

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 86/2

451 SCOMM12: OIL & GAS TAXATION & PIPELINE 1972-77

returns under proposed tax changes would be 12% and 14%, respectively. In the current debate over Alaskan tax policy, the state is focusing on prospective returns on production. The companies, understandably, are emphasizing the total project rate of return. Investors in ARCO and Sohio are obviously interested in which viewpoint ultimately prevails.

DCF returns for the project as a whole may be taken as representative of returns for ARCO (and for Exxon). Sohio's indicated return on TAPS and production combined, given current tax laws and \$11.00 per barrel for crude, would approximate 17% (versus 14% for the project) and 21%, given \$13.00 for crude (versus 18% for the project).

Addendum: Markets for North Slope Oil

This section briefly examines the scope of the West Coast market for North Slope crude during the early years of operation, the prospects for a crude surplus on the West Coast, and the implication for pricing of Prudhoe Bay crude of extending its reach to the Midwest. Sohio foresees a crude surplus of 300-600 TB/D in 1978 when TAPS capacity will be 1,200 TB/D, and as much as 600-800 TB/D in 1982, were TAPS throughput then to approach 1,800-2,000 TB/D (see table on page IV - 24).

Our three earnings models posit production of 600 TB/D for the second half of 1977, rising to 1,200 TB/D in 1978. Production in our "reserves constraint" model rises to a peak of 1,500 TB/D in 1980, as does output in our "production potential" model. The latter model's rate continues to grow, however, to a peak of 2 MM B/D in 1984. Production in our "market constraint" model holds at 1.2 MM B/D through 1980, then rises to its peak of 1.5 MM B/D in 1981.

The market for Prudhoe Bay crude on the West Coast is ascertainable only over a wide range. So, too, as noted earlier, is the prospective supply of North Slope crude. Estimates of product demand in District V are very diverse. For example, Sohio's projections of product demand on the West Coast for 1978 (2,800 TB/D) and 1982 (3,200 TB/D) are around 200 TB/D lower than earlier projections by Exxon and ARCO for those same two years. The outlook for product demand is particularly obscure, because (1) the recent recession has delayed clarification of the response of demand to quantum jumps in prices, (2) the demand pattern is expected to shift toward more rapid growth in fuel oil rather than in gasoline demand. Although not immediately relevant, it is worth noting that demand for petroleum products could slow dramatically after 1982 if El Paso's gas transmission proposal for North Slope gas is selected. In that event, any "surplus" of North Slope crude would likely persist on the West Coast into the late 1980's.

Demand for crude oil in District V will depend on the size and utilization of refinery capacity. Local refineries currently supply some 95% (2,200 TB/D) of West Coast product demand. Distillation capacity was 2,425 TB/D at the close of 1975; crude runs averaged 2,050 TB/D (for an average operating rate in 1975 of 85%). Refinery capacity will increase 415 TB/D (to 2,840 TB/D) in 1976--of which, Socal will account for 350 TB/D. Current firm projects will raise capacity by a modest 90 TB/D more by 1978-79. Sohio projects refinery capacity at 3,100-2,300 TB/D in 1982, assuming maintenance of the historic relationship between domestic and imported product supply. We would not be surprised to see capacity added at a slower rate owing to (1) persisting uncertainty over the course of demand, (2) disincentives implicit in price controls and allocations, and most important perhaps (3) the danger of divestiture. Whether tardiness in adding to refinery capacity would seriously retard expansion of North Slope production is questionable, however. Above-normal utilization of constrained capacity would allow considerable scope for growth in overall demand for crude oil.

Prospective demand for North Slope crude by West Coast refiners will, of course, reflect the aggregate effect of refiners' preferred mix of crudes. The key determinants in crude slates include (1) crude avails from alternative domestic

HYPOTHETICAL DISTRICT V CRUDE OIL BALANCE,
1975, 1978E, 1982E

(Thousands of Barrels Daily)

	<u>1975</u>	<u>1978E</u>	<u>1982E</u>
Product Demand	2,210	2,800	3,200
Crude Demand	2,050	2,475-2,550	2,800-2,900
<u>Production:</u> Declining Fields	1,075	1,000	900
Expansible Fields ^a		175-325	350-400
<u>Imports:</u> Canada	160	0-100	0
Middle East	530	0	0
Indonesia/Africa	320	450-550	400-500
Crude Supply ex North Slope	2,085	1,625-1,875	1,650-1,800
Crude Deficit ex North Slope		600-925	1,000-1,250
North Slope Potential		1,200	1,800
Crude Surplus on West Coast		275-600	550-800

a. Elk Hills and Santa Ynez fields; for 1975 included in "declining field" category.

and foreign sources, (2) the flexibility of refineries for handling varying crudes (particularly, their pollutants), (3) ownership of alternative supplies and related crude-swap arrangements, (4) relative crude prices, and (5) considerations of security of supply.

As for local supply, District V crude production has been suffering natural decline for a number of years. Sohio projects a decline in production from known fields from 1,075 TB/D currently, to 1,000 TB/D in 1978, and to 900 TB/D by 1982. It estimates production from the Elk Hills naval reserves and Santa Ynez area of 175-325 TB/D in 1978 and 350-400 TB/D by 1982. New finds could add untold millions of barrels to reserves by 1982, but any number would represent sheer speculation. Given development lag on the West Coast, however, even large discoveries might not be readily expansible by the early 1980's.

The refineries clustered in the Puget Sound area will represent a prime outlet on the West Coast for Prudhoe Bay crude. Crude capacity in the area is

around 340 TB/D; runs recently averaged 310 TB/D. ARCO has a 96 TB/D refinery at Cherry Point, Washington (in addition to the 185,000-barrel-a-day plant at Watson, California). Crude supplies in this area were recently 50% from Canada (delivered via the Trans Mountain Pipeline), 50% overseas imports. Canadian supply is being phased out (Sohio projects 0-100 TB/D from Canada for 1978, 0 for 1982). Most refiners will require investment in desulphurization facilities in order to handle Prudhoe Bay crude. Those investments are in abeyance pending removal of potential impediments to tanker traffic in the Sound (i.e., limitations on tanker size and constraints on expansion of terminals). The pace at which Puget Sound refiners utilize Prudhoe Bay crude will depend on clarification of these issues.

For 1978, if one could presuppose the backing out of crude imports, the West Coast market could readily accommodate 1,200 TB/D of Prudhoe Bay crude and possibly more. Sohio does project the displacement of imported "sour" crudes.* Refiners will little direct interest in Middle East crudes should clearly prefer Prudhoe Bay crude: it will be cheaper--at least in 1977-78, and offers security of supply. At the same time, Sohio foresees an increase in imports of "sweet" crudes from 320 TB/D to 450-550 TB/D. Unless all facilities are modified to handle "sour" crudes, refiners will require access particularly to Indonesian crude. Moreover, major West Coast refiners--Socal, Union, even ARCO--are also significant crude producers in Indonesia and will have an economic (and political) preference for the latter over Alaskan crude.

The companies have every interest in timely completion of a transportation network from the West Coast to Midwest markets so as to maximize the present value of the Prudhoe Bay earnings stream. Accordingly, the companies have been considering alternative methods of moving Prudhoe Bay to U.S. markets East of the Rockies. Among the options considered is the possibility of reversing the (Canadian) Trans-Mountain or the Four Corners pipelines; these would offer only quite limited flows of Alaskan oil. The companies have also considered construction of large diameter, trans-continental lines, originating in northern California, western Mexico to the U.S. midcontinent/midwest area. In addition, the companies have pondered largely tanker routes--trans Isthmus (with a short pipeline across Central America) and via Cape Horn to eastern U.S. markets.

Sohio, with the largest share of Prudhoe Bay crude, and no controlled outlets on the West Coast, is implementing its own plan for moving Alaskan crude across the continent. The key element of the proposal is reversal of a 30-inch El Paso (Texas to California) gas line. The project would require construction of an oil line from California to the Arizona border (or possible reversal of another gas line to link up with El Paso's system). The FPC is expected to reach

* Crude imports into District V for 1975 divided as follows: Canada 160 TB/D, Middle East (mostly "sour" crudes) 530 TB/D, Indonesian and African "sweet" crudes, 320 TB/D.

its decision on interruption of gas service on the El Paso line by mid-1976. The Department of the Interior is preparing an environmental impact statement on the project. Sohio's proposal includes expansion of the marine terminal in the Santa Barbara Channel. Several layers of California environmental bureaucracy must pass on these plans. The expansion, moreover, appears to be prohibited by the State's two-year moratorium on industrial construction in the coastal zone. Federal legislation will probably be needed to untangle the local regulatory knots; it may not come quickly enough to avoid a potential surplus and holddown on production in 1978 to less than 1.2 million B/D. Sohio's proposal has certain advantages over alternatives: (1) it represents the most economical method of reaching major markets, (2) it will require the least direct capital commitment--a prime consideration in view of the companies' already onerous financing burdens, the possible variability in utilization of the line, and the threat of eventual divestiture.

The project, as originally conceived, might require an investment of \$500 million for capacity of 500 TB/D (and \$300 million more for expansion to 2 million B/D). Financing requirements in 1976 might not exceed \$15 million, but will jump sharply in 1977. Sohio will probably require assistance from the federal government in clearing away local obstacles to terminal and pipeline construction. We assume that by 1979 at the latest, outlets to East of Rockies markets would be in place. One may even reasonably hope for completion of such transport network in 1978. Federal assistance in attaining access to all domestic markets might appear to be a reasonable counterbalance to federal restrictions on exports of North Slope crude.

Crude Pricing Implications

Were Prudhoe Bay crude to move only to West Coast markets, then its value would be set unambiguously by the imported price (or prescribed price) of crude on the West Coast, less transportation charges from wellhead to market. Should Prudhoe Bay crude move in quantity to the Midwest, however, it would take its value from the imported (or prescribed) price in that more distant market less transportation costs from wellhead to the Midwest. The delivered value of imported crude in each of these major markets would include the same f.o.b. price (Persian Gulf) plus transportation costs to respective markets. In the case of the West Coast market, light Arabian crude would lay in at \$13.00 per barrel (\$11.51 f.o.b., \$1.14 tanker freight at Worldscale 60, plus \$0.35 import fee); in the case of the Midwest, it would lay in at \$13.50 per barrel (\$11.51 f.o.b., \$1.24 tanker freight to Gulf Coast at Worldscale 60, \$0.40 pipeline charge from Gulf Coast to Midwest, plus \$0.35 import fee). The difference in transportation cost, and hence in delivered cost, of imported crude amounts to roughly \$0.50 per barrel. It follows that netbacks on Prudhoe Bay crude from the Midwest and the West Coast would be identical only if the difference in transportation costs to these markets were equivalent to the difference in transportation costs on imported crude to these same markets. In fact, the cost of moving Prudhoe Bay crude from Valdez to southern California would amount to \$0.50 per barrel, and from Valdez to Chicago around \$1.50 per barrel (\$0.50 tanker freight Valdez to California, \$0.60 pipeline cost California to Midland, Texas and \$0.40 pipeline cost Midland to Chicago area) for a difference of \$1.00 per barrel.

NETBACKS ON PRUDHOE BAY CRUDE FROM MAJOR MARKETS

(Dollars per Barrel)

	<u>Delivered Cost of Persian Gulf Oil^a</u>	<u>Cost of Moving Alaskan Oil From Valdez To Destination</u>	<u>Alaskan Price at Valdez to Equate with Cost of PG Oil</u>
Los Angeles	\$13.00	\$0.50	\$12.50
Chicago	13.50	1.50	12.00

a. At current AFRA, Worldscale 60.

In southern California, Prudhoe Bay crude would net back from Chicago at \$0.50 per barrel below the ceiling set by the delivered cost of Persian Gulf crude on the West Coast. Given the more favorable netback from West Coast markets, North Slope producers would clearly maximize their earnings by practicing classic price discrimination (by charging West Coast customers the equivalent of the cost of imports, and by charging customers in the Midwest \$0.50 less--on the f.o.b. price or on pipeline transportation--so as to compete with imported crude in the Midwest). Unfortunately for the North Slope producers, such practice would confront effective regulatory and political opposition. In a free market, Prudhoe Bay crude, selling below parity with imports on the West Coast, would tend to enlarge its markets there by driving out imports and its price would tend to rise toward parity with imported crude.

However, if prices of domestic crude are constrained below import parity, as we deem likely, then the movement of Prudhoe Bay into the more distant markets would not likely result in a lower netback than if Alaskan oil were marketed solely on the West Coast. Given the umbrella of higher prices for imported crude than those prescribed for domestic crude, the price of Prudhoe Bay crude in Chicago would be its delivered cost to the West Coast plus full transportation cost to the Chicago area.

COMPANY EARNINGS ON NORTH SLOPE CRUDEIntroduction and Summary

In this section, we translate our three basic earnings models into North Slope-related earnings per share for Atlantic Richfield and Standard Oil of Ohio. For each model, we multiply per-barrel earnings on TAPS, Sadlerochit production, and Kuparuk/Lisburne production by corresponding pipeline throughputs and production volumes of the companies. The reader is urged to see Appendix Tables VI - A to VII - L for the matrix of earnings possibilities. The range of plausible earnings estimates is disturbingly large. The following analysis is deliberately neutral. A positive position on the stocks presupposes a bias toward a favorable configuration of North Slope production and crude prices and tolerable taxation in Alaska.

In our "reserves constraint" model, ARCO's pipeline throughput builds up rapidly to a peak of 315 TB/D by 1979, and its net production to 268 TB/D. In our "production potential" model, ARCO's pipeline throughput peaks in 1984 at 420 TB/D (one third higher than in the "reserves constraint" model) while its net production gains even more rapidly (+50%) to 403 TB/D. The hefty gains in throughput and production is largely attributable to tentative increments from the Kuparuk/Lisburne reservoirs.

