

ALASKA STATE LEGISLATURE

SENATE STATE AFFAIRS COMMITTEE

SENATOR VIC FISCHER, CHAIRMAN

POUCH V, JUNEAU 99811

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SENATE STATE AFFAIRS COMMITTEE

COMMITTEE REPORT

ON

THE SUSITNA PROJECT

SENATE BILLS 68, 69, 70, AND 71

MARCH 24, 1983

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1983

Senate State Affairs Committee
Committee Report -- the Susitna Project
Senate Bills 68, 69, 70, and 71

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The Senate State Affairs Committee held four days of hearings on hydroelectric development and the proposed Susitna project. Testimony on three days was primarily from witnesses invited to address specific issues. In an all-day public hearing in Anchorage, the views of more than thirty members of the public were heard. The focus of the hearings was on economic and fiscal concerns within the province of the committee.

Summary of Principal Findings

1. Alaska's oil revenues have fallen below anticipated levels, making uncertain the state's ability to fund the Susitna project.
2. Falling oil prices have also affected the net benefits of the Susitna project, and the Acres determination that the project is economically feasible may no longer be supportable.
3. Other questions, including whether Susitna would be eligible for tax-exempt bonds, remain to be answered.
4. As the federal construction license is not expected before 1986, three years remain in which to reevaluate the project's economics and financing and to gather additional data before making a decision to construct.
5. Other APA hydro projects have experienced significant cost increases. Power projects in Washington State are facing default because of poor planning and management; this is expected to result in a tighter bond market for new projects like Susitna.
6. Power sales contracts are a prerequisite for the construction of Susitna. Utilities are reluctant to sign take-or-pay contracts until they have assurance that the price of this power will be competitive with alternatives.
7. The APA is continuing to assess Susitna and the alternatives, with a report expected in May.

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8. The public, while supporting hydropower generally, is concerned about the the costs of Susitna power, both in power rates and in opportunity costs.

Bills Before the Committee

Of the bills currently before the committee, SB 68, SB 69, and SB 71 would authorize construction of Susitna and would approve a finance plan for the project consisting of a state appropriation of \$2.3 billion in 1983 dollars to be dedicated through a constitutional amendment and revenue bonds of the APA backed by the general obligation of the state. SB 70, an alternative financing bill, would provide for power project funding through per capita "energy dividends."

Background of The Proposed Susitna Project

The Susitna project is a two-dam (Watana and Devil Canyon) hydroelectric project proposed by the Alaska Power Authority (APA) to provide power to the railbelt area. As planned, the Watana phase (1020 MW) would come on-line in 1993 and the Devil Canyon phase (600 MW) in 2002.

A 2½-year feasibility study was conducted by Acres American at a cost to the state of \$41 million. A \$1 million study of railbelt power alternatives was conducted concurrently for the Governor's office by Battelle.

The Acres study concluded that the project was technically viable, environmentally acceptable, and economically feasible. The determination of economic viability was based on a number of assumptions, many of which have changed since the completion of the study last year.

The APA Board of Directors, in making its recommendations to the State of Alaska last April, noted that while the project offers a potential for long-term benefits, realizing those benefits will depend on skillful management, proper timing, and assumptions about an uncertain future holding true. They concluded, "The Authority believes it is premature to make any¹ commitment, at this time, to actual project construction."

The capital costs of the project are estimated at \$5.1 billion 1982 dollars or \$12.5 billion nominal dollars at 7% inflation. Acres concluded that in order for power in the early years of the project to be priced competitively against thermal alternatives, a state appropriation of \$2.3 billion (later revised to \$1.8 billion)² in 1982 dollars would be required.

This appropriation, variously referred to as an equity investment, state financing, grant, or subsidy would not be repaid to the state's treasury; instead, benefits in terms of jobs, economic development, and state electric rates would be expected to accrue to Alaskans.

Last year, the legislature authorized work to be done on project design and a license application to be submitted to the Federal Energy Regulatory Commission (FERC), and appropriated \$25.6 million. The engineering firm of Harza-Ebasco has been selected for the design work; the FERC application was filed on February 28.

