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68-71

(FILE 10)

STATE OF ALASKA
PRELIMINARY STATEMENT OF FISCAL IMPACT

Bill No: SR 70 Date on Bill: 1/25/83
 Title: An act establishing the Alaska Energy Dividend Fund
 Sponsor: Halford
 Requestor: Senate State Affairs

1. Estimated fiscal impacts on:

a. Expenditures:

(Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86
Capital				
Operating				
Total				

b. Revenues: Please see below.

Revenue				

2. Source of funds to offset fiscal impact of bill:

The Permanent Fund Dividend Fund

3. Assumptions:

This would be an appropriation transfer of monies from the Permanent Fund Dividend Fund to the Alaska Energy Dividend Fund.

	FY 83	FY 84	FY 85
PF Dividend Fund	(170.0 mill)	(122.0 mill)	(169.0 mill)
Ak. Energy Fund	170.0 mill	122.0 mill	169.0 mill

4. Disclaimer:

This statement has not been reviewed by the OMB in the Office of the Governor. It therefore does not represent the final estimate of fiscal impact.

Prepared By: Marcy Reubel Phone: 465-2300
 Division: Senate Office Date: 2/28/83

Approved by Commissioner: Rick D. Heath Date: 2/28/83
 Department: Revenue

5. Distribution:

- Original to Legislative Finance
- Copy to OMB
- Copy to Sponsor
- Copy to Requestor

2/15/83

STATE OF ALASKA

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

FINANCE DIVISION
POUCH WF-STATE CAPITOL
JUNEAU, ALASKA 99811
PHONE: (907) 465-3795

February 23, 1983

M E M O R A N D U M

TO: Honorable Vic Fischer, Chairman
Senate State Affairs Committee

FROM: Milt Barker ^{MB}
Fiscal Analyst

SUBJECT: SB 70

As requested by you, I have prepared the attached tables which show:

1. the annual contributions to the Alaska Energy Dividend Fund, in both actual and FY 1984 dollars (Table I);
2. the number of per capita grants those amounts would fund, taking account of annual escalation of grant amounts for inflation though not taking account of variation in grant amounts for regional cost differences (Table I);
3. state funding for Susitna under "Option D" of the January 1983 Acres financing plan, in both actual and FY 1984 dollars (Table I);
4. the amount that would be available for capital projects that have been proposed excluding power projects (Table II and graph).

The attached Legislative Finance computer runs labelled SB 70 show the entire fiscal picture for the State under SB 70 in both actual and FY 1984 dollars. It should be noted that under the assumptions used, general fund deficits would be incurred in FY 1990 and all subsequent years even without any capital budget. Should these conditions prevail, it might be difficult to maintain funding for the Alaska Energy Dividend Program.

If the Alaska Energy Dividend Program were discontinued after FY 1989, the amount of funding that would have accrued for the program would be \$1,965.0 million (or \$1,635 in FY 1984 dollars). These amounts are less than the State funding called for under "Option D" of Acres for Susitna.

All of the above analysis is based on the January 1983 revenue estimates of the Department of Revenue and could be subject to major revision depending on oil price developments.

SB 70

You have also requested an estimate of the impact of Section 2 of SB 70.

It is impossible to project the impact, not knowing what "energy project service districts" will be formed, what projects undertaken, their scale, their financing, the residential share of power consumption, the retail price of electricity and its effect on monthly residential consumption, etc. However, as an example of how Sec. 2 might work, the Sitka utility district and their Green Lake project are analyzed.

If one assumes that in the absence of SB 70, Green Lake would have been financed 90% with 35 year debt at 10% interest and 10% with equity which earned 12%, then the capital charges for Green Lake would have been \$6.2 million per year. ¹ With sales from Green Lake estimated at 59 million kwh annually, ² the capital charges would have been 10.5¢ per kwh for Green Lake at the busbar.

It is implicitly the intent of SB 70 that no charges for recovery of Energy Dividend Fund grants be included in electricity rates. This should probably be stated in the bill.

It is also the intent of SB 70 that no charges for recovery of any other invested funds or return thereon be allowed in the residential rate for the first 1,000 kilowatt hours. The legislation needs to clarify that neither return of nor return on invested funds will be allowed.