Given \$11.00 a barrel for crude on the West Coast, in our "reserves constraint" model, ARCO's earnings per share in 1978 on North Slope oil would approximate \$4.30 (divided \$1.34 on TAPS and \$2.97 at the wellhead). Subsequent rapid expansion of TAPS throughput and production would raise ARCO's per share earnings by 1980 to \$5.77 and by 1985 to \$5.92. In contrast, ARCO's 1985 earnings in the "production potential" model soar to \$8.42 per share (42% above 1985 results in the "reserves constraint" model) reflecting mainly the assumed buildup of Kuparuk/Lisburne production, so important to ARCO. If Alaskan tax proposals were adopted unaltered, ARCO's earning power on integrated operations would shrink by roughly 20% below the foregoing estimates. In our "reserves constraint" model for 1980, a \$1.00-a-barrel increase or decrease in the market price of crude would benefit or penalize ARCO's earnings by \$0.78 per share under current tax parameters, but by \$0.46-\$0.56 per share under proposed tax laws. In addition to "normalized" earnings discussed above, tax savings accruing to ARCO from ITC and reimbursement of Alaskan reserves taxes could approximate \$1.00 per share in 1978 and 1979, and \$0.50 per share in 1980 and 1981.

Sohio is the leveraged vehicle for investment in North Slope equities. In our "reserves constraint" model, Sohio's pipeline throughput builds up rapidly to a peak of 500 TB/D by 1979 and its net production to an impressive 627 TB/D. The benefit of Sohio's disproportionately large equity in main field production compared with ARCO is readily apparent. In our "production potential" model, Sohio's pipeline throughput continues to surge beyond the 500 TB/D mark to a peak of 667 TB/D by 1984; its net production also continues to grow--but at a slower pace--to 674 TB/D. The more rapid gain in TAPS throughput compared with production reflects the major role of Kuparuk/Lisburne production in expanding pipeline throughput and Sohio's minor equity in those reservoirs.

from 1.9 billion barrels). ARCO's share of Kuparuk/Lisburne crude is expected to be much higher--possibly one-third. While ARCO has speculated publicly as to the production potential of the Kuparuk/Lisburne reservoirs, it has not disclosed the assumptions about reserves underlying that estimate. Given the substantial potential of the Kuparuk/Lisburne formations, ARCO's relatively high interest in those reservoirs, and its lower interest in Sadlerochit crude, Kuparuk/Lisburne crude looms large in ARCO's overall North Slope crude potential. Nevertheless, Kuparuk/Lisburne production will not contribute quite so importantly to ARCO's aggregate earnings on North Slope crude owing to its probably higher cost as compared to Sadlerochit supply.

As noted, Sohio's acreage covers approximately 54% of the crude and condensate reserves (before deduction of Alaskan royalty oil and BP's net profits royalty interest) in the Sadlerochit reservoir. Sohio's exact equity in Sadlerochit reserves is now indeterminate since BP's net profits royalty interest depends on production levels which cannot be projected precisely. Sohio is entitled to 100% of the profits on its net production (after Alaskan royalty) up to 600 TB/D, (i.e., when gross reservoir production reaches 1,270 TB/D). On Sohio's net production above 600 TB/D to 1,000 TB/D (i.e., if gross reservoir production is between 1,270 TB/D and 2,115 TB/D), BP receives 75% of net profits and Sohio 25%. Gross production from Sadlerochit's proven reserves of 9.5 billion barrels is expected to reach 1,500 TB/D for 6 to 8 years and then to decline gradually (our "reserves constraint" model). Sohio's 54% share of Sadlerochit reserves (after deduction of Alaskan royalty oil) equals 4,490 million barrels. Given our projected profile of production from the 9.5 billion barrels of proven reserves, BP's cumulative net profits royalty interest in barrel equivalents amounts to 230 million barrels; Sohio's net reserves approximate 4,260 million barrels, or 95% of the two companies' combined reserves. A higher level of peak production, say of 1,600 TB/D for 6-8 years, would raise BP's share and reduce Sohio's net reserves by close to 100 million barrels.

Tertiary recovery would further complicate assessment of Sohio's true equity in Sadlerochit reserves. First, the size of tertiary reserves and resulting increments to production remain speculative. Second, the division of production and reserves between Sohio and BP would depend on levels of Sohio's net production in particular years. In years when primary/secondary production from the main field was already above 600 TB/D to Sohio, incremental production from tertiary reserves would accrue 75% to BP and 25% to Sohio. In contrast, in years when Sohio's net production (before tertiary production) was below 600 TB/D, increments to production from tertiary recovery would accrue 100% to Sohio until the 600 TB/D level were reached and 75% to BP and 25% to Sohio on increments above 600 TB/D. Given our profile of production in the "production potential" case, in which tertiary reserves serve to lift production from the main field by a maximum of 100 TB/D, Sohio's reserves (after deduction of royalty oil and BP's net profits interest) in the main reservoir would approximate 4,960 million barrels. Sohio's equity in the Kuparuk/Lisburne reserves is expected to be relatively small--perhaps on the order of 10%, or 175 million net barrels from assumed gross reserves of 2 billion barrels. BP might share a small fraction of Sohio's interest in the Kuparuk/Lisburne reservoirs.

COMPANY EQUITIES IN TAPS VERSUS PRUDHOE BAY PRODUCTION,
1978 and 1985

	<u>Initial</u> <u>TAPS Equity</u>	<u>Gross</u> <u>Production</u>	<u>Net</u> <u>Production</u>
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"Reserves Constraint" Model

1978	21.0%	20.4%	17.8%
1985	21.0	20.4	17.8

"Production Potential" Model

1978	21.0%	20.4%	17.8%
1985	21.0	22.3	20.1

"Market Constraint" Model

1978	21.0%	20.4%	17.8%
1985	21.0	23.0	20.1

STANDARD OIL OF OHIO

"Reserves Constraint" Model

1978	33.3%	54.0%	47.2%
1985	33.3	47.8	41.8

"Production Potential" Model

1978	33.3%	54.0%	47.2%
1985	33.3	38.5	33.7

"Market Constraint" Model

1978	33.3%	54.0%	47.2%
1985	33.3	45.2	39.5

Given \$11.00 a barrel for crude on the West Coast, in our "reserves constraint" model, Sohio's earnings per share in 1978 would approximate \$9.55 (divided \$2.03 on TAPS and \$7.52 at the wellhead), rising to \$11.18 by 1980 and to \$11.51 by 1985. In contrast, Sohio's per share earnings for 1985 in our "production potential" model approximate \$13.35 (some 16% above 1985 results in the "reserves constraint" model). Adoption of proposed Alaskan taxes would effectively reduce the above estimates by 23%-25%. In our "reserves constraint" model, a \$1.00-per-barrel change in crude price under current tax regimes would benefit or penalize Sohio's prospective earnings on the North Slope by \$1.70 per share (\$1.00-\$1.24 per share under proposed taxation in Alaska). In addition to normalized earnings, Sohio's tax savings could amount to roughly \$1.95 per share in 1978 and 1979 and \$0.85 per share in 1980 and 1981.

Equities in TAPS

Company earnings on TAPS will, of course, depend importantly on eventual equity shares in the pipeline system. Present equities in TAPS--revised in July 1974 to more closely reflect the companies' equities in Sadlerochit crude reserves--have been agreed upon only for initial capacity of 1.2 million B/D. ARCO's 21% share is close to its 20.4% equity in the 9.5 billion barrels of proved crude and condensate reserves in the Sadlerochit (main) reservoir. In contrast, Sohio's 33.34% initial equity in TAPS remains well below its 54% equity in Sadlerochit reserves (before Alaskan royalty and BP's net profits royalty interest). Sohio and BP together, however, hold 49.2% of TAPS.

Initial equities in TAPS for both ARCO and Sohio now look to be below their shares in posited gross production from the three Prudhoe Bay reservoirs. ARCO's 21% share of TAPS compares with 22.3% of peak gross production from the three Prudhoe Bay reservoirs in our "production potential" case; Sohio's 33.34% equity in TAPS compares with our estimate of 38.5% of gross production. It is worth noting, however, that on excluding Alaskan royalty oil the companies' current equities in TAPS do not differ significantly from their indicated interests in net peak production from the three major reservoirs.

Differences between the companies' initial equities in TAPS and their equities in gross field production reflect our own assumptions as to the production potential of the Prudhoe Bay reservoirs. Moreover, final equities in Sadlerochit reserves await completion of the unitization agreement; equities in Kuparuk/Lisburne crude are much more tentative. Once equities in Prudhoe Bay crude are well-established, equities of ARCO and Sohio in TAPS might be raised upon expansion of the system from 1.2 to 2.0 million B/D. On the other hand, should Alaska prove willing, and financially capable, to participate in the expansion of TAPS, the companies might well accommodate the state's participation. (Such participation may find the state much more sympathetic towards the prospective rate of return on pipeline investment than in the past.) For the present exercise we assume no change in TAPS equities upon pipeline expansion.

Equities in Prudhoe Bay Reserves and Production

Atlantic Richfield's acreage covers approximately 20.4% of the crude and condensate reserves in the Sadlerochit reservoir; its estimated net reserves of crude and natural gas liquids are 1.72 billion barrels (revised downward in 1974

Chapter VII

Drexel Burnham & Co.
INCORPORATEDNORTH SLOPE FINANCINGIntroduction and Summary

In this chapter we examine the capital requirements of Atlantic Richfield and Standard Oil of Ohio for bringing North Slope oil on stream, the possible contributions to these requirements of internally-generated cash flows during the remaining pre-production period, and their requirements for external financing.

We review the companies' borrowings to date, other sources of capital that have been arranged, additional financing requirements, and possible options for obtaining additional funds. Our analysis of uses of funds, as for sources of funds, includes the requirements of ongoing and projected operations apart from the North Slope.

ARCO is fundamentally better positioned than Sohio to meet its capital requirements for the North Slope without resort to ostensibly unorthodox financing (outside petroleum industry standards) in the form of extraordinary reliance on outside capital. Any further big increase in cost estimates or protracted delay in starting TAPS would find Sohio's capital requirements increased by a disturbingly high degree. However, we regard both risks as minor. Unfunded capital requirements of Atlantic Richfield for 1976-77 approximate \$330 million; Sohio's approach is \$1 billion. Fortunately, the real collateral behind the debt of both companies--proved reserves of oil at Prudhoe Bay--will facilitate prospective financing of additional capital requirements during the remaining pre-production period (with further additions to funded debt or the arrangement of production payments or partial advance sales of crude).

The companies will probably be reluctant to resort to additional equity financing in the near future, chiefly in view of adequate recourse to other financing options. They may hope for an eventual renewal of investor confidence and any improvement in prices of their shares based on (1) possible moderation of Alaskan tax demands, (2) start-up of Prudhoe Bay production, and (3) the interim resurgence in reported earnings. However, equity financings in 1978 are becoming increasingly probable in light of the growing role of debt on both companies' balance sheets and the likelihood of continued heavy borrowing on the North Slope and related facilities after the start-up of production in mid-1977.

Atlantic Richfield

Full-scale development of North Slope resources will find Atlantic Richfield ranking in the top tier of large, highly-integrated refiner/marketers in the United States. In the early 1980's, ARCO's refining capacity in the United States will approximate 775 TB/D (after divestment of its East Chicago refinery); the company's net crude production could then exceed 750 TB/D.

In effect, ARCO will have attained enviable balance in the United States while integration ratios of its peers continue to erode. Already among the nation's top producers of natural gas, ARCO will achieve preeminence (surpassed only by Exxon and Texaco) in that area. Meanwhile, the company is expanding on many fronts--in domestic oil and gas exploration apart from the North Slope, in petrochemicals and in foreign exploration and development. The company is also gearing up for development of its extensive coal reserves in the West, and for possible entry into the uranium-enrichment business.

ARCO has been fundamentally better positioned than Sohio to meet its capital requirements for the North Slope project without resort to exceptional dependence on debt financing. ARCO's cumulative financial needs for the North Slope including pre-production taxes may approximate \$3 billion in the period 1969-1977; Sohio's requirements, in contrast, could reach \$5.2 billion. ARCO's net book value at year-end 1975 was \$3.7 billion and its debt ratio was 30%; Sohio's net book value was \$1.5 billion and its debt ratio already 57%. ARCO's cash flow from operations in the remaining pre-production years, 1976-77, could amount to \$2.1 billion compared with Sohio's potential cash flow of \$480 million.

Pre-Production Expenditures and Financing:
1976-1977

As noted, ARCO's cumulative expenditures on the North Slope project through 1977 might approach \$3 billion, divided \$1.7 billion (59%) on TAPS, \$305 million (10%) on tankers, and \$915 million (31%) on development of the main reservoir. The \$915 million for development includes \$770 million for capital and \$145 million of Alaskan pre-production taxes.

Of ARCO's total outlay for TAPS of \$1.7 billion (which includes the company's 21% share of capital and construction interest for pipeline capacity of 1.2 million B/D, and pre-start-up property taxes) through 1977, \$770 million will be spent in the remaining pre-production years 1976 and 1977.*

Of the total \$305 million of outlays on tankers over the 1969-77 period, roughly \$120 million remains to be spent this year and next. While tanker financing is taking the form of life-of-vessel charters rather than direct ownership, and while investments in tankers do not appear on the company's balance sheet, they represent very real long-term obligations of the company.

Of ARCO's total spending of \$915 million for main field development in the 1969-77 period, \$565 million will be spent during the remaining pre-production period; \$430 million represents capital, and \$135 million, Alaskan taxes.

*We assume that full-year 1977 capital requirements will have to be financed prior to mid-year startup of TAPS.

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ESTIMATED CAPITAL AND OTHER EXPENDITURES
ON THE NORTH SLOPE PROJECT, 1969-1977

(Millions of Dollars)

	Spent 1969-1975	Pre- Production 1976-77	Grand Total 1969-1977
<u>\$^a</u>	<u>\$ 985</u>	<u>\$ 770</u>	<u>\$1,755</u>
Initial	900	570	1,470
Construction Interest	75	155	230
Property Tax	10	45	55
 Wells	 \$ 185	 \$ 120	 \$ 305
Initial	160	105	265
Construction Interest	25	15	40
 Shoe Bay Field ^b	 \$ 350	 \$ 565	 \$ 915
Initial	340	430	770
Property Tax	10	15	25
Reserves Tax	...	120	120
 <u>Project Total</u>	 <u>\$1,520</u>	 <u>\$1,455</u>	 <u>\$2,975</u>

TAPS Capacity of 1.2 MM B/D.

Development of main field to capacity of 1.5 MM B/D.

Continued.....