Financing of Hydro Projects in Alaska

The Energy Program for Alaska (AS 44.83.400), adopted in 1981, provides that power projects developed by the Alaska Power Authority are to be funded largely through cash grants from the general fund, with supplemental funds coming from the sale of revenue bonds by APA. The stated purpose of this state participation in the funding of power projects was to convert a portion of Alaska's one-time oil wealth into a renewable resource with long-term benefits to Alaskans. In addition, state funding of such capital-intensive projects would help ensure that consumer costs in the projects' early years would be competitive with the costs from alternative (oil or gas) power sources.

The Energy Program for Alaska currently includes four major hydro projects that are either in operation or under construction. These are Solomon Gulch, Swan Lake, Tye Lake, and Terror Lake. So far, \$270 million has been appropriated by the Legislature for direct funding of these projects. In addition, the APA has borrowed in the form of short-term notes \$200 million in interim financing to supplement the financing of these projects.³ The next major projects anticipated to be added to the Energy Program for Alaska are Bradley Lake and Susitna.

A characteristic of the Energy Program for Alaska is that each project must pay a proportionate share of the combined outstanding debt. This means additional debt cannot be added to the system in a proportion higher than the existing ratio of debt to state funding without raising all rates throughout the system.

Under this system there must be sufficient state revenues available if hydroelectric projects are to be successfully financed in Alaska. As 88% of the state's income comes from oil revenues, the future of the state, and its hydro development plans, is inextricably tied to the price of oil on the world market.

Future State Oil Income

There is now great uncertainty concerning the direction in which oil prices, which have fallen significantly in the last year, are heading. While some analysts believe that prices will stabilize in the long-run and continue to escalate in real terms, others anticipate a serious drop in the short-term that will only very gradually return to price levels experienced during the last decade.⁴

To demonstrate the expected severe decline in state revenues, the Institute of Social and Economic Research compared their 1983 preliminary projections of petroleum revenues with projections they made just two years ago.⁵

For FY 84, their former projection of \$5.6 billion (nominal dollars) compares to the new projection of \$3.2 billion. For FY 93 (the year in which the Watana phase of Susitna could be expected to come on-line) the 1981 projection of \$13.8 billion compares with a new projection of just \$4.0 billion.

The Department of Revenue and the Legislative Finance Division have projected similar revenue declines.⁶ Alaska's peak oil revenue year appears to have already passed.

Effect of Oil Prices on Susitna

Lower oil prices will affect the Susitna project in at least four major ways:

- 1) Lower state revenues may be insufficient to pay for Susitna.

Reduced state income may mean that there are insufficient state funds to pay for the state's portion of Susitna.

The Legislative Finance Division has compared projected revenues to funds available for⁷ capital projects and to funds needed for Susitna. They identify just \$2.4 billion in nominal dollars available for all capital projects between 1985 and 1993, under current law, after subtracting funds needed for the operating budget. This compares to the \$3.5 billion alone that would be required for Susitna under SB 68 and to the \$11.7 billion that has been identified for other planned capital projects. Even if the law were changed so that both permanent fund inflation-proofing and dividends were repealed, the analysis shows that there would still be a total of only \$6.6 billion available for capital projects in the same time

period.

2) Less state spending and reduced economic activity decreases the demand for power.

Battelle, in revising its electricity forecasts for the railbelt last year, adjusted its forecasts downward to 'reflect this effect.' The previous peak demand projected for 1995, for example, was 993 MW in the moderate case; the revised peak demand is 791 MW for the same year.

3) Lower inflation rates may result in higher financing costs.

If interest rates remain high, the discount rate--the difference between inflation and interest rates-- will increase. Higher discount rates will result in higher real costs for bonds.

4) Thermal alternatives to Susitna will be cheaper than anticipated.

Less expensive thermal alternatives (oil, gas or coal) reduce the net economic benefits of Susitna. The financial feasibility of Susitna would also be affected, as more state funding would be required to assure the marketability of Susitna power. The House Research Agency has studied the effect of lower natural gas prices on Susitna feasibility. The recent gas contracts signed by Enstar Natural Gas Company and the Department of Revenue's most-recent oil price escalation forecast were used as the basis for comparison with the Acres feasibility analysis. The conclusion was that if oil prices correspond closely to the Department of Revenue's forecast, the price of power from gas generation would be 38% less in 1994 than projected by Acres, and 50% less in 1996. This means that, in order for the price of power from Susitna to be at a marketable rate, an additional \$600-700 million in state grant funds, above the \$1.8 billion projected by Acres, would have to be appropriated to the project.

