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CONTRACT BETWEEN  
STATE OF ALASKA  
LEGISLATIVE FINANCE DIVISION  
AND  
MIKE DOOGAN

The parties to this agreement are the LEGISLATIVE FINANCE DIVISION, hereinafter referred to as the "Division", on behalf of the House Finance Committee, and MIKE DOOGAN, hereinafter referred to as the "Contractor."

The purpose of this agreement is to provide consulting services to the House Finance Committee through the Division.

IT IS, THEREFORE, MUTUALLY AGREED THAT:

CLAUSE I. - STATEMENT OF WORK

The Contractor shall prepare a report to the House Finance Committee on revenue issues involving the State of Alaska. The report shall be a review of existing information on oil and gas revenues and oil and gas tax revenues to the state, written in easily understandable language. The report shall include, but not be limited to, past, present and proposed revenue measures and their impacts upon the oil and gas industry and the State of Alaska.

CLAUSE II. - PERIOD OF PERFORMANCE

- (A) Work under Clause I shall be performed between February 6, 1978, and April 6, 1978, with the final draft report due by March 31, 1978, with the provision that the period of performance may be extended by mutual agreement of the parties.
- (B) This agreement may be terminated
  - (1) by either party on 10 days' written notice to the other party, or
  - (2) by mutual consent of the parties to this agreement.

CLAUSE III. - COMPENSATION AND METHOD OF PAYMENT

- (A) The Contractor shall be compensated as a contract employee at a rate of \$15.22 per hour. The Division will make necessary arrangements for such compensation to be remitted to the Contractor on or about the first and fifteenth days of each month and shall advise the Contractor of information or records that may be necessary to process such payments. Payments under this clause are not to exceed \$8,000.
- (B) Travel expenses of the Contractor while on the business of the Division or the House Finance Committee, approved by the Division prior to the Contractor's incurring the expenses, shall be reimbursed according to Article 2 of AS 39.20 and the regulations enacted pursuant to Article 2 of AS 39.20. Payments under this clause are not to exceed \$2,000.
- (C) Deductions from the Contractor's compensation shall be made for federal withholding tax, Alaska withholding tax and social security.

CLAUSE IV. - PROJECT DIRECTOR

Performance of the work specified in this agreement shall be under the general direction of Rep. Steve Cowper, Chairman of the House Finance Committee, or his designee.

CLAUSE V. - REPORTS

The Contractor shall keep the Project Director informed as to the progress of the work performed under this agreement and shall provide progress reports as specified by him.

CLAUSE VI. - RECORDS, DOCUMENTS, AUDIT

The Contractor shall maintain accurate records, including detailed time records, as may be required by the Division. The records are subject to inspection by the Division at all reasonable times. All documents,

reports, and writings performed under this contract are, upon delivery to the Division or at termination of this agreement, the property of the Division. The Committee shall have the full right to use these documents for its purposes, or otherwise, when and where the Committee may designate without any claim on the part of the Contractor for additional compensation.

CLAUSE VII. - ALL WRITINGS CONTAINED HEREIN

This agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this agreement shall be deemed to exist or to bind either of the parties to this agreement.

IN WITNESS WHEREOF, the parties have executed this agreement on the date indicated.

CONTRACTOR:

STATE OF ALASKA  
LEGISLATIVE FINANCE DIVISION

By: \_\_\_\_\_  
Mike Doogan

By: \_\_\_\_\_  
Jay Hogan, Director

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

APPROVED BY:

\_\_\_\_\_  
Rep. Steve Cowper, Chairman  
House Finance Committee

#9

A GUIDE TO ALASKA'S OIL AND GAS REVENUES

PREPARED UNDER CONTRACT WITH THE  
DIVISION OF LEGISLATIVE FINANCE  
ON BEHALF OF THE  
HOUSE FINANCE COMMITTEE

by Mike Doogan

March 31, 1978

## SCOPE OF REPORT

This report is intended primarily as a translation, an attempt to describe in English what the state's revenue picture looks like, particularly the oil and gas revenue segment.

There are no astounding new discoveries hidden in the following pages. In a sense this report is 'superficial' in that it does not attempt to explore specific issues in depth. The author has not read everything written on state revenue or even everything written on state oil and gas revenue. He has not even talked to all parties involved. He has simply attempted to understand the major factors influencing state revenue and, in turn, report them in a way others are likely to be able to understand.

This report is written from an 'objective' viewpoint, in that the author has attempted to allow the reader to draw his own conclusions from the facts presented. Those facts which seem critical to an understanding of the state revenue picture, however, are emphasized. In the last section of this report, Facts and Options, the author expresses some opinions. These opinions are solely the author's.