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PROJECTED USES, INTERNAL SOURCES OF FUNDS AND EXTERNAL FINANCING REQUIREMENTS
1976-77

(Millions of Dollars)

	<u>1976</u>	<u>1977</u>	<u>Cumulative 1976-1977</u>
<u>Uses of Funds:</u>			
TAPS Capital ^a	\$ 435	\$ 135	\$ 570
TAPS Construction Interest	100	55	155
Tankers ^b	45	75	120
Prudhoe Development ^c	330	100	430
Alaskan Taxes ^d	85	95	180
TOTAL NORTH SLOPE	<u>\$ 995</u>	<u>\$ 460</u>	<u>\$1,455</u>
Other Capital Expenditures	\$1,005	\$1,040	\$2,045
Debt Repayment	117	24	141
Dividends	145	145	290
TOTAL	<u>\$2,262</u>	<u>\$1,669</u>	<u>\$3,931</u>
<u>Internal Sources of Funds:</u>			
Earnings	\$ 366	\$ 420	\$ 786
Non-cash Charges	655	675	1,330
BP Notes	58	...	58
TOTAL	<u>\$1,079</u>	<u>\$1,095</u>	<u>\$2,174</u>
External Financing Requirements	<u>\$1,183</u>	<u>\$ 574</u>	<u>\$1,757</u>

a. For TAPS capacity of 1.2 MM B/D.

b. Includes construction interest.

c. Development of main field to capacity of 1.5 MM B/D.

d. Pre-production property and oil reserves taxes.

Drexel Burnham & Co.

ARCO is employing traditional high debt financing for TAPS and, as needed, off-balance-sheet debt for tankers in the form of long-term leases on vessels. The bulk of the debt required to finance its share of TAPS capacity 1.2 million B/D has already been raised. Financing of tanker requirements also been arranged.

Of the total outlay of \$1.7 billion required for TAPS in 1976 and '77, we assume that 85%, or \$1,445 million, will be debt and that 15%, or \$255 million, will be equity capital.* To date, ARCO has raised \$1,310 million in long-term debt (including a \$250-million revolving credit convertible to a 5-year loan prior to end-1978, and \$150 million in 4-year Eurodollar credits). Thus, ARCO has yet to raise some \$135 million in debt and \$255 million in equity capital for TAPS prior to 1977 startup.

ARCO's other corporate uses of funds during the remaining pre-production period could total \$3,248 million, which, when combined with remaining TAPS requirements of \$390 million, raise financing requirements for 1976-77 to \$3,638 million. ARCO's sources of funds apart from TAPS debt and tanker financing might total \$3,307 million in 1976-77. The total includes estimated cash flow from operations (\$2,116 million); outstanding BP notes (\$58 million); suspended debt-equivalents for chemical facilities (\$300 million); sale of major carved-out production payment (\$429 million); advance sales of gas (\$250 million); sale of the East Chicago refinery; and related inventories (\$140 million); sale of ARCO's petroleum operations in the Province of Saskatchewan (\$1 million).**

ARCO's unfunded capital requirements in 1976 and 1977 work out to \$331 million--\$196 million if unfunded debt for TAPS is excluded. ARCO could resort to a variety of financing options--including additional debt or advance crude sales--to raise this relatively small amount of capital. It may also be noted that the company is discussing the sale of its remaining petroleum operations in Canada to a national oil company. ARCO had valued its Canadian properties at \$400 million prior to the recent sale of its interest in Saskatchewan for \$23 million.

ARCO may decide to fund TAPS with 10% equity capital and 90% debt.

Allowance by the FPC of inclusion of advance payments for gas commitments in pipeline rate bases led to the cancellation of \$720 million in advances to ARCO. Recent advance sales of gas in the lower-48 states and sale of a production payment compensated for the bulk of this loss.

AGO 531589

ATLANTIC RICHFIELD

TAPS AND OTHER FINANCING:
ADDITIONAL PRE-PRODUCTION FUNDING REQUIREMENTS

(Millions of Dollars)

<u>TAPS Capital Requirements, 1969-1977</u>		\$1,700
(1) TAPS Equity Requirement		\$ 255
(2) TAPS Debt Requirement		\$1,445
<u>TAPS Debt Financing</u>		
ARCO Pipe Line 7% bank note due 3/6/78		\$ 25
ARCO Pipe Line 7½% bank note due 2/5/80		25
ARCO Pipe Line 7 3/4% notes due 6/1/98		40
11/1/74 ARCO Pipe Line 8.7% notes due 11/1/81		200
1/15/75 ARCO Pipe Line 8% notes due 1/15/82		250
7/16/75 ARCO Pipe Line 8 3/8% notes due 7/15/83		250
1/1/75 ARCO Pipe Line, revolving credit convertible to 3-year term loan prior to end-1978		250
Early 1975 4-year Eurodollar credits from Canadian and European banks		150
1/27/76 ARCO Pipe Line 8% notes due 2/1/84		200
		\$1,390
Less: Repayment of Short-term Bank Debt		80
(3) TAPS Debt Financing to date		\$1,310
(4) (2)-(3) TAPS Debt Requirement less Financing to date		\$ 135
<u>Other Corporate Uses of Funds, 1976-1977</u> (ex TAPS and Tankers)		
North Slope		\$ 610
Other Capital Expenditures		2,045
Purchases of 6 million Common Shares of Anaconda at \$27/sh.		162
Debt Repayment		141
Dividends		290
(5) Total Other Corporate Uses of Funds		\$3,248
<u>Other Sources of Funds, 1976-1977</u>		
Corporate Cash Flow		\$2,116
BP Notes		58
Approximate Unexpended Private Debt for Chemicals		300
12/5/75 Sale of Production Payment		420
Advance Sales of Gas in Lower-48 States		250
Sale of East Chicago Refinery and inventories		140
Sale of Petroleum Interests in Saskatchewan		23
(6) Total Other Corporate Sources of Funds		\$3,307
(7) <u>(1+4+5-6) Additional Financing Requirements, 1976-1977</u>		\$ 331

ATLANTIC RICHFIELD

POSSIBLE IMPACT OF TAPS DELAY ON FINANCING REQUIREMENTS*

(Millions of Dollars)

Capital Costs ^a	\$100
Construction Interest on TAPS	115
Property Taxes	40
One-half of 1978 Spending ^b	<u>235</u>
Increment	\$490

One year delay.

Speculative.

Excludes possible expenditures on lower-48 pipeline.

We estimate that a full year's delay in bringing North Slope crude on stream would add approximately \$490 million to ARCO's preproduction expenditures. As noted earlier, chances of such delay--let alone a protracted delay--now appear minimal.

A Glimpse Beyond 1977

Although ARCO's prospective cash flow from North Slope operations is very impressive, continuing outlays on the project may prove to be almost equally impressive, particularly if the company undertakes development of the Kuparuk and Burne reservoirs, tertiary recovery in the Sadlerochit reservoir, early development of natural gas, and construction of a pipeline system to East-of-Rockies markets (table on next page).

ATLANTIC RICHFIELD

NORTH SLOPE CASH FLOW AND POSSIBLE CAPITAL EXPENDITURES,
1978-1983

(Millions of Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
<u>"Reserves Constraint" Case</u>						
Cash Flow ^a	415	532	507	508	484	491
Possible Capital Outlays	<u>470</u>	<u>82</u>	<u>125</u>	<u>380</u>	<u>380</u>	<u>50</u>
Main Field/TAPS/T	470	82	50	50	50	50
Gas Development	...	...	...	330	330	...
<u>"Production Potential" Case</u>						
Cash Flow ^a	404	519	520	618	691	722
Possible Capital Outlays	<u>760</u>	<u>372</u>	<u>415</u>	<u>960</u>	<u>710</u>	<u>380</u>
Main Field/TAPS/T	470	82	725	50	50	50
Lower-48 Pipeline	40	40	40	...	...	...
Lisburne/Kuparuk	250	250	250	250	...	...
Tertiary Recovery	...	...	...	330	330	330
Gas Development	...	...	...	330	330	...
<u>"Market Constraint" Case</u>						
Cash Flow ^a	412	421	393	560	516	520
Possible Capital Outlays	<u>470</u>	<u>332</u>	<u>300</u>	<u>630</u>	<u>630</u>	<u>50</u>
Main Field/TAPS/T	470	82	50	50	50	50
Lisburne/Kuparuk	...	250	250	250	250	...
Gas Development	...	...	...	330	330	...

- a. Cash flow includes investment tax credits for the period 1978-1981 and reimbursement of Alaskan reserves taxes in 1978 and 1979. Earnings included in cash flow assume \$11.00-per-barrel crude price and current tax laws.

Standard Oil of Ohio

Sohio's prospective transformation from a severely crude-deficient, regional refiner/marketer of medium size (with supporting interests in coal, chemicals, and foreign production) into a crude-rich integrated major is being accompanied by severe growing pains.

Sohio's capital commitment on the North Slope is huge both in absolute terms and relative to its capital base. As already noted, the company's cumulative expenditures on the North Slope project through 1977 could reach \$5.2 billion. In contrast, Sohio's net book value at end-1975 was \$1.5 billion; its debt-to-capital ratio was already 57% and headed a bit higher. More disturbing to investors, Sohio's capital requirements have continued to grow in discrete chunks owing in part to inflation and in part to catch up for early delays in constructing TAPS. In addition, Alaska has imposed an onerous tax on oil reserves, payable prior to the startup of North Slope operations. A major concern of investors--now ebbing--has centered on the potential large increment to pre-production costs, and external financing requirements, from possible delay in bringing North Slope crude on stream. If such delay were opened, then Sohio might face a true financial crisis. As noted earlier, the probability of a protracted delay in completion of the North Slope project appears slim.

STANDARD OIL OF OHIO

ESTIMATED CAPITAL AND OTHER EXPENDITURES
ON THE NORTH SLOPE PROJECT, 1969 - 1977

(Millions of Dollars)

	Spent 1969-1975	Pre- Production 1976-1977	Grand Total 1969-1977
Capital	\$1,593	\$1,252	\$2,845
Construction Interest	1,407	928	2,335
Property Tax	171	254	425
	15	70	85
Reserves	\$ 233	\$ 391	\$ 624
Capital	208	320	528
Construction Interest	25	71	96
Hoe Bay Field ^b	\$ 755	\$ 995	\$1,750
Capital	740	705	1,445
Property Tax	15	30	45
Reserves Tax	...	260	260
Net Total	\$2,581	\$2,638	\$5,219

TAPS capacity of 1.2 MM B/D.

Development of main field to capacity of 1.5 MM B/D.

STANDARD OIL OF OHIO

PROJECTED USES, INTERNAL SOURCES OF FUNDS AND EXTERNAL FINANCING REQUIREMENTS
1976-1977

(Millions of Dollars)

	<u>1976</u>	<u>1977</u>	<u>Cumulative 1976-1977</u>
<u>Uses of Funds:</u>			
TAPS Capital ^a	\$ 675	\$ 253	\$ 928
TAPS Construction Interest	195	59	254
Tankers ^b	216	175	391
Prudhoe Development ^c	400	305	705
Alaskan Taxes ^d	175	185	360
TOTAL NORTH SLOPE	<u>\$1,661</u>	<u>\$ 977</u>	<u>\$2,638</u>
Other Capital Expenditures	120	90	210
Debt Repayment	11	18	29
Dividends	<u>50</u>	<u>50</u>	<u>100</u>
TOTAL	<u>\$1,842</u>	<u>\$1,135</u>	<u>\$2,977</u>
<u>Internal Sources of Funds:</u>			
Earnings	\$ 131	\$ 138	\$ 269
Non-cash Charges	<u>105</u>	<u>105</u>	<u>210</u>
TOTAL	<u>\$ 236</u>	<u>\$ 243</u>	<u>\$ 479</u>
<u>External Financial Requirements</u>	<u>\$1,606</u>	<u>\$ 892</u>	<u>\$2,498</u>

a. For TAPS capacity of 1.2 MM B/D.

b. Includes construction interest.

c. Development of main field to capacity of 1.5 MM B/D.

d. Pre-production property and oil reserves taxes.

Of the \$5.2 billion committed for the period 1969-77, TAPS will account for \$45 million (54%), tankers for \$624 million (12%), and development of the main Hoek Bay field for \$1,750 million (34%).

Of the TAPS total of \$2,845 million (which includes Sohio's 33.34% share of total and construction interest for a 1.2 million-B/D pipeline and pre-startup property taxes), \$1,252 million will be spent in the remaining pre-production years 1975-77.* Of the total \$624 million for tankers, \$391 million will be spent in 1975-77. Of the total \$1,750 million projected for main field development, some \$1,000 million remained to be spent during the pre-production years 1976-77. It is worth noting that of this \$995 million, some \$705 million represents actual capital requirements, while \$290 million will be for Alaskan taxes.

Thus far, Sohio has relied very heavily on debt to finance its North Slope commitments. Pipeline and tanker costs account for a hefty chunk (66%) of total financial requirements through 1977, with traditional methods of financing pipelines and tankers accounting for the preponderance of debt issuance to date. High debt/asset ratios on pipelines are typically justified by I.C.C. requirements for through-put commitments over the economic life of facilities and by the assured rate of reimbursement built into pipeline tariffs. (Alaska's past forays into the arena of prospecting profits on TAPS have, from time to time, caused some nervousness over eventual returns on this pipeline investment.) Tanker financing is following the industry trend of off-balance-sheet debt in the form of lease commitments for life of vessel.

As noted, Sohio's cumulative capital requirements for TAPS (including construction interest but excluding property taxes) in the 1969-1977 period will total \$2,845 million, of which 85% or \$2,346 million will be supplied by debt and 15% or \$414 million by equity capital. Advances by the parent to Sohio Pipe Line Company for equity capital have thus far amounted to \$150 million of the \$414 million total requirement for equity capital. To date, Sohio has raised \$1,724 million in medium and long-term debt.** The company also has available a revolving bank credit (convertible into a term loan) of \$600 million. Thus, total debt financing for TAPS already arranged is almost sufficient to cover TAPS' debt needs through 1977. Other probable uses of funds in the remaining 1975-77 pre-production period could amount to \$1,404 million of which \$1,065 or 76% would represent expenditures for North Slope exploration/development and Alaskan taxes, \$210 million or 15% for other corporate capital expenditures (mainly in the lower 48 states), and the remaining \$129 million or 9% for dividends and scheduled debt repayment.