Key Feasibility Factors

The real discount rate and fuel price escalation are the key feasibility factors that must fall within defined limits for Susitna to be an economically feasible long-term source of railbelt power. Acres, in performing the feasibility analysis, made assumptions on future values of these factors based on the information available at the time of the study. Acres performed a sensitivity analysis,¹⁰ that

showed the net economic effect of changes in these assumptions.

Acres assumed a base case discount rate of 3%, and the APA continues to assume that Susitna financing can be obtained at that rate. Acres concluded that Susitna was viable only with a discount rate of less than 4.2%. A discount rate of 5%, the sensitivity analysis showed, would result in a negative net benefit of over \$500 million. The current discount rate, according to Data Resources Inc., is more than 6%.¹¹ Even that favorable rate assumes tax-exempt financing.

It is not clear whether Susitna bonds will be eligible for tax-exempt status. According to the APA, the IRS has indicated that the "two-county rule" would prohibit tax-exemption, unless power sale contracts were something other than take-or-pay. The APA has identified alternative methods of obtaining tax-exempt status, including granting the APA authority to retail power (by-passing the utilities) or restructuring the existing utilities.¹²

The fuel escalation rate assumed by Acres in its base case was 2.6% above inflation to 2000 and 1.2% to 2010. An escalation rate less than 1%, according to the APA, would result in negative net benefits. A zero percent escalation rate would result in a negative net benefit of over \$1 billion.

Other critical factors in the feasibility analysis include load forecasts, capital costs and capital cost escalation, and base fuel costs.

There is now considerable uncertainty regarding oil and gas price trends. Other elements of the feasibility analysis are also in flux. The APA is currently reevaluating the assumptions for its Susitna update, which will be reviewed by the Office of Management and Budget. Much of this information can be fed into computer models, so that project feasibility may be continually monitored.

Susitna Financing Plan

The APA is required by statute to submit a finance plan for each proposed project. Acres has prepared a report for the APA, "Task 11: Financing Options," which is the first step towards a finance plan for Susitna.

The financing options suggested by Acres, and reviewed by the APA's financial advisors, involve state appropriations of between \$1.4 and \$1.8 billion (1982 dollars) between 1984 and 1989, with the balance of funding coming from revenue bonds. Two of the four options involve state appropriations guaranteed through a constitutional

amendment.

Among the recommendations of APA's financial advisors are that prior to major state expenditures or the sale of any bonds, participating utilities sign definitive contractual commitments, an updated economic and financial analysis of the project be completed, and the question of whether or not tax-exempt bonds can be sold be answered.

The advisors stressed that bonding, to the greatest degree possible, should be with revenue bonds, backed by the moral obligation of the state, rather than relying upon general obligation (G.O.) bonds. They said that G.O. bonds would, in any case, be of limited usefulness, as they will be marketable only if their maturity dates fall within the state's short oil revenue curve, and the state can only incur an additional \$565-\$900 million in G.O. debt without negatively affecting its bond rating. The advisors also recommended that the state appropriation be made first, before any bonds are sold.

Cost History of Other Power Projects

The four hydro projects of the APA that are either in operation or under construction have experienced significant increases in construction cost estimates between the feasibility and actual construction stages. These have varied from 54% for Swan Lake to 218% for Tye¹³.

The committee specifically reviewed the Tye Project. Its wholesale power price, even with the state paying 70% of the capital costs, will be much higher than the cost of diesel power for Petersburg and Wrangell. Problems identified were major changes in project design, poor initial cost estimates, poor review of cost estimates, poor pricing analyses, hasty decisions made without the benefit of accurate data and analysis, overcapacity resulting in under-utilization, and mid-project statutory changes.

In response to committee concerns, APA staff testified that they expect to gain better control of project costs in the future through more professional and complete engineering work, closer supervision by the APA, and a requirement for independent cost estimates.

Other lessons may be learned from the experiences of the Washington Public Power Supply System (WPPSS), as explained by Eileen Titmuss, a bond analyst for Drexel, Burnham, and Lambert in New York City.

In WPPSS, Washington created an agency to enter into long-term power sales contracts with utilities to build nuclear plants. The bond market believed that the projects were backed by the full faith and credit of the U.S.