## A DEFINITION

Throughout this report the phrase 'oil and gas industry' is used. Generally, the phrase refers to all companies involved in oil and gas operations. But in the case of specific operations -- the Prudhoe Bay field or the trans-Alaska pipeline, for example -- the phrase is used to mean those companies directly involved.

## THE SOURCES OF STATE REVENUE

The State of Alaska receives money from many sources. The Department of Revenue, the state agency that handles this money, divides it into three

types: unrestricted revenues (money available for any purpose of government), restricted revenues (money received by the state for a specific purpose), and special funds (money used by the state for a specific purpose) :

The operations of government mainly are financed from unrestricted revenues. These revenues are divided into five categories: taxes, license and permit fees, intergovernmental receipts, state resource revenues, and miscellaneous revenues.<sup>2</sup>

Taxes provide most of the unrestricted revenues. According to the department's estimate for fiscal year 1979-<sup>3</sup> (that is, July 1, 1978 to June 30, 1979), taxes will provide some 63 percent of unrestricted revenues.

Next in size are state resource revenues, about 34 percent; license and permit fees, about 2 percent; intergovernmental receipts, about .65 percent; and miscellaneous revenues, about .35 percent.<sup>4</sup>

Taken all together these categories, the department estimates, will provide \$928.5 million during fiscal year 1979. <sup>5</sup>

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<sup>1</sup> Alaska's Revenue Sources FY 77-79, Research Section, Department of Revenue. An example of restricted revenues is money received from the federal government for educational programs. An example of special funds is the state's Scholarship Loan Fund.

<sup>2</sup> Alaska's Revenue Sources FY 77-79. Intergovernmental receipts are revenues shared with the state by the federal government.

<sup>3</sup> Alaska's Revenue Sources FY 77-79, FY 79 figures are used because they do not contain reserves tax payments which the state no longer receives.

<sup>4</sup> Alaska's Revenue Sources FY 77-79, The percentages are the author's, based on the department's figures, and are meant to show orders of scale, not to precisely predict the future.

<sup>5</sup> Alaska's Revenue Sources FY 77-79, This figure does not contain Alaska Native Claims payments, a 25 percent Permanent Fund contribution, or a 5 percent Renewable Resources Development Fund contribution. The legislature's estimate, found in Senate Committee Substitute for House Concurrent Resolution 97 Amended Senate (Senate CS for HCR 97 am S) is \$18.1 million higher (\$946.6 million) because the legislature decided the Renewable Resources Development Fund contribution is available for appropriation in fiscal year 1979.

Right now, the state also has a surplus; money not spent in previous years. The liquid portion of that surplus (the part that is in 'ready cash')<sup>6</sup> is estimated by the legislature to be \$273.6 million for fiscal year 1979.<sup>7</sup> The legislature has decided that at least \$250 million of this surplus will not be spent during fiscal year 1979.<sup>8</sup>

These estimates for fiscal year 1979 provide an example of the sources of revenue to the state. But where does the money come from?

Although there is some dispute over exactly how much state revenue the oil and gas industry provides, there can be little dispute it provides the majority.

A pair of examples illustrates this point. The industry estimates it will provide 67 percent of the state's tax revenue in fiscal year 1978.<sup>9</sup> The state Division of Legislative Finance estimates the industry will provide 61 percent of all unrestricted revenues in fiscal year 1978 and 67.8 in fiscal year 1979.<sup>10</sup>

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<sup>6</sup>The balance of the approximately \$600 million surplus is not 'ready cash' because it is invested in long-term commitments such as state loans and Alaska mortgages.

<sup>7</sup>Senate CS for HCR 97 am S

<sup>8</sup>Senate CS for HCR 97 am S

<sup>9</sup>Let's Talk..., Public Affairs Department, Exxon Company, U.S.A., and What Alaskans Should Know About: Jobs Resources and Government, Alaska Resources Development Committee, Alaska Oil and Gas Association.

<sup>10</sup>Oil and Gas Taxes, Milt Barker, Fiscal Analyst, Division of Legislative Finance, February 17, 1978.

Medium-range estimates show the oil and gas industry, barring the unforeseen, will continue to provide the majority of state unrestricted revenues for some time to come. <sup>11</sup>

#### The Nature of Oil and Gas Revenues

The state receives direct oil and gas revenues principally from five sources; (1) bonuses, (2) royalties, (3) Oil and Gas Production Properties taxes (severance taxes), (4) Oil and Gas Exploration, Production and Pipeline Property taxes (property taxes), (5) corporate income taxes paid by oil and gas companies. <sup>12</sup>

What follows is a description of each of these sources.