* assume that full-year 1977 financial needs have to be met prior to mid-year start-up of TAPS.

To date, Sohio's term debt for TAPS has been raised mainly through Sohio/BP Trans-Alaska Pipeline Finance Inc. (Sohio Pipe Line Co., 67.8%; BP Pipeline Inc. 32.3%) and includes the following issues: December 4, 1974, \$250 million in 9 3/4% debentures due 1999; January 29, 1975, \$250 million of 8 5/8% notes due 1983; July 1975, \$750 million of privately-placed 10 5/8% notes due in 1993 and 1998. In March 1976, Sohio offered \$200 million of notes due October 1, 1977. The funds may be used for North Slope facilities other than TAPS.

STANDARD OF OHIO

TAPS AND OTHER FINANCING:
ADDITIONAL PRE-PRODUCTION FUNDING REQUIREMENTS

(Millions of Dollars)

<u>TAPS Capital Requirement, 1976-1977</u>		\$2,760
	TAPS Equity Requirement	\$ 414
	Less: Advances by Parent to Sohio Pipeline	150
(1)	TAPS Equity Requirement less Financing to date	\$ 264
(2)	TAPS Debt	\$2,346
<u>TAPS Debt Financing</u>		
	12/4/74 Sohio/EP \$250 million 9 3/4% debentures due 1999	\$ 169
	1/29/75 Sohio/EP \$250 million 8 5/8% notes due 1983	169
	7/75 Sohio/EP \$1,750 million 10 5/8% notes due 1993 and 1998	1,186
	Revolving Bank Credit	600
	3/76 Sohio \$200 million 7.1% notes due 1/1/77 ^a	200
(3)	TAPS Debt Financing to date	\$2,324
(4)	(2)-(3) TAPS Debt Requirement less Financing to date	\$ 22
<u>Other Corporate Uses of Funds 1976-1977:</u> (ex TAPS and tankers)		
	North Slope	\$1,065
	Other Capital Expenditures	210
	Debt Repayment	29
	Dividends	100
(5)	Total Other Uses of Funds	\$1,404
<u>Other Sources of Funds, 1976-1977:</u>		
	Corporate Cash Flow	\$ 479
	Bank Credit, payable from crude proceeds	300
	10/2/75 Issuance of 2 million shares of common stock	136
	Advances on Coal (\$96 million) and Uranium Development (\$16 million)	112
	3/76 \$50 million 7.6% notes due 4/1/79, and \$75 million 8% notes due 4/1/81, both for payment of Alaskan reserves tax for 1976	125
(6)	Total Other Sources of Funds	\$1,152
(7)	<u>(1+4+5-6) Additional Financing Requirements, 1976-1977</u>	<u>\$ 533</u>

a. We assume the entire amount (\$200 million) will be spent on TAPS.

Other sources of funds--including funds from operations (\$479 million), issuance of common stock (\$136 million), a bank credit repayable from proceeds on North Slope crude (\$300 million), advances on coal and uranium development (\$112 million), and sale of notes for 1976 payment of Alaskan reserves taxes (\$125 million)--may total 1,152 million in the years 1976-77. Remaining financing requirements before start-up approximate \$538 million.

Sohio's options for financing the additional \$538 million range widely. They include additional debt (public or private), equity financing, advance sales of crude (several modes are available), elimination of the dividend, even sale of an interest in its equity in TAPS. Sohio could issue additional debt except as constrained by covenants attaching to existing debt, since the real collateral behind its Alaskan-related debt is the company's Prudhoe reserves, nothing else.* Obviously, Sohio's heavy reliance on debt is contingent upon a rapid build up of its cash flow from North Slope production, promising fairly prompt correction of the debt/equity imbalance. If North Slope crude were to sell for \$11 a barrel on the West Coast (and if Sohio were to raise debt to cover the whole of its remaining financial requirements through 1977), Sohio's cumulative cash flow from the first four years of its North Slope operations would be sufficient to retire the company's entire outstanding debt projected for the close of 1977.

STANDARD OF OHIO

PROSPECTIVE DEBT/CAPITAL RATIOS, END 1977

(In Per Cent)

-1975	57% ^a
-1977 If 1976-77 Requirements Financed by Debt	60% ^b

Sohio's debt-to-capital ratio approximates 60% if deferred revenue (obligations) were included.

Sohio's debt-to-capital ratio would approach 63% if deferred revenue (obligations) were included.

Sohio's leeway under those strictures for raising additional debt or for sale of reserves in the ground would be more than ample even if current cost estimates were to escalate substantially or were pre-production expenditures to balloon owing to delay in completion of North Slope facilities.

As this report was nearing completion, Sohio announced plans to issue \$250 million Sohio Pipe Line Co. debentures due 2001.

While from Sohio's point of view the cost of additional debt might be regarded as high by conventional standards relative to the cost of an equity financing, it is understandable why Sohio is postponing a major common stock offering. (Last year's equity issue was modest, given the scale of Sohio's capital needs.) Besides the variety of other options available for raising capital, an equity financing of almost 7.7 million shares at the recent price of the common would be needed to raise the entire remaining \$538 million in external financing requirements for 1976-77. (Sohio must also consider BP's financial condition in issuing common stock since BP is entitled to purchase 54% of new stock offerings by Sohio.) Undoubtedly, Sohio is looking forward to the day when the price of its stock more adequately reflects the company's earnings possibilities.

In order to avoid both additional debt and a large equity financing, Sohio could resort to advance crude sales--its ace in the hole. To raise \$538 million from advance crude sales, Sohio might have to convey roughly 110 million barrels of crude, or a little over 2.5% of its net proved reserves of liquids in the main field at Prudhoe Bay.

STANDARD OIL OF OHIO

POSSIBLE IMPACT OF TAPS DELAY ON FINANCING REQUIREMENTS*

(Millions of Dollars)

Capital Costs ^a	\$ 50
Construction Interest on TAPS	235
Property Taxes	80
One-half of 1978 Spending ^b	<u>190</u>
	\$565

* One-year delay.

a. Speculative.

b. Excludes expenditures on lower-48 pipeline.

On our reckoning, a full year's delay in startup could add \$565 million to Sohio's remaining pre-production financing requirements, raising the total to \$1,100 million. This lofty level of external cash needs would still be tolerable, prospective debt ratios considered, provided that a plausibly assured start-up date were then foreseeable.

STANDARD OIL OF OHIO

NORTH SLOPE CASH FLOW AND POSSIBLE CAPITAL EXPENDITURES,
1978 - 1983

(Millions of Dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
<u>Reserves Constraint" Case</u>						
Cash Flow ^a	897	1,061	1,005	1,022	980	991
Possible Capital Outlays	<u>382</u>	<u>155</u>	<u>130</u>	<u>425</u>	<u>425</u>	<u>130</u>
Main Field/TAPS/Tankers	382	155	130	130	130	130
Gas Development	...	...	...	295	295	...
<u>Production Potential" Case</u>						
Cash Flow ^a	878	1,036	995	1,100	1,119	1,138
Possible Capital Outlays	<u>507</u>	<u>280</u>	<u>370</u>	<u>1,005</u>	<u>965</u>	<u>670</u>
Main Field/TAPS/Tankers	382	155	245	130	130	130
Lower-48 Pipeline	85	85	85	...	...	...
Lisburne/Kuparuk	40	40	40	40	...	...
Tertiary Recovery	...	...	...	540	540	540
Gas Development	...	...	...	295	295	...
<u>Market Constraint" Case</u>						
Cash Flow ^a	881	896	810	963	919	924
Possible Capital Outlays	<u>382</u>	<u>195</u>	<u>170</u>	<u>465</u>	<u>465</u>	<u>130</u>
Main Field/TAPS/Tankers	382	155	130	130	130	130
Lisburne/Kuparuk	...	40	40	40	40	...
Gas Development	...	...	...	295	295	...

Cash flow includes investment tax credits for the period 1978-1981 and reimbursement of Alaskan reserves taxes in 1978 and 1979. Earnings included in cash flow assume \$11.00-per-barrel crude price and current tax laws.

#12.14

SCOMM

ALASKA STATE LEGISLATURE

MEMORANDUM

October 6, 1975

TO: Senator John Huber, Chairman
Special Committee on Taxation and Revenue

FROM: Franklin D. Fleeks
Committee Counsel

SUBJECT: Alaska Mineral Severance Tax, SB 294.

This memo is a summary of what has happened up to this date on SB 294. It is submitted for your information.

Review of the letters submitted and testimony at the hearing held on May 9, 1975, reveals that mining industry representatives, municipal utility officials, ancillary industry representatives, and interested individuals were unanimously opposed to the tax. The only testimony in favor of the tax was from the Department of Revenue.

The Department of Revenue Position

The Department of Revenue representatives stated that there is a severance tax on all of the state's renewable and non-renewable resources, oil and gas, timber, fishing, etc., except the "hard" mineral industry. The industry, at present, is taxed through a mining license tax, which is a tax on net income. From Commissioner Gallagher's testimony, the hard mineral industry grossed \$62,000,000 for the 1974 fiscal year. The sources were as follows:

Sand and Gravel	\$42,000,000
Coal	14,000,000
Other	6,000,000
Total	\$62,000,000

From the approximately 200 licenses issued only two paid tax. One from the coal industry and one from the platinum industry. The amount collected brought the state \$30,000 in revenue. The mining license tax is considered ineffective.

The present law is an additional net income tax. The Department considers it a tax on efficient procedures. Their position is that if a graduated severance tax is imposed it will fall on all producers of hard minerals in the State except those who sever less than \$100,000 worth of minerals in a year. SB 294 would serve to tax a non-renewable resource,

extract revenue from those producers who ship out-of-state or to foreign countries, provide easier administration, and would provide additional revenues from a source that other taxes may not be able to touch. Instead of \$30,000 the anticipated revenue is \$3,500,000.

SB 294 is considered prospective because of the low level of hard mineral activity in the State. Passage would allow the hard mineral industry to plan rationally its tax cost if further development takes place.

In answer to criticism that the bill was like the British Columbia Royalty tax, the Department of Revenue stated the following. The B.C. bill is a two step royalty linked to international price for the refined mineral and a Canadian wholesale price index. The royalty is in addition to Federal and provincial taxes and cannot be taken as a deduction in computing the taxes. The proposed mineral severance tax would be deductible on Federal and State Income Tax returns, the effect being that the tax would be paid half by the Federal and State governments and half by the taxpayer.

In talking to John Messenger, Assistant Attorney General, it was sensed that it is still the intent of the Department to go forward with the bill. Attempts will be made to make it more palatable.

Mining Industry Position

From testimony and the letters the industry's position is that passage of SB 294 will discourage current and future exploration for minerals. They consider the mineral severance tax a gross receipts tax and as such it is inherently unfair. They also stated that because the proposed tax would add another cost to the already heavy burden of exploring and developing minerals in Alaska, only those prospects having the greatest potential will be exploited. Marginal deposits would be left untouched.

Ancillary Industry Position

Testimony was given by Jim Dotson of the Alaska Air Carriers Association. He represented the view of the air taxi and air charter firms in the State. A large amount of the revenue of his members is derived from providing support to survey teams, geological teams, and others doing the summer exploration work. He had been informed that just because SB 294 had been proposed, two large summer contracts for 1975 had been cancelled. His position was that passage of SB 294 would seriously reduce the air carriers' revenue with a consequent reduction in air service in the State.

Utilities Position

Letters were received from Fairbanks Municipal Utilities System and Golden Valley Electric Corporation, since they are two of the largest consumers of coal for electric generating purposes. Their position is that the proposed tax would be passed on to them and increase their operating costs. This in turn would lead to a rate increase for their customers.

Native Corporations Position

In our Anchorage staff meeting on September 24, 1975, Representative Anderson gave the Native Corporations' position. He stated that SB 294 would make it more difficult to go to the capital market to obtain funds for exploration and development. He also stated that the proposed bill had caused delays in current negotiations with financial institutions.

It should be noted that the Administration, by Governor Hammond's letter of May 8, 1975, states that further hearings would be held " . . in order to jointly develop a rational tax . . . "

Listed below are the names of the companies and persons who wrote to the Committee.

Mineral Severance Tax Project

Digest of Letters

<u>Date</u>	<u>Correspondent</u>
4/25/75	Dr. Johl Morris
4/17/75	Perry, Knox, Kaufman Inc. M.A. Kaufman
4/30/75	Cominco American J.C. MacLean
4/11/75	Rodney A. Blokestad
4/10/75	U.S. Borax J.E. Stephens
4/18/75	Heflinger Mining & Equipment Company Carl F. Heflinger
4/12/75	Eagle Creek Lodge Don Bennett
4/8/75	GVEA R.L. Huffman
4/4/75	Alaska Miners Association - Fairbanks Branch Mark Ringstad
4/11/75	MUS Robert Hanson
5/5/75	John E. Clark
5/6/75	Ketchkian Pulp Company Edward W. Borger, Sr.
5/6/75	Alaska Gold Company W.A. Glovinovich
5/19/75	C.C. Hawley & Association W.E. Shoemaker

460 Lovella Way
Sacramento CA 95819
26 October 1975

Senator John Huber
Special Committee on Taxation and Revenue
Pouch V
Juneau Alaska 99811

Dear John:

It was so very nice that you and Francis were able to visit us the other night, although I am sorry for both of your sakes that the occasion was ~~so demanding~~ physically, and sorry for all of us that it was so brief.

This letter's intent is to tell you something about the Nevada-type of tax on mineral rights (or leasehold interest, or whatever you want to call it) and give an indication of what it might mean relative to Prudhoe Bay. Here is the critical aspect of this sort of tax in contrast to the income tax: the Nevada system levies the tax on the income to the property, whereas an income tax is a tax on the income to the person (either individual or corporation). Thus, there is none of this jiggery-pokery about the geographic point at which income is realized. It is realized at the property.

Nevada has a successful 90-year history of administering this tax, which is in lieu of property taxes (Nevada has no income tax) or severance tax). The tax is simple to administer, and it achieves equity because it is based on ability to pay. I should add that Nevada has a property tax on equipment, just as Alaska has, but it has no property tax on mineral rights.