Government, and the bonds found a generous market acceptance. In truth, the real security behind the bonds was the ability of the Bonneville Power Administration to raise rates. When costs of the nuclear plants rose and power demand proved to be less than had been projected, two of the five plants had to be mothballed and a substantial rate increase was proposed. Participating utilities balked at the increase, claiming they simply could not raise the required revenues, despite take-or-pay contracts.¹⁴ This has resulted in a revenue shortfall that may soon force WPPSS into defaulting on these bonds.

The lessons of WPPSS that could be applied to Susitna include knowing true and full project costs, having realistic demand forecasts, requiring the utilities to participate in project investment, providing for rate-payer education and involvement, and close state monitoring of agency management and contracting.

The bond market, after WPPSS, is expected to be tighter because of competition for funds among other large-scale projects. In addition, bond purchasers can be expected to take a harder look at both the sanctity of power sales contracts and the economic assumptions underlying project feasibility analyses.

Power Sales Contracts

Power sales contracts help assure the marketability of a project's power. It is standard industry practice to obtain power sales contracts prior to beginning project construction.¹⁵

Until now, the APA has not followed this practice, and utilities have been under no obligation to purchase power from its completed projects. In the Ketchikan case, the power sale contract that was eventually signed allows the utility to cease purchasing Swan Lake power if it becomes higher priced than the diesel alternative.

The APA is currently in the process of developing a standard take-or-pay contract, requiring utilities to purchase the power regardless of its cost.

Utilities are understandably reluctant to sign such contracts if the price of project power may cost more than the alternatives. This problem has been most apparent in the case of Petersburg and Wrangell, where it appears that the power from Tyee Lake will cost significantly more than continuing to generate with diesel.

Utilities are also reluctant to sign take-or-pay contracts for power under the Energy Program for Alaska because of flaws in the legislation.¹⁶ One concern is the

provision that if \$5 billion is not appropriated for energy projects by 1986, all projects must pay a 10% return on state investment each year. Further, because of the "pooling" nature of the Energy Program for Alaska, utilities are responsible for paying a proportionate share of any new debt that enters the system and have no control over rate increases to meet that debt. This makes it impossible to predict rates or ensure price stability.

The APA has recommended, the Federal Energy Regulatory Commission will require, and the Governor has insisted that construction not begin on Susitna without first having rigorous power sales contracts in place. The utilities are reluctant to make commitments and have indicated that they will not do so until they have a better assurance that Susitna costs will be competitive with alternatives.

All major railbelt utilities were represented at the Anchorage hearing, and all testified that they must have more information about the level of state funding and the possible price of power before they will be willing to negotiate take-or-pay contracts.

Although the Alaska Public Utilities Commission has no jurisdiction over the APA, it does have authority to review the power supply contracts of regulated utilities to ensure reasonable consumer rates. It would likely become involved if the reasonableness of Susitna prices came into question.

Information and Work Schedule

APA's Susitna feasibility update will not be completed until mid-May, and will include, besides economic feasibility factors, information on alternatives including Cook Inlet gas, North Slope gas, coal, and Chakachamna hydro.

The Administration indicated that it will be prepared, also in May, when oil market fluctuations may have steadied, to discuss the state's ability to finance Susitna.

A license application was filed with FERC on February 28, 1983. FERC approval for construction is not expected until December 1986, although FERC hopes to expedite the approval process.

The APA Board of Directors, meeting March 14, altered their request for funding for the Susitna project from the \$37 million recommended in the Governor's preliminary FY 84 capital budget to \$22 million. This smaller amount of money will enable them to continue with the work required for FERC licensing, but will not provide for detailed design engineering. The reason given for the decision was to request funds only as needed; as FERC licensing is expected to take three years, it is not necessary to proceed with

detailed design work during FY 84.

The APA is also studying the possibility of lowering the height of the Watana Dam. Preliminary indications are that dropping the dam height by 85 feet could save 10% of the Watana construction costs for 12% less annual energy, while a drop of 185 feet could save 20% of the costs for 26% less energy. The intent of such a design change would be to enhance the financial viability of the project by requiring less appropriation of state funds. Although the project cost would decrease, the per unit cost of energy would increase.

Conclusions

The two major outstanding questions regarding the viability of the Susitna project concern its economic and financial feasibilities.

Economic feasibility relates to the project's net benefits, compared to the alternatives for providing electricity to the railbelt. The study completed by Acres in 1982 concluded that at that time the project appeared feasible. Since that time, a number of fundamental assumptions have changed and remain unsettled. An updated feasibility analysis is required to determine if Susitna remains the most economic choice.