#### BONUSES

"Usually the bonus is the money paid by the lessee for the execution of an oil and gas lease by the owner. Another form is called an oil or royalty bonus. This may be in the form of an overriding royalty reserved to the landowner in addition to the usual one-eighth royalty." <sup>13</sup>

Typically, the state's bonuses have been of the first type: a lump sum paid for the rights to a lease. The most famous example is the approximately \$900 million in bonuses received in 1969 for North Slope leases. <sup>14</sup>

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<sup>11</sup>In fact most estimates show an increase in the proportion of oil and gas revenues to total unrestricted revenues through 1985. See particularly State Revenue Outlook Through 1985, Richard G. Haggart, Research Analyst, Division of Legislative Research, November 17, 1977.

<sup>12</sup>The other three direct sources are state mineral lease rentals, federal mineral revenue sharing payments and Oil and Gas Regulation and Conservation Taxes. They are estimated to provide \$2.5 million, \$1.5 million, and \$.5 million respectively in fiscal year 1979.

<sup>13</sup>Handbook of Oil Industry Terms and Phrases, R.D. Langenkamp, The Petroleum Publishing Company, Tulsa, Oklahoma, 1974, Page 14.

<sup>14</sup>An example of the second type of bonus is that offered to the federal government during last fall's Outer Continental Shelf lease sale.

The Department of Revenue estimates that no money will be received from bonuses during fiscal year 1979. <sup>15</sup>

#### ROYALTIES

"A share of the gross production of the oil and gas on a property by the landowner without bearing any of the cost of producing the oil and gas. The usual landowner's royalty is one-eighth of gross production." <sup>16</sup>

With the exception of the dispute over field gathering and treatment charges to be discussed later, this is the current status of state royalties.

The Department of Revenue estimates that royalties will provide \$250.8 million during fiscal year 1979. <sup>17</sup>

#### SEVERANCE TAXES <sup>18</sup>

This is a tax on oil and gas produced in the state.

The first major element of the severance tax is the 'wellhead value' of the oil or gas. Wellhead value is the sale price of the oil or gas minus the costs of delivering it to the point of sale. <sup>19</sup>

The second major element is the 'economic limit factor', a figure, provided by a mathematical formula, which determines the rate of taxation.

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<sup>15</sup>Alaska's Revenue Sources FY 77-79

<sup>16</sup>Handbook of Oil Industry Terms and Phrases, Page 76.

<sup>17</sup>Alaska's Revenue Sources FY 77-79

<sup>18</sup>The current severance tax is set forth in AS 43.55.

<sup>19</sup>Wellhead value and its importance to oil and gas revenues is examined in greater detail later.

The tax is the greater of (a) 12.25 percent of the wellhead value multiplied by the economic limit factor or (b) a number of cents per barrel of oil or thousand cubic feet of gas multiplied by the economic limit factor.

The economic limit factor makes the severance tax a sliding scale tax rather than a flat rate tax. Leases producing oil or gas at a high volume pay a higher tax than leases producing at a low volume. Leases producing only enough to pay 'overhead costs' pay no severance tax at all. <sup>20</sup>

The Department of Revenue estimates that severance taxes will provide \$176 million during fiscal year 1979. <sup>21</sup>

#### PROPERTY TAXES <sup>22</sup>

"This law, commonly referred to as the '20-Mill Hardware Tax', was enacted by the 1973 Special Session of the Legislature and became effective on January 1, 1974. Properties taxable under this law include virtually all properties situated in the state used in the exploration for, production of, and pipeline transportation of oil and gas. <sup>23</sup>

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<sup>20</sup>'Overhead costs' are defined in law as "royalty, production supplies, purchased fuel, routine maintenance and wages and benefits of employees working on the production operation. Additional direct operating costs not listed in this section may be included only after their inclusion in a regulation adopted by the department."

<sup>21</sup>Alaska's Revenue Sources FY 77-79

<sup>22</sup>The current property tax is set forth in AS 43.56.

<sup>23</sup>The law provides (in 43.56.020) exemptions from local taxes on oil and gas production property rights, oil and gas leases, oil and gas in place, oil and gas produced or extracted in the state, the value of intangible drilling and exploration expenses, pre-construction property for oil and gas pipelines and related facilities. Exemptions from state taxes are provided (in 43.56.210) for property used solely for the retail distribution or liquifaction of natural gas and permanent residences, office buildings requiring substantial local government services, or oil and gas pipeline systems owned and operated by a certified public utility regulated by the Alaska Public Utilities Commission.