Let's take a quick look at the approximate tax base that Prudhoe Bay will generate in its first year of production. You may recall that I testified in April of this year that Prudhoe Bay then had a value of about \$10.3 billion; I estimated this value by escalating the price of oil and otherwise updating my 1973 appraisal made for the North Slope Borough. Employing the same escalation of price, and also escalating expenses, I estimate that the 1977-78 net income to mineral rights will be

\$2,259,000,000.

Incidentally, I did not include \$203 million that would otherwise be levied in severance taxes, for two reasons. One is that the severance tax complicates the issue of net income to mineral rights, and the other reason, which follows on the first, is that I do not believe that the severance tax should be levied if the net income tax to M.R. is used. It muddies the waters relative to tax equity.

The tax on net income to M.R. permits the retention of your present ad valorem property tax on equipment. The way this is done is to allow an expense against income that is an amortization charge on all the equipment. Thus, the value of the equipment is removed from the net income tax base.

There it is in a nutshell: a prospective \$2 billion tax base consisting of the net income to properties, producing a tax to be paid in lieu of either severance, regular income, or ad valorem property taxes. Of course, the state's royalty income would also be received, and would be a charge against income in computing the net income to M.R.

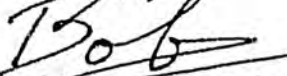
If you would like me to do a detailed job on this for you, I will (1) write a report containing tax comparisons and prospective tax bases, (2) compose forms that will be required for administration, (3) suggest the staff required for the job (it will be remarkably small), and (4) testify on the issue. Of course, I would also be happy to work for you along other lines, such as the issues encountered this last spring. If you are interested in considering a net income tax to M.R. on mines as well as oil and gas fields, I can write a parallel report on that topic.

By the way, my work for Nevada was highly successful, in that the legislature adopted all of my major recommendations. If you want to check on this, you might write James Anderson, Chief, Division of Assessment Standards, Capital Plaza, 1100 East Williams, Carson City, Nevada 89701. He is in charge of implementing Nevada's revised program

And finally: as I told you when you were here, I will be out of the country all of December.

Oh, here's another "finally": I just got a letter from Sterling Gallagher inviting me to a meeting in Anchorage on November 6 on the subject of "Mining Tax Policy." Besides the fact that I will be giving a talk that day to the California Manufacturers Association in Newport Beach, I couldn't come to Anchorage merely on that invitation. I had earlier corresponded with Gallagher about doing some research for his Department on the above subject, but of course it was as a consultant and not merely as an individual visiting Alaska. Thought you might like to know.

Sincerely



Robert H. Paschall
Consulting Valuation Geologist
and Engineer

SCOMM

#12:15

TESTIMONY OF MR. RICHARD KILGORE
OF WALTER J. LEVY CONSULTANTS CORP.
FOR THE JOINT SENATE AND HOUSE
RESOURCES COMMITTEE MEETING ON
OIL AND GAS TAXATION - MARCH 21, 1977

CHAIRMAN POLAND - We will bring the meeting of the Senate and House Resources Committee meetings to order. We have with us as our first witness this morning, our consultant from the firm of Walter J. Levy, Mr. Richard Kilgore. We have asked Mr. Kilgore to address us this morning on the net income tax bills and those closely associated thereto. We will break at 10:00 AM, and will resume again this afternoon at 1:30 PM.

For those who are sitting behind me, if you'll raise your hand so that Mr. Farleigh can notify me if you have a question, you will be recognized, and with that I'd like to welcome Mr. Kilgore back to Alaska and let him take over.

RICHARD KILGORE - Thank you Senator Poland. I think it is appropriate since I am the leadoff witness, that I present here this morning what I call an overview of tax legislation.

CHAIRMAN POLAND - Mr. Kilgore, for the record, would you identify yourself.

RICHARD KILGORE - Yes. I'm Richard Kilgore. I'm Director of Research for W. J. Levy, Consultants. I've been with the firm for about fourteen years.

What I'm going to attempt to do here this morning is to provide what we would call an overview. I'm not really going to go into very much detail about the individual pieces of legislation, at least the specific provisions of them, and concentrate more on the approaches, the alternatives, and so on. Most of my remarks will have to do with income taxation, but I also have some remarks on severance taxation if we have enough time; and I'd like to say a little bit in the end about a total tax package - total tax regime in Alaska because the whole thing is obviously more than a sum of these parts if it has to do with the impact of the total program.

I'd like to look at the major areas of taxation and really consider the alternatives presented to you because they are quite diverse, and give you our appreciation, really, of the major pros and cons this time of the major pieces of legislation, of the major approaches and the kinds of pros and cons, advantages and disadvantages which we think you legislators should be looking at and asking questions of witnesses as you go along. We will be available as I say, for specifics later.

As many of you may recall, our firm has been urging upon the legislature, for many years, that it review its corporate income tax, and especially to do this before Prudhoe Bay Production really comes on and you have major questions of taxation there. We have pointed out in the past, and I think it's fairly well known now the problems of apportionment under the present regulation, and I don't really think we have to get into that in detail. We ourselves did our own analysis of how the present system might work for Prudhoe Bay. Taking data submitted by SOHIO, in submission 1 at the request of the legislature, and very roughly what it turned up was that if one applies the present system, that is the three factor apportionment system with sales and property, and payroll, what you turn up in the way of income apportion to Alaska is roughly one quarter of what the producing income and the pipeline income would be. Saying that another way - if the present system were applied to Prudhoe, using as I say, data supplied by SOHIO, what you would get is an effective rate of taxation instead of something like 9.4% an effective rate of taxation, roughly a quarter of that, two to two and a half percent, so there are obviously problems with the present system, and as I say, I won't burden you with too much of that as I think by this time it's fairly well known by everyone.

Now, you at the present time have before you three different bills, basically two different approaches, but three different bills designed basically to deal with this problem of the inappropriateness of the present formula. The first is the bill submitted by the Governor, and this comes out of the work of Professors Zeifman and Ainsworth, and a report done by the Department of Revenue. This is SB 236, and HB 322. We basically feel that this is quite an imaginative and new approach, and involves basically two features: A change in the tax base, and a modification of the apportionment formula. I'll come back to that. Second, we have a bill on separate accounting introduced by the subcommittee on leasing and taxation, and third we have the net proceeds bill introduced again this year which reads to similar, and I guess even identical, to the net proceeds tax of last year. So we have three bills basically, I'm going to say, on two approaches, and lets look at some of the pros and cons of these. I should say at the outset that like many things in the field of taxation, no one approaches his ideal here, there's no magic answer to this that's going to come out, and one approach is not just going to stand out that is uniquely better than any other one. It's just not the case. So there's clearly room for debate, and for your careful look at these approaches. So first lets look at this Governor's bill coming out of the Zeifman and Ainsworth work.

Basically, as you see, there are two features to this legislation. One is a change in the tax base, and the second is a change, as I say, in the apportionment factors themselves. The present system as you probably know, uses federal taxable income. That's its base, and takes a portion of that federal taxable income. This new proposal involves a switch to book net income before income taxes as reported by oil companies to their stockholders. Now, there are certain clearcut advantages or pros for the State in this switch in tax base from taxable income to book net profits. First of all, figures are readily available from annual reports. This concept of income is reported by most companies or at least most of the major companies that will be operating as oil producers in Alaska. Second, as you will hear, I'm sure, from Professor Zeifman and from the Revenue Department, there are fewer so called erosions than in federal taxable income, that is under federal taxable income rules there are various kinds of generous accounting rules allowed to companies which works to reduce the amount of income on which they pay taxes, and you're fairly familiar with this too, I'm sure. Such things as intangible drilling expenses are under federal tax law, can be treated as expense items, not as capital items, and this involves large write-offs. The federal government allows accelerated depreciation and so on, and companies in their book accounting

rarely, if ever, expense intangibles or use accelerated. They use normal kinds of depreciation under normal accounting rules. So very clearly switching in this direction results in a higher tax base than federal taxable income, and this obviously throws up more income to the State of Alaska. But switching from taxable income to debt book income does have problems. It is not without problems. I'll just enumerate a few of these. Later we can talk about these in more detail. Even within acceptable accounting principals there's a certain flexibility, obviously, to companies in respect to how they report income, the kind of deduction and so on. Inventory gains and losses are often treated differently by companies, and they have some choice in this. Currency changes, how they are affected by currency changes, gains and losses, they are often treated differently by companies. Incidentally, some of these factors which resulted in different kinds of accounting don't always even show up in company annual reports. If they're not material, they may not even be stated within a company annual report. One would probably have to go beyond that, if one wanted to see the effect of these factors. There is also a certain amount of flexibility in accounting for write-offs. When does one realize a loss, if one has some sort of venture that is going bad, at what point do you write the thing off as a total loss? There is a certain amount of flexibility in this. Companies at times will use what is sometimes

called the "blood bath" approach to accounting. When things really go wrong, and you have a lot of losses, there is a tendency to just write it all off in one year, and take all the bad at one time. Of course, the company doing this, it would effect the tax base that Alaska would be looking to in this approach. But, I don't think any of these while they present problems in switching to book income are probably disabling. Revisions could also be a problem. Companies at times change accounting procedures, and will then revise their book income and various parts of this back through time, and this would cause problems also if one does this, if there's a later revision, do you then change your tax base, and so on. So this presents problems. I think perhaps, a more serious problem in going to pre-tax book income has to do with how one arrives at that. Now, normally pre-tax income, if you went to a company annual report, what you would do was take net income after taxes and add back all income tax payments, and that's apparently what is proposed here in this piece of legislation. That would include all income taxes including income taxes paid to foreign governments. This looks to us like it could really present problems, and it raises questions about what sort of a tax base you are really reaching when you look at pre-tax book net income. If you'll take the annual report of a company like EXXON which is going to be an operator in Prudhoe Bay, is going to be a producer there, also a company that has very large foreign operations and pays very large

foreign income taxes, it is very interesting to see what has happened in the past to those foreign income taxes, and then I would like to talk about what may happen in the future to foreign income taxes and how this might effect the tax base that you'd be using if you should go to net book income under your appropriate income tax.

If you look at the annual report of EXXON or any other oil company operating in the foreign field, what you will find is that over the past few years, and particularly the years '73 and '74, there was a very sharp buildup in foreign income tax payments. That is tax payments to foreign producing governments such as the Saudi-Aribs in Iran, and so on, and the result of this huge increase in foreign income tax payments this bid build up, as you all know, had to do with the increase in OPEC prices. OPEC dictated very substantially higher prices. These higher prices were obviously not intended to benefit the companies, but to benefit the producing governments themselves, and so what the producing governments did was take a large part of this income generated by the very much higher prices and tax it away from the oil companies in the term of income taxes. Some of it they called royalty, some of it they called income tax, but there was a very large income tax component to this, and this resulted in very large increases in foreign income tax payments

by oil companies. And, if Alaska had been on this system which involves using book income, what would have happened over these years is that Alaska would have benefited from a huge increase in pre-tax income from a company such as EXXON, and this would have resulted in large part

not after tax profits EXXON earned, but because of its income tax payments to foreign government. So Alaska, over this period, would have benefited from a very short run up in pre-tax income because of income tax payments by oil companies to foreign governments. It would have worked to the benefit of Alaska, had Alaska been on this system.

But now, if we look ahead, we find the concession terms are changing in the middle east and elsewhere, and almost all foreign areas. Foreign governments have increasingly taken control of producing operations themselves. When the companies remain, they remain as producers and operators, but they serve in increasingly different roles. They serve as contractors, not as concessionaires, and under this new type of system, payments to the producing governments tend not to be in the form of income tax, they tend to be in terms of purchase of oil, purchase at market prices with the companies being compensated in terms of service fees for their continuing operations in these countries. So what is beginning to happen is these huge payments to foreign producing governments are increasingly not called income tax payments, they are called purchases,

purchases of oil from the Saudi Arabian State Oil Company for example, and already if you look at the annual report of a company like EXXON, you will see that we have a decline already in 1975, and I guess when the 1976 annual report of EXXON is out, you will find another decline in foreign income tax payments, so what had happened in foreign oil markets would have worked to the benefit of Alaska over the past few years, but now would be working in the other direction. That is EXXON may have a relatively constant after tax profit on its foreign producing operations in countries such as Saudi Arabia, but its pre-tax will be going down. Why? Because it won't be making income tax payments to the Saudi's or other foreign governments. It will be purchasing oil and this would effect the pre-tax profit. So you could have a declining base from this kind of thing.

Now, I dwelled at some length on this because it's interesting. What it demonstrates is that when you use this approach, you do have some problems, and you have things happening outside Alaska which effects the tax base that you are going to reach an apportion part of, but it's very much affected by the things that have nothing to do with profitability in Alaska. And this, I think, the foreign income tax things, are a good illustration, and they are an important one,

and that's why I spent some time with this. So under this kind of system you would have things effecting net book income that really have very little to do with Alaska, and this is something of a problem, and one doesn't know for the future how these various kinds of changes would effect it, and what I'm talking in foreign income taxes probably will work to the disadvantage of Alaska. Other things that we may know nothing about could work the other way. So moving to book income as a concept had truly some advantages. You'll have obviously a higher income that you are trying to take a part of, but it's not without problems. We can discuss those more at some later point.

The second part of this approach has to do with a change in the apportionment formula. What has been suggested here in the legislation is changing from sales to extraction, and there are some very clear advantages to Alaska in this obviously. The extraction isn't oriented measured and is production measured in Alaska, and is obviously more appropriate than a measure such as sales where a large part of sales of crude oil in Alaska are not made within Alaska, but they are made without Alaska. So this kind of a move will clearly apportion more income to Alaska, and is certainly a step in the direction of higher appropriate income tax receipts for the State of Alaska. Now here again, although this step obviously works in the direction of favoring Alaska and higher income tax payments to the State,

there are technical problems as well that you should be aware of, and especially in foreign areas. Net production of companies is not always so easy to define, and net production as set out in the annual reports of the oil companies may not quite match Alaska's definition. The legislation before you does define net income in certain specified ways. The production figures that you get from the companies may not always match, and there may be problems of meeting your definitions, especially in foreign areas such as Indonesia, for example, where companies work under contracts. The concept of net production is not the same as the simple system where one has the simple royalty that one takes off, and it may be difficult to define what really is net production. What is production of a company? What is purchased oil? So that moving in this direction has some benefits for the State, but it obviously is not without problems.