This feasibility analysis must realistically consider the alternatives to Susitna. These include Cook Inlet gas, North Slope gas, coal, other hydro including Chakachamna, and conservation. Each of these alternatives has so far received far less consideration than the Susitna option.

Financial feasibility relates to whether, regardless of the project's economic feasibility, the project can be financed so that the price of power will be at a marketable rate. The Acres analysis showed that a state appropriation of at least \$1.8 billion (in 1982 dollars) would be required to keep the price of power competitive. Unless Alaska is both willing and able to pay this price, the project will not be financially feasible, utilities will not contract to purchase Susitna power, and project bonds will not be marketable.

A workable finance plan for Susitna needs to answer at least three questions:

- (1) How much does the state need to appropriate to Susitna to assure that its power will be initially priced no higher than the alternatives?
- (2) Will state revenues be sufficient to make such an appropriation without negatively impacting other state needs?
- (3) Can a mechanism be developed that

would either guarantee the availability of the necessary funds or provide for the accumulation of all necessary funds prior to bonding and construction?

The finance plan proposed in the legislation before the committee does not answer these questions. The state revenues available for Susitna have not been determined, the tax-exempt status of Susitna revenue bonds is uncertain, the degree to which the state can safely obligate to back the revenue bonds is unknown, and other elements of a successful finance plan are absent. Accordingly, the basis for acting on the bills is not currently available.

A public vote would be desirable to assure public acceptance of both project subsidies and future power rates. Such a vote requires a realistic and workable finance plan, and a question for the voters with specific information as to total project costs and levels of state funding.

The FERC license for Susitna is not expected before late 1986, so a construction decision is not required at this time.

NOTES

1. Letter from Charles Conway to Governor Hammond, April 26, 1982.
2. A distinction is made between economic feasibility and financial feasibility. Economic feasibility relates to whether a project is the lowest-cost option in the long-run. Financial feasibility relates to the ability to finance a project in such a manner that the price of power is competitive with alternatives. A project might thus be economically feasible without being financially feasible.
3. The interim financing is divided between Tye Lake (\$50 million), Swan Lake (\$35 million), and Terror Lake (\$115 million).
4. Recent forecasts are noted in "Alaska Energy Planning Studies," by Arlon Tussing and Gregg Erickson, Nov. 1982. The authors note that, while the government agency forecasters referenced by Acres project increases in real oil prices, recent internal forecasts by petroleum producers assume real declines through 1985 and a long-term trend between a level nominal-dollar and a level constant-dollar trajectory. The significance of varying forecasts is not whether one may be more reliable than another but that there is neither consensus nor certainty.
5. "Comparison of ISER MAP Model Projections Prepared in 1981 for Battelle Railbelt Study and Preliminary Projections Prepared in 1983," prepared for the Alaska Senate State Affairs Committee by Scott Goldsmith and Gunnar Knapp, Feb. 1983.
6. All revenue projections are simply projections, and actual revenues could vary widely. The Department of Revenue currently bases its projections on the 30th percentile of probability, which means that there is a 70% chance that revenues might be higher than projected. With the recent drop in OPEC prices, however, the 30th percentile projections are considered most likely.
7. "Funds available for Capital Projects," memo to Senator Vic Fischer from Milt Barker, Fiscal Analyst, Feb. 21, 1983.
8. "Railbelt Electric Power Alternatives Study," Battelle, Volume 1, Dec. 1982, p. xv.

9. "Comparison of Susitna and Natural Gas Power Costs," memo to Rep. Hugh Malone from Jack Kreinheder, Research Staff, March 3, 1983
10. Plate 24, "Sensitivity Analysis," Acres summary report, 1982
11. Data Resources U.S. Review, Feb. 1983
12. APA Susitna "Checklist," Table 1, transmitted to Governor Sheffield Jan, 17, 1983
13. "Cost History of APA Hydro Projects", Chart 5 accompanying transcript of testimony by Gregg Erickson before the Senate State Affairs Committee, March 1, 1983
14. In Oregon, the courts have ruled that contracts binding municipal utilities to WPPSS debts are illegal. At question is whether the utilities had the right to make such commitments without a vote of the ratepayers.
15. Letter to Charles Conway from Eric Yould, October 11, 1982
16. "Marketing of Project Power Under the Energy Program for Alaska," memo from Myles Yerkes to Eric Yould, Dec. 28, 1982