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1. \$59 million cost for Green Lake excluding any transmission costs multiplied by $(.9 \times .10369)$, the debt service per dollar borrowed at 10% for 35 years + $.1 \times .12$.
 2. 37.5 million kwh generated from Green Lake for first seven months at FY 83 extrapolated to 12 months and multiplied by 91% for line losses, utility's consumption, etc.

The effect of these two elements of intent would be that the residential customer pays no charges for the capital cost of a project if there is any grant money at all in the project. Other customers would pay the entire charges for invested funds (though nothing for grant funds).

Assuming residential customers would have borne their pro-rata share of capital charges in the absence of SB 70,³ SB 70 in this case would result in a 10.5¢ per kwh savings to residential customers on their first 1,000 kwh's. With current average monthly consumption in Sitka of 783 kwh per residential customer, the average customer's benefit would be \$82 per month or \$986 per year. Sitka has 2,480 residential customers and a population of 8,221. Thus, the average benefit per person would be \$297 per year.

For commercial and industrial customers, there could be either an increase or a decrease in rates depending on the amount of grant funds in a project. Commercial and industrial consumption in Sitka is currently 71.8% of total consumption. If these customers picked up all Green Lake capital charges (in the absence of any SB 70 grants), their cost per kwh would increase from 10.5¢ to 14.6¢. A grant of \$16.6 million would keep commercial and industrial charges at 10.5¢. If Sitka got \$5,000 for each of its 8,221 persons it would have received a grant of \$41 million which would have lowered commercial and industrial charges for Green Lake to 4.5¢ per kwh. Of course, a grant covering 100% of project costs results in a 10.5¢ per kwh saving for all customers, commercial and industrial as well as residential.

If Sec. 2 should result in an increase in commercial rates, businesses may well pass on the cost increase through price hikes. Should this occur, it would mean some dilution of the direct benefits to residential customers.

You have asked for an assessment of the efficiency of SB 70 as a mechanism for distribution of state wealth to residents. With a grant of \$16.6 million which would keep commercial and industrial users at their existing rate, SB 70 provides a benefit estimated above at \$297 per person. This benefit can be compared to the possible earnings on \$16.6 million divided among the 8,221 people. This would be \$202 per person if the funds earned 10% interest. SB 70 provides a greater benefit to residential customers for the money because of the subsidy from commercial and industrial customers paying the project costs not funded by grants.

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3. Some utilities, of which Sitka is one, provide a rate break to residential customers vis-a-vis commercial and industrial customers. Others may give a better rate to commercial and industrial users often through declining block rates.

If keeping commercial and residential rates constant while letting residential customers off the hook is the test, then this example would argue for \$2,000 per capita grants. Of course, one can be even more efficient by giving even smaller grants, still letting residential customers off under Sec. 2 and hitting commercial and industrial users for the capital costs. Or one could just pass a bill forbidding residential charges for capital costs under any circumstances for the first 1,000 kwh per month.

At the \$5,000 per capital level, the Green Lake example would suggest that individuals could receive more if the grants were invested. They would then receive \$500 at 10%. At the \$5,000 grant level in the Green Lake example much of the benefit goes to reduce commercial and industrial rates as shown above.

If the benefit under SB 70 is compared to the amount that individuals would receive under the Permanent Fund dividend program, the SB 70 benefits would look more favorable because individuals only receive 50% of the five year average income. But that is a matter of policy; individuals could be given the entire earnings off amounts deposited in the Permanent Fund. The full amount of earnings represents the opportunity cost of using funds for other purposes, such as SB 70 grants. Note too, that because of inflation-proofing, Permanent Fund dividends increase over time in nominal terms while the capital charges the electricity customer forgoes under SB 70 are a fixed amount for the life of the project.

attachments

cc: Senator Halford

MB:ro

TABLE I
ALASKA ENERGY DIVIDEND FUND (SB 70)

<u>Fiscal Year</u>	(1) Annual Contribution to Energy Dividend Fund (50% of Permanent Fund Income) (\$ Millions)	(2) Thousands of Per Capita \$5000 Grants	(3) State Funding for Susitna "Option D" (\$ Millions)	(4) Annual Contribution to Energy Dividend Fund (Millions FY 84 \$)	(5) State Funding for Susitna "Option D" (Millions FY 84 \$)
1984	236	47.2	--	236	--
1985	268	50.1	806.8	251	658.0
1986	304	53.1	413.3	265	318.0
1987	342	55.8	475.3	279	345.0
1988	385	58.7	552.1	294	378.0
1989	430	61.3	156.4	310	101.0
1990	480	64.0	--	320	--
1991	540	67.3	--	330	--
1992	590	68.7	--	340	--
1993	650	70.7	--	350	--
1994	700	71.2	--	360	--
1995	760	72.2	--	360	--
1996	830	73.7	--	370	--
1997	890	73.9	--	370	--
1998	970	75.2	--	370	--
1999	1040	75.3	--	380	--
2000	<u>1120</u>	<u>75.9</u>	<u>--</u>	<u>380</u>	<u>--</u>
	10535	1114.3	2403.9	5565.0	1800.0