In general, we feel that this approach, this one and rather novel new approach for the State has certain advantages. I sum these up by saying it will clearly increase Alaskan tax revenues. It works better in a sense, and why it does is quite obvious. Book income is higher than taxable income. Extraction is a better measure than sales, so you throw up more income to Alaska. If you throw up more income it

obviously means you are moving closer, hopefully, to getting something like 9.4% of what will be the producing income in Alaska. And although the administration end of it is not quite so simple as it looks, initially, and for some of the reasons that I've set out here, it obviously has some administrative advantages over other approaches. It is somewhat simpler, and this is certainly an advantage in this approach. Now the real basic disadvantage that we feel to this whole approach is that while it would get higher income apportioned in Alaska, one doesn't really know out of this system, how close one would get to true profitability. That is, how much income in Alaska and how close that is to what seems to be extensively profitability in Alaska. This is very difficult to know, very difficult to know how close it is. In total and company by company, it's difficult to know how the thing will actually work.

We ourselves tried a very simple approach to try to see how close it would come, and what we did, and anyone can do this, if one takes the annual reports to say, the three major companies that will be producing on Prudhoe Bay, ARCO, EXXON, and SOHIO, takes the latest data available for them, and that's the 1975 annual reports of these companies, (the 1976 one is not out), and then simply adds to that data for Prudhoe Bay, profitability, production, and so forth for Prudhoe Bay, and rather than make our own estimates

for that, again we turn to the data submitted by SOHIO, in SOHIO submission 1, so what we attempted to do was simply combine the data for Prudhoe Bay/Alyeska as contained in SOHIO submission 1, with the company's latest annual report data, and then attempted to see how this new approach would work that is using as our tax base pre-tax book income and then using a property factor, payroll factor and an extraction factor, and this is a very rough approximation obviously, but what happens when one does that, you find out that this apportionment formula does not apportion all the income that is assumed for Prudhoe Bay and Alyeska. It does not apportion it all, and more interesting than that, what you get is if you look at the three companies, just to see how three companies of this type would fare under this system, you get quite different results for the different companies. That is, some companies, at least one of the companies, you would get a fairly high porportion of the income earned in Alaska by this approach. From another company, you would get quite low percentage of it, so that one could, at least this little illustration suggests, that one could have companies with exactly similar operations in Alaska such as for example ARCO and EXXON, and get very different tax liabilities for the two companies, and we think this looks to be a potential disadvantage. You say this is only an illustration and one doesn't know what would be thrown out of this approach, but it does suggest

that what you may be getting in the way of apportion income and income tax payments may be off the mark of what profitability really is. So, we receive that as kind of the key draw back to this. You go in the right direction, but you don't know where you really are. Some people could be underpaying income taxes, other people could be overpaying, and how it would balance out to the State as a whole, it's difficult to say.

We would make this suggestion. If the legislature decides that this new approach in the bill submitted by the Governor is the approach it wants, and it might well because of ease of administration or whatever reasons that one chose this, we would suggest that perhaps the legislature might want to consider at the same time that it did this, that it ask or require of the Department of Revenue that it provide every year, estimates of profitability on oil and gas production within Alaska, perhaps with input from company, I don't know, but estimates by Revenue, the best estimates they can make and how much is made on oil production, pipelining or whatever in Alaska, so that the legislature can take this information, set it against the income tax receipts it's actually getting, and try to get some measure of how this thing is really working, that is how well is it achieving its goal of identifying income in Alaska.

Perhaps such reports could even have data by company not identified or something of this sort so that one could also, so that the legislature could evaluate over time how well it was working company by company. So that if you take this approach, we suggest that you might want to consider also getting some sort of information estimates out of the Department so that you would be in a position to evaluate in subsequent years how well it seems to be working.

Moving from this approach to a second and quite different approach to income taxation, take a look at direct accounting. Now, in principal of course, direct accounting is getting around some of these problems of apportionment. It's going directly at a measure of how much income there is from oil and gas operations in Alaska, so that in principal at least, if it can be done in a reasonable way, it does not suffer from the defects of this other approach. It is trying to measure directly what you really want to tax, in total in company by company, and we've always felt if it was legally possible to do this, and it were administratively possible to do this, this would seem to be the logical approach to taxation. Now, the problem as will be pointed out by many other people who will be testifying in here is that there are

problems of administration. There clearly are, and they are real. There are various problems of how one allocates expenses to Alaska, how does one look at and evaluate inter-affiliate sales, and things of this sort, corporate overhead and how much is allocated to Alaska, and so on. So that there are very real administrative problems to this approach, even though it is a more straight forward approach. It requires, on the part of tax administrator's rules, regulations, rather extensive ones, and obviously involves audit capabilities. One has to audit. There is a lot more auditing under this approach, and so on. And a lot, I think, has been said in the reports by the Department of Revenue and by Professors Zeifman and Ainsworth about these administrative problems. What we would urge the legislature to do though is really to try to weigh these very carefully. This is the major drawback, the administrative problems in this more direct more logical approach, weigh very carefully just what are the magnitude of these problems? How difficult are they to handle? How many people will be involved? How much money would have to be spent and so forth. How difficult is it really? And what seems to me the attempt you have to get some judgement as is to weigh whether the difficulties in administering this thing are really worth the effort. It is a difficult thing, really, to assess, and I think that in assessing these kinds of things, one can't necessarily

look for parallels elsewhere or general problems of separate accounting or direct accounting in other states. I don't think you can put too much weight simply on the fact that companies sometimes favor separate accounting. I think when you're looking at the difficulties here, you've really got to look at the circumstances of the oil producing operations in Alaska and try to get some handle on this by looking at that, not by looking at parallels elsewhere. Try to assess _____ ask questions on how to assess, how difficult it would be for the oil producing industry in Alaska. That's what we're talking about.

I won't really spend much time on the net proceeds. It was an attempt last year, really, an indirect attempt at direct accounting by a separate oil and gas production tax. It based, although differing in some respects from separate accounting and from the separate accounting bill, it's basically the same approach as direct accounting. So I think if one is going the route of attempting directly to estimate or tax income in Alaska, one would worry about the differences between the net proceeds and the separate accounting tax, but more important, I think, are the two basic approaches to income taxation in Alaska, and what you're going to have to do is weigh very carefully the pros, cons, advantages and disadvantages of these two basic approaches to a problem inherent in the present corporate income tax

regime in Alaska as it applies to oil and gas production.

Chairman Poland, I had planned at this time to go on with some comments on severance tax. I don't know whether you would want to break for questions on corporate income taxation or go on.

CHAIRMAN POLAND - Do any members of the committee have any questions that they would like to ask Mr. Kilgore at this time?

SENATOR HUBER - Madam Chairman, I thought that Dick might want to make some comments on the data base which you gather by a net proceeds tax approach that you may not find available in the other ones. That's been a major consideration by Levy Company and Associates, helping to develop that particular item.

RICHARD KILGORE - Okay, this is one of the obvious. Looking at this and direct accounting, this is one of the aspects to it. And the net proceeds things, you are doing it on kind of a property by property basis. You are not aggregating everything as you might under certain separate accounting approaches, and having access to that kind of information

Hestis Severance

would be of use to the State, because it does give the State some feel for profitability of individual properties, ranges of profitabilities, what are cost value relationships in various fields, and so on. And that is of value obviously in designing or further modifying the tax regime in Alaska.

CHAIRMAN POLAND - Any questions? Very well, Mr. Kilgore. We will go on to the severance tax at this time then.

RICHARD KILGORE - I believe our firm is on record as saying that this really is an appropriate time to review your severance tax. We have major new production coming on in Prudhoe Bay, and this production which is obviously quite different in character from that you have now in Cook Inlet. The second reason is that our office has been concerned for some time about the way the present tax works for Cook Inlet production receiving old oil prices. We've been concerned about this, and we think that the legislature should appropriately review this at this time. And I'll come back to that.

Now you have two bills - two severance taxation bills before you, but before I turn to the bills themselves, I would like to review with you certain principals we feel you should keep in mind in reviewing severance

TESTIMONY OF MR. RICHARD KILGORE
OF WALTER J. LEVY CONSULTANTS CORP.
FOR THE JOINT SENATE AND HOUSE
RESOURCES COMMITTEE MEETING ON
OIL AND GAS TAXATION - MARCH 22, 1977 (AM)

RICHARD KILGORE - I appreciate the opportunity of coming back so fast, and what I'd like to do is fire my remarks, really, to the corporate income tax issue and amplify on the very brief remarks I made yesterday morning, and also comment on what appeared to be some differences with other testimony yesterday. What I propose to do is review again in more detail, really, the pros and cons of the two basic approaches to income tax which are before you. I want to make it clear at the outset, though, that it is not our role here to advocate one approach or another. Basically, we see our role as giving you an appreciation of how we see the pros and cons, and advantages and disadvantages of these two approaches, what they seek to accomplish, how well they seem to accomplish the goals that they are intended for, and leaving it to you to make the final judgement. So I don't want my remarks to be construed as advocacy of either separate accounting or apportionment to modified apportionment approaches, and so on. I think, and I'd also really like to get down to basics on some of this, and I think maybe we lost some of the basics in some of the testimonies yesterday. I think it is important to appreciate at the outset that our concern here, my concern, your concern, is not really with how apportionment or separate accounting work in general in other

states for other industries and so on, what we are concerned with here is not with these approaches as general approaches to income taxation, but what we're talking about is their applicability to the oil and gas industry in Alaska. This is what we're talking about, and I think we have to keep this in mind. Not how well it works for other states, but why other people use it, and so on. If you will remember our original concern with the approach that you now have, the three factor approach that you now have with your income tax system didn't have anything to do with general worth, its general ability, and its general applicability. It had to do with how this thing specifically worked toward the oil and gas industry in Alaska, and this is how this whole question of reviewing your income tax came up, and it appeared to us, and we have testified many times, that the approach didn't seem to work very well for oil and gas operations in Alaska, that is in a portion, a very much smaller amount of income to Alaska than would appear to be earned by the oil and gas industry on producing operations and pipeline operations in Alaska. Now, if the oil and gas industry in Alaska were small scale, and I guess this really wouldn't matter, you probably wouldn't be very much concerned with it, and you probably also could view it as if it doesn't work for the oil industry, it probably works well for other industries, maybe for other industries it apportions more than you might expect, and so on if they wash out. But, as

you all know, the oil and gas industry will be by far the biggest income producing industry in Alaska as far as we all can see, so it obviously is of very considerable importance to you. It is important to you, I think, that you have a tax structure which gets you something like your 9.4% of what appears to be the profits generated by oil and gas operations in the State of Alaska, so we have to keep in mind, we're really talking about these two approaches very specifically in the context of oil and gas in Alaska, not as general approaches. Now, I noted the other day that Professor Zeifman argued against separate accounting at one point, and one of his arguments, I think repeated a number of times, was that a good reason for not adopting separate accounting was that no state has adopted it as a general approach to income taxation. This was an argument against separate accounting. Now, basically, I don't find that a very persuasive argument. First of all, we're not talking about other states, we're talking about Alaska, and we're not talking about general applicability to all industries, we're talking here about oil and gas, and I don't think anybody has suggested that the State of Alaska should adopt separate accounting as a general approach to income taxation in the State, and certainly the two bills before you; Senate Bill 105 on separate accounting, and Senate Bill 202 on net proceeds, both of these are clearly

intended to apply only to the oil and gas industry in Alaska, so I don't find this a very persuasive argument against separate accounting, and I think we have to keep this in mind. Conversely, just because a number of states use this three factor apportionment formula, I don't think it's a particularly persuasive reason for applying it in Alaska if it isn't appropriate to your oil and gas producing industry.

Now, I'd really like to get down to basics here. Starting off by considering what do we really mean by income in oil and gas operations in Alaska. Is it really so scrambled up by other activities of multi-national, multi-state enterprises that it just can't be unscrambled? Are we really talking about some kind of affliction which can never be put together and that we really just shouldn't bother with it? What is this income in Alaska that we're attempting to identify? Well, let's look first at what the industry does in Alaska. It comes to Alaska, it explores Alaska, hopefully finds oil or gas. It develops those resources, transports them to a point of export in the State, be it Valdez, Cook Inlet, or whatever - at least a bulk of the oil or gas does that, and then it moves into consumption in other states. Now it is true that a lot of this kind of activity and what goes on in this whole process does take place within the integrated scheme of operations of major oil companies. In fact, in many cases the final sale of the oil produced in your state

may not be a sale between third parties until it actually gets to the gasoline pump in California, for example, that may be the first point at which the sale is made, and the rest is within integrated operations. But what does this imply about income earned in Alaska? Is there a concept of income earned in Alaska, if this is the process by which a lot of your oil really moves. Well, I would put it to you that your oil when it leaves the State of Alaska does have a value. It will have a value, and it will have a value that's highly visible. We don't know what the FEA is going to do on the pricing of Prudhoe Bay oil, for example. But it may very well be that they will establish a value at Valdez for example. It may be that they will set a wellhead value. If they set a wellhead value, we can add on a pipeline charge, and we can have a value of oil as it leaves Alaska. So, basically, it's this value of oil leaving Alaska that is identifiable which is really the final revenues from producing oil and gas in this State. These are the revenues which you can identify as being earned by oil and gas producing operations in Alaska. Obviously when you are talking about a net income, you're talking about deducting various kinds of costs. Exploration development costs, pipeline costs, operating costs, amortization of capital costs and the like. The large number of these costs are incurred in the State and can be identified as incurred in the State.

Some of them are obviously some of the costs incurred to produce your oil. To get out of the State are the costs which are incurred elsewhere. Corporate overheads, obviously, a certain amount of corporate overhead time has to do with planning for the oil producing operations in Alaska. Some of the services which are provided to the operations in Alaska come from outside the State, and these are just some of the areas where accounting problems arise, but still these are within reason, identifiable also. So the income we're really talking about identifying in taxing is the value of the oil leaving the State of Alaska and an appropriate allowance for the various costs involved. Now the question for you, with your consideration of income tax, is which of these approaches really identifies income as we seem to see it and say that it is earned by the oil and gas industry by virtue of their operations up here. Which one is going to identify a portion of income which you apply your 9.4% tax. You'll get an appropriate tax on that income. Now, as I discussed yesterday, there are basically two approaches, and those are the approaches which are before you. One is apportionment, and this is where the approach is to look at the total income available, total income earned by a company, and try to work some fraction which gets applied to that total income, gets you income in Alaska. The other

approach is basically separate accounting which goes back to those revenues and cost categories that I discussed just a little while ago, and attempts directly to identify them and come up with income in Alaska, and the question is which of these seems to identify and work best that has come closest to identifying what would appear to be the true income on operations in Alaska, but not only that, taking into account also cost difficulties of tax administration, and that cannot be ignored. An approach which gives you the perfect answer and which is extremely costly or impossible to do in practice, obviously is not the kind of tax that you want.