WITNESSES WHO TESTIFIED BEFORE THE COMMITTEE

| <u>WITNESS</u> | <u>AFFILIATION</u> |
|---------------------|--------------------------------------|
| Governor Sheffield | Administration |
| Eric Yould | APA |
| Ray Benish | APA |
| William Wakefield | FERC |
| Tom Singer | Erickson & Associates |
| Ernie Haugen | Thomas Bay Power Commission |
| Richard Underkofler | City of Petersburg |
| Kenneth Mason | City of Wrangell |
| George Matz | OMB |
| Ernie Mueller | Environmental Services, Limited |
| Kent Wick | Homer Electric Association |
| Bob Mellin | Self |
| Mike Kelly | Golden Valley Electric Association |
| Jeff Bohman | Self |
| Harold Pomeroy | Self |
| Jeff Eustis | Self |
| Bob Penney | State Chamber of Commerce |
| Mano Frey | Laborers' Union Local 341 |
| Joseph Henri | Resource Development Council |
| Jim Ayres | Self |
| Paul Lowe | Self |
| Larry Underwood | Self |
| Wayne Beckwith | Anchorage Chamber of Commerce |
| Budd Goodyear | Matanuska Electric Association |
| Tom Stahr | Municipal Light and Power |
| Lee Woreham | Susitna Power Now |
| Liz Gilbert | Chugach Electric Association |
| Sharon O'Dell | Self |
| Nancy Lee | Self |
| Mary Pat Haberle | Self |
| Keith Treseder | Self |
| Victor Mittasch | Self |
| Judy Zimicki | Northern Alaska Environmental Center |
| Jim Sykes | Self |
| George Skladal | Self |
| Doug Stark | Self |
| Ron Kuzek | Self |
| Mark Beltz | Self |
| Bill Holton | Self |
| Brian Boyd | Self |
| Earl Finkler | CSM |

| | |
|--------------------|------------------------------|
| Chuck Konigsburg | Self |
| Lisa Moorehead | Self |
| George Rogers | Self |
| Don Grimes | First Southwest |
| Steve McAleer | First Boston |
| Sterling Gallagher | John Nuveen |
| Tony Merritt | Acres American |
| Gervin Wernock | Acres American |
| Eileen Titmuss | Drexel Burnham Lambert |
| Gregg Erickson | Erickson and Associates |
| Lee Gorsuch | ISER |
| Milt Barker | Legislative Finance Division |
| Robert Heath | Department of Revenue |
| Harrison Call | RMI Pacific Northwest |
| Carolyn Guess | APUC |
| Dick Emmerman | OMB |
| David Rogers | Senate Advisory Council |
| Al Carson | DNR |
| Dennis Kelso | ADFG |

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SENATOR VIC FISCHER, CHAIRMAN

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March 10, 1983

Honorable Bill Sheffield
Office of the Governor
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Dear Governor Sheffield:

The Senate State Affairs Committee has completed extensive hearings on the proposed Susitna hydroelectric project. We appreciated your taking the time to share your thoughts on this project with us.

The inescapable conclusion of the hearings is that the precipitous drop in oil prices has substantially altered the economic foundations of the Susitna project. Unless an immediate and thorough re-evaluation is made, and new answers provided, Susitna may well change from its desired goal of being the high benefit keystone to future state development into an uneconomic white elephant with an appetite for state funds capable of destroying Alaska's economy for years to come.

It has become clear that action by you and your administration is critical before the project can move ahead, and before we will be in position to act knowledgeably on legislation pending before the Senate State Affairs Committee (SB 68, 69, 70, and 71). We trust that you will cooperate in providing the necessary information and answers.

A summary of the extensive information and analytical work presented at the hearings will be completed next week and will be presented with the meeting minutes and edited transcripts. The purpose of this letter is to share with you, immediately, some of the questions that have been raised so that they may begin to get the attention that they require.

Though most people favor hydroelectric power and Susitna, the crucial question now facing Alaska is, simply, how and whether the state can pay for the project. The economic and financial picture was

quite different a few years ago, when oil revenues were piling up and it appeared that we would have billions of dollars in "surplus" revenues to spend on Susitna. If we are to proceed, we must find new ways of financing the project that will not undermine the fiscal structure of the state.