Notes: 1 & 4. From attached Legislative Finance computer runs labelled "SB 70";
2. Col. 1 ÷ (5 x 1.07^N) where N = Fiscal Year - 1984; grants increased 7% per annum
for inflation;
3 & 5. "Option D" from Susitna Hydroelectric Financing, Task 11: Financing Options,
Acres, January 1983; from Table 4 and Table 3 respectively; FY 83-85 summed
and shown as FY 85.

PREPARED BY:
LEGISLATIVE FINANCE
2-22-83

TABLE II
FUNDS AVAILABLE FOR CAPITAL PROJECTS
UNDER SB 70
(\$ Millions)

FISCAL YEAR	(1)	(2)	(3)	(4)	(5)	(6)
	General Funds	GO Bonds	Funds Available for Capital Projects Total	Loan Program Appropriations	Governor's Six Year Capital Budget	Total Capital Projects
<u>Actual Dollars</u>						
1985	546.0	--	546.0	300.0	2035.0	2335.0
1986	580.0	300.0	880.0	300.0	742.9	1042.9
1987	415.0	90.0	505.0	300.0	961.2	1261.2
1988	481.0	125.0	606.0	300.0	1066.2	1366.2
1989	250.0	--	250.0	300.0	?	300.0+
1990	--	50.0	50.0	300.0	?	300.0+
1991	--	140.0	140.0	300.0	?	300.0+
1992	--	--	--	300.0	?	300.0+
1993	--	--	--	300.0	?	300.0+
Total	2272.0	705.0	2977.0	2700.0	4805.3	7505.3+
<u>FY 1984 Dollars</u>						
1985	511.0	--	511.0	280.0	1901.9	2181.9
1986	507.0	262.0	769.0	262.0	648.9	910.9
1987	339.0	73.0	412.0	245.0	784.7	1029.7
1988	367.0	95.0	462.0	229.0	813.4	1042.4
1989	180.0	--	180.0	214.0	?	214.0+
1990	--	33.0	33.0	200.0	?	200.0+
1991	--	87.0	87.0	187.0	?	187.0+
1992	--	--	--	175.0	?	175.0+
1993	--	--	--	163.0	?	163.0+
Total	1904.0	550.0	2454.0	1955.0	4148.9	6103.9+