Now, I'll start with apportionment. You have an apportionment formula in place in your tax laws today. You have Senate Bill 236, which is a modified version of an apportionment formula, but still an apportionment formula nonetheless, and the approach is to start, as I said, with total income of the company before taxes, under your present law, taxable income. This proposal suggests shifting it to book income, but nonetheless starting with the total income earned by an enterprise. The next step in apportionment, whether it be the one you have now or a new one, is to develop a fraction to apply to this total income in a corporation which hopefully when applied, brings back to Alaska an

appropriate amount of income. Now, you do that by taking factors that appear to be indicative of income generating activities, such things as properties, payrolls, sales and the like. These are things which indicate income producing activities are taking place, and what you do is you take ratios of these in the State to the total. Now, the question is does this really work? Does it correctly assign income to Alaska, or maybe _____ when does it work? When would this give you the kind of answer that you would hope to throw up? Well, it would work if roughly the same income is generated per unit of these income identifying factors in Alaska, as in Alaska and outside Alaska. These are the circumstances under which it appears to work. That is, just let's take one factor for a moment. Let's take property, if income is proportional to property in Alaska as it is elsewhere. That says in effect, if rates are returned the same in Alaska as they are elsewhere. If that's the case, and then you take the ratio of property in Alaska to the total, then you will allocate, and apply that to the total income of corporation, you will correctly bring into Alaska the amount of income that's earned there. That's if the ratio of income, in this case the property is the same inside Alaska as it is outside Alaska. And the same would go for the other factors. If you're looking at payrolls, if income to payrolls are the same in Alaska and outside, then this would be the correct factor for

allocating income in Alaska. Now, it's obvious, I guess, to anybody looking at any of these factors, it's unlikely that they will be identical in Alaska and outside Alaska. Rates of return aren't the same. You need fewer people and payrolls under some circumstances to generate income in Alaska and elsewhere, and so on. So that the apportion approach basically says factors are not perfectly going to be the same in Alaska and outside, and therefore work perfectly, so what do we do? We take a number of these factors. Three in this case and we average them, and hope that that will give us an overall fraction which will appropriately apportion income into Alaska when applied against the total income of a corporation operating here. It averages somewhat obviously better than any single one of these factors taken by itself. Now, the question is how well it really works even when you average these factors, and how much better will it work if you move from the factors that you have now, to an extraction factor. Professor Zeifman was asked in testimony yesterday, how well his approach would work in Prudhoe Bay and Alyeska. Now, his answer was that his approach would be more effective because it takes into account the whole picture. All the profitability of the corporation was the answer. In a more general vein he also said that in reviewing the disadvantages of separate accounting, in my review of the

disadvantages of separate accounting, I didn't mention the most important disadvantage of separate accounting, that is again that it didn't look at the whole pie, it didn't look at the total income of the corporation. So he was saying first of all that his approach would seem to work better for Prudhoe Bay and Alyeska because it looks at the total income of the corporation. And he also said this is one of the disadvantages to separate accounting. Now, it seems to us that looking at the whole pie, that is the whole income of the corporation, all of the income it generates everywhere, it in itself has no value, unless the apportionment you come up with that you apply to this whole pie, the fraction that you apply to it, really works to get the appropriate amount of income in Alaska. What we're saying is that simply looking at the whole pie, looking at the total _____ of the corporation in and of itself is no virtue. Its only virtue only works if the apportionment formula of the fraction you apply to it is appropriate and brings it in, and I think that's very important to appreciate, simply looking to the whole income of the corporation doesn't say that this is an appropriate approach of getting a lot of income as it were.

Now, you remember our analysis all along, with the present system you have looked at these factors and tried to come up with how appropriate they really were. We pointed out

that if you looked at the payroll factor, it was relatively _____ . You have relatively few people on payrolls in the kind of functions that you will have in Alaska in the oil and gas industry. Very few payrolls for production for pipeline and so forth relative to the income generating, so we were critical of this particular fact. In sales, it's been pointed out are often zero in Alaska. Sales are made outside Alaska. Property, that to us appeared to be a better factor. That is, you have very heavy investment here in Alaska to generate the kind of income that you are going to generate, but our analysis said that property being a better factor couldn't make up for these other ones. Now, Senate Bill 236, this new approach, substitutes extraction for sale, and this is clearly an improvement. Oil production is a good measure of generation of income, and therefore it is a better factor. But the question remains, does even this modified apportionment formula do the job? Not just get more revenues, which it clearly will, and the other part of the approach is moving to book net income also will get more revenue, and it's not simply a question of does it get more revenue, does it really get the income apportioned to Alaska that is appropriate? This still remains the question. And this is what I said yesterday, the biggest drawback to the whole apportionment approach and even a modified apportionment approach as proposed

here, is that it is unclear how close you will come to true profitability through this approach. It's a very elusive and very uncertain thing, and it appears to us there's by no means a guarantee that this will happen, and this we see as the most serious drawback to this approach, and there are really two aspects to the question of whether appropriate income is apportioned to Alaska under this approach. One has to do with how much in total is apportioned to the State of Alaska. If you take each of the individual companies, apply this approach, apportion income to Alaska, sum it up, how close does that come to the overall profitability of the industry operating in Alaska, the profitability as I laid it out before. And the second question is, how does it work for individual companies. That is, we apportion use this approach for each individual company operating here. How close does the apportionment formula come to apportioning appropriate income to Alaska for individual companies. Does it work well for some companies, not well for other companies, and so on? If this is the case, that works unevenly amongst the companies, then you have a question of equity of taxation. So these are the two aspects that are important, and this is an uncertain thing and difficult to really try to come to grips with. How well would this thing do the job? Now, I stated yesterday that our office had done some illustrative analysis to try to get some handle on this question. We had been somewhat reluctant to put this

formally on the record and discuss with you a little bit about the results, what I saw as the major results that came out of this thing yesterday, but we were somewhat reluctant to lay out because there are a lot of caveats involved in what we did, and when you put this thing into the public record, it's often used without regard to the caveats which are very important, and we hate to see those get lost. I have been asked if we would put this formally into the record, and I'm going to do so now, and I would then like to discuss it with you including all the caveats and get those on the records. I would like to distribute this to you at this time and discuss it. I would like to spend some time on this. I hate to burden you too much, as I say, I want to make it clear in your own minds exactly what we have here and what we don't have. Now what we have done, we have labeled very carefully a hypothetical illustration. Because it is a hypothetical illustration, I would underscore that. It is a hypothetical illustration of this modified apportionment formula applied to book income which is the feature of this new legislation, and we've done it for three major Prudhoe Bay producers. Now, I would call your attention to the note first of all because this is important. The note says the calculations shown on the table above are not intended to represent projections of income that actually would be of portion to Alaska in 1978 for the three companies

if this new approach were taken. It is not that. Rather their calculations are meant to provide a rough illustration of how this approach might work for three Prudhoe Bay producers that vary in size and scope of overall operations, and even though these are identified as SOHIO, ARCO, and EXXON, and we use some of their data, it really is not meant so much that it is these companies, it is companies of these characteristics, and these are quite diverse companies as you know. EXXON is a huge international company. SOHIO has been basically limited to domestic activities with very little production so far, and ARCO being somewhere in between, so they are not meant to be really the companies. We have used their data just to illustrate what will happen with companies of different size. Now, what we've done in this illustration is on the first line to take from the 1975 annual reports of these companies, these are the latest available to us, the pre-tax net book income of these companies outside Alaska. We've just taken a pre-tax net book income, and since basically in these companies virtually everything is outside Alaska in those years anyway, we take this as the income outside Alaska, and this is data for 1975, and all we've then attempted to do is to graph on to this sort of a Prudhoe Bay operation. Now, we cast around for data to use for Prudhoe Bay, we considered making our own estimates, but we finally settled for some data that had been submitted by SOHIO to the legislature at the request of the legislature, and we reluctantly

used this. It was readily available, reluctant because when SOHIO put this information into the record, they did it with a lot of reservations, and we have the same reservations about it, and anybody looking at these numbers, I think, certainly should take it in the context of all the reservations that SOHIO had about their own data, and we apologize to SOHIO in a way for using it without a complete list of all their reservations.

SENATOR CROFT - Could I ask just one question in that regard? That was the information that was furnished by SOHIO, at the request of the committee was furnished to you?

RICHARD KILGORE - This is SOHIO submission 1.

SENATOR CROFT - To Greg Erickson, analyzing the corporate tax? So it was for that purpose.

RICHARD KILGORE - Yes. It was for that purpose, and they labeled it as hypothetical and so on, which it is, and I want you to understand that that's all that it is, and we appreciate their reservations about it, but we had to have something to give us an idea, something that we could graph upon to present data, and we simply and arbitrarily gave 50% of that to SOHIO and 25% each to the other two companies,

simply because that seems to be roughly their equities in this thing, and if we add that, we end up with a figure for total pre-tax income. This is obviously hypothetical, it has '75 data, it has what someone hypothetically says might go on in Prudhoe Bay in '75 _____ purposes. Then, we attempted to apply the approach of Professor Zeifman to this. Looking at property factors where the numerator were the property factors used in the SOHIO thing. The denominator was property as we found it in the annual reports of the companies. Payroll, we just took an arbitrary 2%. It's arbitrary that makes relatively little difference to the analysis. The extraction factor, we took net production as assumed in the SOHIO hypothetical illustration. We took as a denominator, net production as it appeared in the annual reports of the companies without worrying about whether net production was quite what was meant in this bill, and we averaged the factors for the companies. We then applied it to pre-tax book income which included other activities of companies and this hypothetical illustration for Prudhoe Bay. Divide the average of the three, which is the way this approach would work, and that gave us the income that would be apportioned to Alaska under these circumstances, and that's the second to the last line down there, and then what we did on the final line was

to take this income apportion to Alaska out of the theoretical model, but applying this new approach to this hypothetical model, and looked at what percent that was of the income assumed to have been earned on Prudhoe Bay and Alyeska operations above.

I think that the most striking thing that came out of this was the difference in the way the approach worked for the three companies. Again, three companies of these different characters. In the case of the EXXON type company, the approach came very close to apportioning what is assumed in the beginning was the income there. 650 up on the top. 625 apportion. So it worked very effectively for the EXXON type company in this particular situation. It worked much less effectively in the case of an ARCO type company with these sort of data. It added up to less than half; the income apportion to Alaska, than it was assumed to be earned there in the first place. And of course, in this simple model, EXXON and ARCO are earning the same money in Alaska, but the amount of income apportioned to Alaska under this mechanism are quite strikingly different. In fact in the ARCO type case it's about half. The SOHIO type company comes somewhere in between, and in total the approach allocates about two thirds of the total income from three companies in Alaska. I certainly wouldn't put too much stock in the two thirds, but I think the more striking thing is the differences that

get thrown up amongst the three companies here. Now, these are very _____ calculations, and things could very well change. I might point one thing out to you. What is striking in the case of the EXXON type corporation is that, as I say, it appears to be very effective in this case. And the question is, why? If you go to an addendum on the third page, it basically explains why this works in this particular instance for this type of a company. If you will recall, I said a while ago that if ratios of income to the various kinds of factors you use are the same within and without Alaska, then the approach works in general quite well. To take that a step further, the ratios of income to the various factors such as property or extraction are higher outside Alaska than they are inside Alaska, then the apportionment formula tends to favor Alaska. That is, it brings in more income than it should. If the ratio is higher in Alaska than outside, then these kinds of ratios work to the disadvantage of Alaska. Let me put it this way, if we look at a property factor for example, and within the State of Alaska, one earns whatever 20% on property (on assets) that's the rate of return. If it's 10% on operations outside Alaska, a lower rate of return, and you simply take the total income of the corporation then use the ratios of property to allocate to Alaska, you will not get the income to the State of Alaska that you should.

If the rates of return are higher in Alaska than they are elsewhere, then if you simply had a one factor apportionment formula, simply property, and that says that, say, 15% of the property is in Alaska, and you apply that to the total income, but the problem is that that 15%, what is it going to bring in? It's going to bring in average profitability to Alaska. An average of everything, and if Alaska is higher you're not going to bring in as much income as you should in effect. That is because what you're bringing in is average profitability if you do that. If you simply go with the ratios of property bringing in average profitability into Alaska, when in fact it's higher. And the other way around. If profitability is higher outside Alaska, higher say relative to property, and again you only have a one factor formula, and then you use the proportion of property, you bring in average profitability into Alaska, and in fact it's higher outside, so that you apportion more than you properly should. Now what this is getting to is why does this particular formula for these set of circumstances seem to work for an EXXON type corporation? Well, the answer is basically shown on the addendum. These, what we've done, if you'll look at the top panel, we've got the ratio of income pre-tax net book income to property in this model outside Alaska inside Alaska. Now, if you'll look at EXXON, it has a very much higher ratio of income to property outside Alaska than inside Alaska, Pre-tax income.