The committee was told that falling oil prices will affect the Susitna project in four ways:

*First, state revenues will be lower, and the funds simply will not be available to appropriate the state's "equity" portion without sacrificing other needs. As Lee Gorsuch, of the Institute of Social and Economic Research, testified, it now looks as though our peak revenue year may well be past.

*Second, lower state revenues will result in less economic activity within the state, which will reduce the future demand for the project's power.

*Third, lower oil prices and reduced economic activity should result in a lower inflation rate, which may raise the real cost of project financing.

*Fourth, lower prices mean that the cost of the thermal alternatives to Susitna will be less.

To elaborate on the last point, a recent memo by the House Research Agency indicates that with lower than expected gas prices (as evidenced by the recent Enstar contracts) the Susitna project would need subsidies of an additional \$600-700 million in state appropriations, above the minimum \$1.8 billion projected by Acres, as necessary to simply make Susitna power marketable relative to the alternatives.

Given the projected revenue situation, an awareness seems to be emerging that the factors that made Susitna an economically positive project just a short time ago may no longer be present. These factors must be continually monitored from this time forward so that when the time is right, we will be in a position to go forward with Susitna. Some of these factors, as identified by OMB, are:

- load forecasts
- fuel prices
- capital costs
- the discount rate

All of these factors are now different from the assumptions made by Acres in evaluating Susitna eighteen months ago, and are still changing.

At this stage, we have identified some of the key issues and questions that now need to be addressed in order to proceed with decisions on Susitna. We need your help to deal with them.

1. FINANCING

The basic question is: is there, can there be, a workable

finance plan for Susitna? So far, the Alaska Power Authority has not presented a finance plan, only a list of possible options. APA has suggested that only a dedicated revenue stream of \$1.8 billion (\$1982) would satisfy the need for a cash contribution by the state, with revenue bonds to supplement the financing. Analysis by the Legislative Finance Division, however, has found that such a dedicated stream would leave no money for any other capital projects in the whole state. Commissioner Heath has indicated that the administration is "very nervous" about Susitna financing, but is not prepared to comment more specifically on a finance plan until some of the uncertainties in the oil market are resolved. I believe we will have no progress on Susitna until a realistic financing plan is in place, one that can be approved by all parties.

What are Administration plans with respect to Susitna financing?

Is a financing plan being prepared?

When can the legislature expect a bona fide proposal from the administration for financing Susitna?

What is the Administration position on the financing bills pending before the Senate State Affairs Committee?

SB 68 -- advisory vote on financing Susitna

SB 70 -- Alaska Energy Dividend Fund

SB 71 -- bonding for Susitna

2. UPDATING ASSUMPTIONS

Which of the Susitna study and feasibility assumptions need to be updated, and how shall the updates be incorporated into the project's evaluation?

Who will be responsible for what data, and how will it all be tracked?

When will an authoritative re-assessment be available?

Many of the factors in question were identified during our hearings. They include the forecasted demand, fuel prices and price escalation, capital costs, and the bond discount rate. The APA is responsible for the update, but they have indicated that it will not be completed until May. Even then, these factors will still be subject to considerable uncertainty.

3. DECISION TIMING

You and others testified to the necessity to meet various criteria before a decision can be made to go ahead with Susitna.

The FERC representative, William Wakefield, testified that FERC approval is not likely before December, 1986, maybe not until 1987.

How far shall we go and what shall we do with Susitna before we are sure that it is both feasible and financable?

What is the Administration position on SB 69, which would authorize first phase construction of Susitna?

What schedules do you anticipate for provision of neces-

sary answers?

APA staff testified that a smaller Watana Dam is under consideration. They also indicated the possibility of a different, single dam on the Susitna River in lieu of the two-dam configuration; it would be designed for smaller load demands and would cost less. At the same time, site specific design and engineering are being considered and appropriations have been requested to pursue plans previously prepared.

What timing and effort is considered appropriate for further preparatory work pending FERC approval? What further action will be required in pursuit of FERC application action? What costs are entailed in what activities in FY 84, 85, and 86? In other words, how much money is required, and when, to keep the Susitna project viable during the FERC application and re-evaluation periods?

4. RELATIONSHIP TO BRADLEY LAKE

APA staff testified that Bradley, in order to compete with gas, would require a cash contribution of 50-75% of the project cost which is estimated at a total of about \$400 million.

