6	2.1	3.6	← Cumulative Cost of Project Investigations and FPC Licensing Only										

CUMULATIVE LOANED AMOUNT LESS DEBT SERVICE REPAYMENT, (IN \$ 1,000,000)

ADDITIONAL COST OF DELAYED SCHEDULE
FOR HYDROELECTRIC PROJECT CONSTRUCTION

Capital Investment:	
Hydroelectric Projects	\$ 4,886,000
Additional Diesel Plants	2,204,000
Cost of Fuel for Additional Diesel Generation	<u>8,606,000</u>
TOTAL ADDITIONAL COST	\$15,696,000

- NOTE: 1. Based on 6% borrowing rate.
2. Based on 1975 dollars (Present Value).
3. Additional Diesel: Ketchikan - 6,400 kW; Sitka - 4,000 kW.
4. Capital Investment = Loaned Amount Less Debt Service Requirements, 1975 through 1988.

Page 1 line 27 "15%" to "5%"

Page 3 line change "3" to "6"

change "hydro electric" to "electric"

Page 2, line 2 change \$250,000,000 to \$100,000,000

Committee Report spelling out the
relationship between 17' and HB 329
if it should pass

5%
2%

461711

Send HCRFF &
H fin 3/19/75

Natural Resources (Kathy Jackson 2416)
Rep. Terry Goodson

Notified

Present

Testified

X
+