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2-22-83

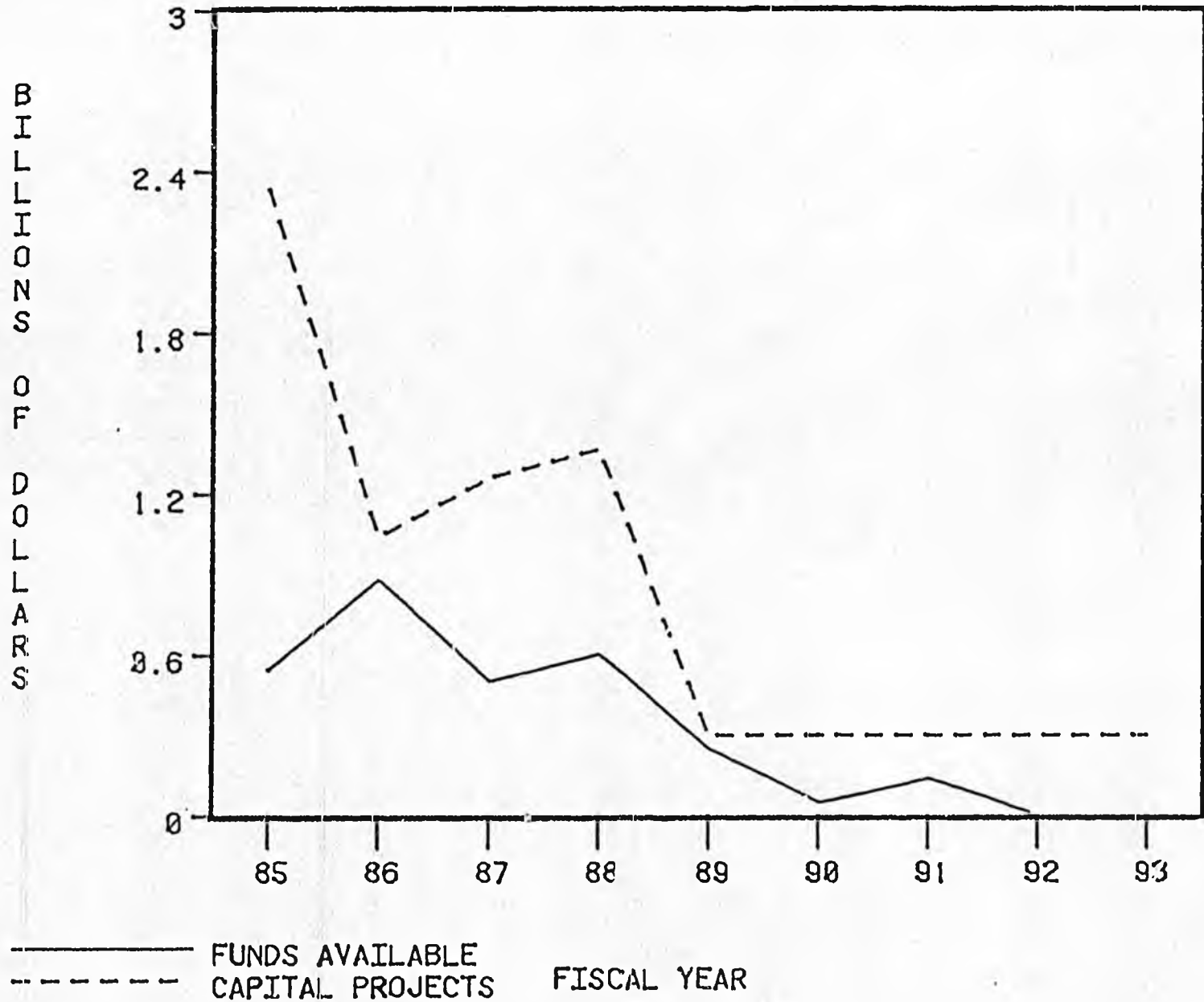
TABLE II

- Notes:
1. From attached Legislative Finance computer run labelled "SB 70";
 2. From Table 1, Susitna Hydroelectric Project, Task 11; Financing Options, Acres, January 1983;
 4. Assumes loan appropriations at roughly the Governor's FY 84 budget level, \$294.5 million;
 5. Total of general fund capital projects (including voter approval) contained in Executive Budget, Book 2, Capital Budget and Six Year Capital Program, FY 83, Jay Hammond, Governor; FY 85 amount is sum of FY 83-85 amounts less amounts appropriated for capital and loans for FY 83 and less the amount of capital projects proposed by Governor Sheffield for FY 84.

FY 84 \$ amounts are based on a 7% inflation factor: the Acres Susitna numbers appear to be on a calendar year basis and are thus adjusted for an extra 1/2 year.

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LEGISLATIVE FINANCE
2-22-83

FUNDS AVAILABLE FOR CAPITAL PROJECTS
UNDER SB 70



STATE OF ALASKA
 LEGISLATIVE FINANCE WORKING DOCUMENT
 BUDGET FORECASTING MODEL

*** ACTUAL DOLLARS IN MILLIONS ***

JAN 83 DEPT OF REVENUE ESTIMATES
 OPERATING BUDGET AT SPENDING LIMIT
 SPENDING LIMIT INCREASES 10% PER ANNUM
 SURPLUS SPENT ON CAPITAL
 INFLATION 7% PER ANNUM
 DIVIDENDS GO TO ALASKA ENERGY DIVIDEND FUND
 PERMANENT FUND INFLATION-PROOFED
 PERMANENT FUND EARNS 12% PER ANNUM
 GO BONDS PER ACRES JAN 83 SUSITNA FINANCING PLAN