How does Susitna fit with the need for and financing of other planned hydro projects, specifically Bradley Lake?

How and when shall we proceed with Bradley? Shall it be the 135 MW size or the 60-90 MW size? Such decisions are clearly intertwined with a decision on the timing of Susitna, and they need to be addressed in that context.

In addition, is it wise to begin funding this smaller but still expensive dam incrementally, without considering where the full funding will come from and whether we can afford it either with or without Susitna?

5. ALTERNATIVES

Serious questions have been raised about the extent to which alternatives to Susitna hydro have been adequately examined. This matter becomes particularly important if Susitna decisions are deferred due to financing, marketability, or other problems.

It has been very difficult in the past to evaluate alternatives--gas, coal, other hydro--because they have not enjoyed the same degree of financial support as Susitna. Although many studies have been completed, the focus has not always been clear. For example, of the two recent studies concerned with using North Slope gas for electrical generation, one (Ebasco) is principally a hardware study, and the other (Booz-Allen) basically avoided the option because Ebasco had already looked at it. The representative from Booz-Allen, when asked to compare the gas option to Susitna, commented that the way to decide on how to meet railbelt electrical needs was to identify the need and then look at all the options, not to identify a source and then show how it could serve the need.

It was also suggested that we let the marketplace do the

choosing, and then decide whether to subsidize the capital costs of that choice.

In any case, in order to be prepared, additional consideration of the short-term and long range alternatives to Susitna appear to be called for.

How can we best continue to evaluate alternatives? Who should do that?

Are there technologically "clean" ways of using coal for power generation? Could such use facilitate development of coal resources for export and other economic development? Would state subsidies be required to make that feasible? How much money would be required to adequately study coal potentials?

How can we best determine what the realistic prospects are for use of gas to meet future power demand? What effect would state equity or subsidies akin to Susitna have on future gas and power cost?

Chakachamna and other hydro?

The Department of Commerce and Economic Development (DCED) has documented significant savings, even in Anchorage, through residential energy conservation. In other parts of the country, utilities have found that it's usually more cost effective to invest in conservation than in new generating facilities. Even though conservation will not by itself solve future power requirements problems, its potential for energy and cost savings is enormous.

What role can and should conservation play in decreasing the need for additional power for the railbelt?

How do the benefits of other alternatives, including subsidized power costs, compare with the benefits of energy conservation?

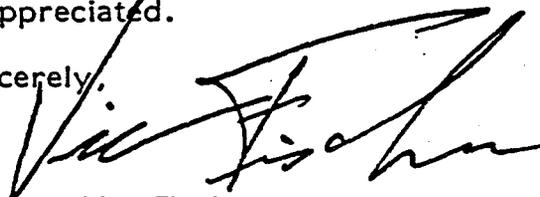
There are many other questions that need to be answered in the near future, including: tax-exempt bonding, land ownership, fisheries mitigation, and power sales contracts. The ones I noted above seem, based on the committee hearings, to be those that are the most basic and urgent at this time.

The above questions are, of course, difficult to answer. But they must be confronted in light of the fiscal realities now faced by the Susitna Project. As the issues before us are of such importance that they must be addressed at the highest level, I look forward to your Administration taking the lead in seeking answers to all the many questions and establishing a policy course for Alaska's energy future.

It is clear from the information we obtained in the hearings that legislative actions on Susitna will be stymied unless we receive

critical financial and other information from your administration.
Your cooperation in this will be greatly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Vic Fischer". The signature is written in a cursive, somewhat stylized script.

Senator Vic Fischer

cc: Commissioner Dick Lyon
Commissioner Esther Wunnike
Commissioner Dan Casey
Peter McDowell, OMB
Charles Conway
John Schaeffer
Robert Huffman

BILL SHEFFIELD
GOVERNOR



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

March 16, 1983

The Honorable Vic Fischer
Senator
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Senator Fischer:

This will acknowledge receipt of your letter of March 10, sharing with me the questions raised during the extensive hearing held by the Senate State Affairs Committee on the proposed Susitna hydroelectric project.

A copy of your list of questions has been sent to the Commissioner of the Department of Commerce and Economic Development, Dick Lyon. I have asked him to personally coordinate the Administration's response to these questions and to assist you further, if necessary.

I look forward to receiving a summary of the hearings when it is completed.

Sincerely,


Bill Sheffield
Governor