And, therefore, application of this formula for the EXXON type corporation is beneficial in the State of Alaska. It pulls in more income than it otherwise would. This very high ratio of 42.4 here, has the effect of favoring Alaska, and that's basically why you get the results that you have here. That's why it works better for the EXXON type than it does for other models that we have. Now, I want to tie back to something that I said the other day. If you look at the question of why does pre-tax net book income to property look so high for EXXON. Is it because it has really such profitable operations outside the United States? This would suggest then that on a pre-tax basis they make 42% return on their property. The answer is that this number, this ratio, is inflated by all those foreign income tax payments that I talked about the other day. EXXON works big international operations. In the year 1975 it payed tremendous amounts of income tax to foreign governments, and that inflated its pre-tax net book income. After tax it would look quite different, but we're talking pre-tax here. This is the way this thing works. So, that has inflated this figure, you get a very high figure. It happens to work to the advantage of the State of Alaska under this model. Now, as I said the other day, this is a particular aspect of this thing, pre-tax net book income including foreign income taxes that may not be the case in the future. These may very well dwindle. Income tax payments

probably will be replaced by purchases of oil, so that this high factor that's built in here with our particular model that happens to throw up a reasonable amount of income for income corporations, may not in the future, may not be this way in the future, but the fact that this EXXON type corporation, international corporation in this particular illustration ends up with an apportionment formula working correctly may not hold in the future. It's uncertain for a lot of reasons, including this particular income tax feature. If we went through this illustration five years from now, the results might be quite different here. In total, and I think amongst companies, I think really there is no way of knowing. Now, again, this is merely illustrative, nothing more. We've taken these three companies because they're quite different companies, they're quite different companies of the type that will be operating in Alaska. Their own income will be quite different obviously, but if you just grafted on the Prudhoe Bay Alyeska thing to this on some rough assumptions as profitability and investments and so on, this is the way it would appear to work, and all I submit is that it does raise questions about this approach and about its ability really to identify income. Clearly, the apportionment by picking another factor that takes up a higher amount of income, but that in the process of merely increasing the income, it creates some inequity, and if what you want to do is simply

increase the take, you ought to increase the rate, instead of tinkering with one of the factors to simply produce additional income.

RICHARD KILGORE - Of course, if you increase the rate, you have to increase the rate for other corporations.

SENATOR CROFT - Sure, then what you're saying is that Alaska operations themselves are not paying enough once you've isolated it. Then your solution to that problem is to increase the rate if you think you have to have more, rather than trying to increase one of the factors that go into determining what portion of the income is allocated to the State.

RICHARD KILGORE - Well, this might be one approach. If you're not willing to change the factors, you would be left with changing the tax base which has also been suggested, or you would be left with changing the rate.

SENATOR HUBER - I wish that Dick would discuss the pre-tax net book income on extraction because I want to ask him a question about the sales factor that it replaces. It looks to me like the sales factor that it replaces would be on the same side of the book as how he explained the income

from property up above to where Alaska would get more than its share, because we have less than a reasonable share of the world-wide sales.

RICHARD KILGORE - Well, accept that to the extent that sales are really zero. This may drop out of your thing all together.

SENATOR HUBER - You mean that doesn't work out because we have a multiplying factor, or a dividing factor of zero? I don't like these mathematics that don't work both ways.

REPRESENTATIVE MEEKINS - I'm just trying to figure out how this works. Is it, I might have it backwards, is it the ratio of whatever the factor is to income to the factor if it's higher than outside then.....

RICHARD KILGORE - Then it's to your disadvantage because you're bringing it in at the average.

SENATOR CROFT - In that regard, our best guess as far as Prudhoe Bay is concerned is that with regard to about 75% of the operations at Prudhoe Bay is going to work to our disadvantage. We're talking about 50% SOHIO, and 25% ARCO.

RICHARD KILGORE - Or in total, but as I said, I would not put any precision on these at all. In this particular model, what happens in total, you throw up about two thirds when

the companies combine.

If you'll just look at the illustration itself, you will see that total income apportioned to Alaska, the sum of the three companies is seventeen sixty. When in fact by definition they are earning 2.6, it's about two thirds, but I would not take that as indicative of how much this approach will really do. I think that the more important thing here is how it seems to work for the different companies, and also in a sense says, at least suggests, that for this particular model it also doesn't throw up all of the income as well in total.

REPRESENTATIVE MEEKINS - But you could get a rough estimation of how that's going to work by seeking out different companies and going with their finding what their ratios are in terms of the profitability of their Alaskan activity versus their average, and you could see whether or not you are losing or gaining the respect of that individual company, couldn't you in that respect if you knew clearly that the profits rates in Alaska were much greater than for those factors than their average world-wide, then you wouldn't know exactly how much, but you would know that we're not getting what's appropriate, and we're taking the average instead of the higher rate.

RICHARD KILGORE - It is possible to gather enough information to look around and see how it would work with various companies, but that's not really what I suggest that you do. This is, as I said, intended purely as an illustrative to demonstrate how it works under these particular set of circumstances assumed here, and again I would look very carefully at the notes to this and also to the note which sets out some caveats about this.

Now, this illustrates, I think, some of the potential problems and I think, at least I hope, focuses on the workings of this thing, so you can think about the workings of this approach. This was described, I think, in testimony yesterday, as fictional and I guess it is illustrative based on some real data, but it certainly is not intended to be a projection of what will happen or anything of that sort. It was described as fictional as opposed to some actual data that were used, tax return data that were used to develop this approach, and I would like to make at least a couple comments on some of the inferences that were drawn from those tax return data. For one thing, they were used to illustrate net book income if you'll remember exceeded taxable income for the companies and it certainly demonstrated that, and no one was surprised at that result. Now, the second thing though, is that what turned up in those tax return data is that for

companies for which you had both apportioned income and separate accounting if you'll remember, the former, that is the apportionment is always higher, it was positive, described as always positive, and the latter, separate accounting always zero or negative, and this was taken as evidence that separate accounting doesn't work. Now, I'd like to address myself to that problem. The question is why did you get this result. Why did apportionment give you positive, and in this case which is oil companies operating in the State, 14 of them I believe back in '73, '74, and '75 that you got this kind of result. It was said that Mr. Lipton was wrong when he guessed that perhaps the reason was that you had zero sales and therefore when you went to separate accounting you had zero sales and you started subtracting and so on, but it wasn't indicated what it is that really gives you this kind of result, and I think that it would be of considerable interest to you to find out why you got this kind of result. The explanation really was not given, and when I say it was said that zero sales were not the reason, zero sales in the sense that producers that were producing and selling would declare their sales at zero. That was a hypothesis that we had, apparently that's not it. I can only speculate, I would guess that in the years covered what happened was that there were companies operating in Alaska and spending

money on payrolls, they have some office space, property, exploration, money, geophysical work maybe, bonuses, I think that bonuses were paid and the like, and there must have been such companies that had little or no revenue that were not gaining revenue out of production in Prudhoe Bay, and for these companies they would in fact be running losses. That is they would have no income. Not a question of your producing, but selling outside the State, simply that they don't have any income. Now, if they don't have any income, no revenues incurring these various expenses, they would run losses and separate accounting would certainly show them with losses, but I don't think if this is the explanation, and if it's not I think we'd like to know. If this is the explanation, I think one doesn't go from that to assume that separate accounting always ends up with no income or negative income, clearly if you apply accounting to the producers on Prudhoe Bay, they will not throw up no income. I would also point out the results which said separate accounting negative apportionment positive, why does that happen? Well that happens probably because these companies had payrolls in Alaska. People were here, and they were getting interested in the search here, and so forth, so you threw up some positive income by apportionment. You had some payroll, you had some property and so on. And you throw up positive income, but I think you have to ask the question of whether

this is really what you intend to do if we have companies operating in Alaska at losses because they haven't found any oil, haven't generated any income, do you really want to apportion income to them in Alaska and tax them on it? Should they pay income taxes when in fact they have no income in Alaska?

CHAIRMAN POLAND - Mr. Kilgore, I'm afraid we're going to have to break now. Our schedule this afternoon is 1:30 PM at the Supreme Court Room again, and we only have one individual scheduled to speak this afternoon, and that's the gentleman from British Petroleum, so possibly when he's through, we can resume the rest of this discussion with you. Thank you very much.

SCOMM

12:16

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• REPRESENTATIVE MARTY FARRELL
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ALYESKA PIPELINE SERVICE COMPANY
- Testimony on Regulation and
Ownership -
Joint Senate Commerce and House
State Affairs Committees

March 6 through 10, 1972 -

SENATE BILLS NOS. 294 AND 313

RIGHT-OF-WAY LEASING

Joseph R. Cortese
Squire, Sanders & Dempsey
Cleveland, Ohio

Senate Bills 294 and 313 present a number of serious problems and, in our opinion, they conflict with federal regulatory authority and the United States Constitution.

I. THE BASIC PREMISE OF THE BILLS IS WRONG, FOR THE STATE CANNOT USE ITS LAND CONTROL TO FORCE UNCONSTITUTIONAL RESULTS.

The basic premise of these bills is that the State, in its capacity as a landowner having control over land necessary for the pipeline, can impose terms and conditions on the pipeline proprietors that it concededly could not impose in its governmental capacity. We should state at the outset that this premise is wrong. It directly conflicts with the decisions of the United States Supreme Court. For example, in Frost v. Railroad Commission of California, 271 U.S. 583, 594 (1926), the U. S. Supreme Court held that a California statute, which sought concessions from a motor carrier as to methods of operating its business as a condition of the use of state highways, was in violation of the United States Constitution because such a requirement would constitute a taking of the carrier's property without due process. The Court said:

"If the state may compel the surrender of one constitutional right as a condition of its favor, it may, in like manner, compel a surrender of all. It is inconceivable that guaranties embedded in the Constitution of the United States may thus be manipulated out of existence."

Likewise, the attempt of a state to regulate how an interstate telegraph company may select its customers is void even where posed as a condition to use of the streets, for the state may not use its constitutional powers to achieve the unconstitutional result of interfering with interstate commerce.

"It is suggested that the State gets the power from its power over the streets which it is necessary for the telegraph to cross. But if we assume that the plaintiffs in error under their present charters could be excluded from the streets, the consequence would not follow. Acts generally lawful may become unlawful when done to accomplish an unlawful end, United States v. Reading Co., 226 U.S. 324, 357, and a constitutional power cannot be used by way of condition to attain an unconstitutional result." Western Union Telegraph Co. v. Foster, 247 U.S. 105 (1918).

As the following will further show, a state may not use its control of land to prohibit, attempt to regulate, interfere with, or unduly burden interstate commerce, nor to exact waivers of constitutional rights. If the use of state lands is necessary for interstate transportation, the state cannot withhold the right-of-way, it cannot exact more than reasonable compensation for such right-of-way, and it cannot invade the field of federal regulation or unduly burden interstate commerce as a condition of making available the use of its land.

II. THE STATE OF ALASKA MAY NOT WITHHOLD THE NECESSARY RIGHT-OF-WAY FOR IT MAY NOT WITHHOLD THE MEANS OF TRANSPORTING THE OIL AND GAS IN INTERSTATE COMMERCE.

The State of Alaska through its oil and gas leases has granted to the lessees the right to develop, produce, process and market oil and gas. That oil and gas can only be marketed feasibly by means which utilize state-owned lands. Under these circumstances, the State may not withhold its lands from the lessees.

This principle follows from the commerce clause of the United States Constitution. In Oklahoma v. Kansas Natural Gas Company, 221 U.S. 329 (1911), the State of Oklahoma by statute prohibited companies, which were engaged in transporting gas out of the State of Oklahoma, from laying, constructing and operating gas pipe lines in, on, under, across or along the highways of the State. The gas company merely sought rights to cross the highways for purposes of a pipeline to get natural gas out of the state. Oklahoma argued that while the gas company had the right to engage in interstate commerce, it did not have a right to obtain right-of-way in the state for that purpose, and that the state could withhold from such foreign corporation the power of eminent domain and the right to cross highways. The Supreme Court held that the state could not withhold the right to use highway crossings to construct the pipeline, and rejected the state's contentions, saying:

"At this late day it is not necessary to cite cases to show that the right to engage in interstate commerce is not the gift of a State, and that it cannot be regulated or restrained by a State, or that a State cannot exclude from its limits a corporation engaged in such commerce. To attain these unauthorized ends is the purpose of the Oklahoma statute. The State through the statute seeks in every way to accomplish these ends, and all the powers that a State is conceived to possess are exerted and all the limitations upon such powers are attempted to be circumvented. * * * The use of the highways is forbidden to them [interstate pipeline companies] and the right of eminent domain is withheld from them, and the prohibitive strength which these provisions are supposed to carry is exhibited in the fact that the boundary of the State is a highway. If it cannot be passed without the consent of the State, commerce to and from the State is impossible. The situation is not underestimated by appellant [Oklahoma Attorney General], and he says: 'If the appellees had the right of way they might engage in interstate commerce, but their desire to engage in interstate commerce is a different thing from the means open to them to procure a right of way.' And it is further said, that 'the confusion of the right to engage in interstate commerce with the power to forcibly secure a right of way is the basis of appellees' case.'

"There is here and there a suggestion that the State not having granted such right the alternative is a grant of it by Congress. But this overlooks the affirmative force of the interstate commerce clause of the Constitution. The inaction of Congress is a declaration of freedom from state interference with the transportation of articles of legitimate interstate commerce, and this has been the answer of the courts to contentions like those made in the case at bar.

"* * * No State can by action or inaction prevent, unreasonably burden, discriminate against or directly regulate interstate commerce or the right to carry it on. And in all of these inhibited particulars the statute of Oklahoma offends."

Thus, it was held that the interstate pipeline could cross state highways notwithstanding the prohibition in the Oklahoma statute.

The same Oklahoma statute was also considered, and was held to be unconstitutional in the case of Haskell v. Cowham, 187 F. 403 (8th Cir. 1911). There, the court stated as follows:

"No state may by means of its police power, or its proprietary power, over highways or by means of any of its other powers, erect and maintain impassable barriers against interstate commerce along its borders or through its body in the face of the grant to the nation of the power to regulate that commerce; for all the powers of the state are subordinate to this power of the nation and to its will that such commerce shall be free."

Not only would the withholding by the State of a right-of-way to the lessees constitute an undue burden on interstate commerce, but it would also constitute a deprivation of the lessees' property without due process of law. A succinct statement of this principle is found in the Haskell case cited above:

"But an owner who by virtue of his ownership of land or of mining leases thereof has the vested right to draw by means of wells or pumps natural gas from beneath the surface is the owner of valuable property which the state cannot take from him without just compensation and state laws and acts of the officers of a state which prevent him from taking it from the land and selling it and conveying it out of the state in interstate commerce, while they permit the withdrawal and sale of such gas in intrastate commerce, necessarily violate the national Constitution (1) because they take his property without just compensation and (2) because they substantially discriminate against and directly regulate interstate commerce."

The right of the lessees of the North Slope oil and gas to transport it in interstate commerce without obstacles or burdensome conditions imposed by the State is