FISCAL YEAR	REVENUE	INTEREST	TOTAL REVENUE	OPERATING BUDGET	CAPITAL BUDGET	DEBT SERVICE	PERMANENT FUND DIVIDENDS	TOTAL BUDGET	SURPLUS OR DEFICIT	PERMANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$ 0 MIL
1983										3790	88	
1984	2703	370	3072	1987	770	167	236	3161	-88	4321	0	0
1985	2775	389	3164	2185	546	164	268	3164	0	4892	0	0
1986	3029	422	3451	2404	580	163	304	3451	0	5532	0	0
1987	3112	456	3568	2644	415	166	342	3568	0	6222	0	0
1988	3456	499	3954	2909	481	179	385	3954	0	6998	0	0
1989	3540	540	4080	3200	250	190	430	4080	00	7860	00	00
1990	3300	580	3870	3520	00	190	480	4190	-320	8750	00	320
1991	3000	620	3620	3870	00	180	540	4580	-960	9650	00	960
1992	2890	670	3560	4260	00	160	590	5000	-1440	10600	00	1440
1993	2700	740	3430	4680	00	160	650	5490	-2050	11570	00	2050
1994	2610	810	3420	5150	00	130	700	5990	-2560	12590	00	2560
1995	2520	880	3390	5670	00	130	760	6560	-3170	13650	00	3170
1996	2380	950	3330	6240	00	120	830	7190	-3850	14760	00	3850
1997	2440	1030	3470	6860	00	80	890	7830	-4360	15950	00	4360
1998	2510	1120	3630	7540	00	60	970	8570	-440	17210	00	4940
1999	2660	1210	3870	8300	00	40	1040	9380	-5510	18570	00	5510
2000	2800	1310	4110	9130	00	30	1120	10280	-6170	20040	00	6170
TOTAL	48410	12590	61000	80550	3050	2300	10550	96440	-35440			35350

STATE OF ALASKA
 LEGISLATIVE FINANCE WORKING DOCUMENT
 BUDGET FORECASTING MODEL

*** FY 1984 DOLLARS IN MILLIONS***

JAN 83 DEPT OF REVENUE ESTIMATES
 OPERATING BUDGET AT SPENDING LIMIT
 SPENDING LIMIT INCREASES 10% PER ANNUM
 SURPLUS SPENT ON CAPITAL
 INFLATION 7% PER ANNUM
 DIVIDENDS GO TO ALASKA ENERGY DIVIDEND FUND
 PERMANENT FUND INFLATION-PROOFED
 PERMANENT FUND EARNS 12% PER ANNUM
 GO BONDS PER ACRES JAN 83 SUSITNA FINANCING PLAN

FISCAL YEAR	REVENUE	INTEREST	TOTAL REVENUE	OPERATING BUDGET	CAPITAL BUDGET	DEBT SERVICE	PERMANENT FUND DIVIDENDS	TOTAL BUDGET	SURPLUS OR DEFICIT	PERM-ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$ 0 MIL
1983										3790	88	
1984	2703	370	3072	1987	770	167	236	3161	-88	4321	0	0
1985	2594	364	2957	2042	511	154	251	2957	0	4572	0	0
1986	2645	369	3014	2100	507	143	265	3014	0	4832	0	0
1987	2540	372	2913	2159	339	136	279	2913	0	5079	0	0
1988	2636	380	3017	2219	367	137	294	3017	0	5338	0	0
1989	2520	390	2910	2280	180	140	310	2910	00	5610	00	00
1990	2200	380	2580	2350	00	130	320	2790	-210	5830	00	210
1991	1870	380	2260	2410	00	110	330	2850	-600	6010	00	600
1992	1680	390	2070	2480	00	90	340	2910	-840	6170	00	840
1993	1470	400	1870	2550	00	90	350	2990	-1120	6290	00	1120
1994	1330	410	1740	2620	00	70	360	3040	-1300	6400	00	1300
1995	1190	420	1610	2690	00	60	360	3120	-1500	6490	00	1500
1996	1060	420	1480	2770	00	60	370	3190	-1710	6560	00	1710
1997	1010	430	1440	2850	00	30	370	3250	-1810	6620	00	1810
1998	970	430	1410	2930	00	20	370	3320	-1920	6670	00	1920
1999	960	440	1400	3010	00	10	380	3400	-2000	6730	00	2000
2000	950	440	1390	3090	00	10	380	3480	-2090	6790	00	2090

TOTAL 30330 6300 37130 42520 2680 1550 5580 52320 -15190 15100