"The '20-Mill Hardware Tax' is administered by the Department of Revenue. Taxable properties are assessed each year at full and true value and are taxed at a rate of 20 mills (2%). The municipality in which the property is situated levies and collects its own taxes, based on state assessments, at the same rate as applied to locally assessed properties. Taxes paid to municipalities may be credited against the 20-mill state levy<sup>24</sup>...If the property is located in the unorganized area of the state, the entire '20-Mill Hardware Tax' is paid to the state."<sup>25</sup>

The Department of Revenue estimates that property taxes will provide \$170.6 million during fiscal year 1979.<sup>26</sup>

#### CORPORATE INCOME TAXES <sup>27</sup>

"The Alaska Corporate Income Tax is a tax imposed upon corporate net income much in the same manner as the income tax on the earnings of individuals. The determination of taxable income is based primarily upon the Internal Revenue Code and Federal rules, as is the case in number of other states.

"In addition, Alaska is a regular member of the Multistate Tax Compact, an organization comprised of a number of states throughout the country having as one of its objectives the development of a reasonable degree of uniformity in application and compliance of state income taxes with respect to multistate businesses. As a consequence, Alaska has joined with other states in adopting the Uniform Division of Income Tax Purposes Act (UDITPA) as part of the Multistate Tax Compact.

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<sup>24</sup>Thus, if a municipality taxes at 9 mills, the balance of the 20-mill tax, or 11 mills, would go to the state.

<sup>25</sup>Alaska Taxation Of The Petroleum Industry, Alaska Oil and Gas Association, January 1977.

<sup>26</sup>Alaska's Revenue Sources FY 77-79

<sup>27</sup>The current corporate income tax is set forth in AS 43.20.011(e).

"UDITPA results in the apportionment to Alaska of a portion of the net taxable income earned by any of the companies, including oil companies, which do business both within and without the state. Apportionment of the income to Alaska is accomplished through the use of a three-factor formula which is the ratio of property, payroll, and sales within Alaska to total property, payroll, and sales located everywhere. That percent then is the portion of the taxpayer's total income which is apportioned to Alaska and taxed." <sup>28</sup>

The Department of Revenue estimates that total corporate income taxes will provide \$65.6 million in fiscal year 1979. <sup>29</sup> Of this total, the department estimates oil and gas corporate income taxes will provide \$23.7 million. <sup>30</sup>

Of these five principal sources of oil and gas revenue, the first two are ownership revenues. Bonuses and royalties are paid to the state because it holds the ownership of the resources. The other three sources are tax revenues.

The significance of this is that the state could not afford to operate without its ownership revenues.

To put it another way: if the land on which oil and gas is being produced was in private ownership, the state would not receive royalties and bonuses. Without estimated royalties, and the state's unrestricted revenues would be \$677.3 million for fiscal year 1979, instead of the \$928.5 million estimated.

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<sup>28</sup>Alaska Taxation of the Petroleum Industry

<sup>29</sup>Alaska's Revenue Sources FY 77-79

<sup>30</sup>Oil and gas company corporate income taxes are not shown as a separate item in the department's estimates. This figure was received verbally from the department. It is disputed by industry sources who say payments will be some \$10 million to \$15 million higher.

This would require a sharp reduction in the state budget, which provides financing for the services provided by the state.

#### The Identity of Oil and Gas Revenue Producers

Some 95 percent of oil and gas revenues currently flow to the state from a single source: production of oil from the Prudhoe Bay field and associated activity. <sup>31</sup>

The Prudhoe Bay field is the largest single reservoir of oil and gas discovered in the United States. Estimated recoverable oil reserves (that is, oil that can be produced commercially) are some nine billion barrels, while estimates of the total size of the field run to 20 billion barrels.

Prudhoe Bay oil is being recovered by two oil companies, British Petroleum (BP) and Atlantic Richfield (ARCO), under an agreement among the owners.

In addition to the state with its 12.5 percent share <sup>32</sup>, the other Prudhoe Bay owners are: <sup>33</sup>

BP-Sohio <sup>34</sup>	53.15
ARCO	20.27
Exxon	20.27
Mobil	2.09
Phillips	2.04
Chevron	.84
Getty	.54
Amerada-Hess	.53
Marathon	.04
Placid	.04
Louisiana Land	.03
Hunt Group	.085

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<sup>31</sup>This percentage is a consensus figure drawn from state and industry sources.

<sup>32</sup>The state's share comes out of the other owners' shares and is not in addition to them.

<sup>33</sup>These figures are from the Department of Natural Resources' Office of Minerals and Energy.

<sup>34</sup>As in all cases where British Petroleum and Sohio are mentioned, it is not clear which company is which. Simply put, the BP-Sohio merger arrangements have the author baffled.

The single outlet for this oil is the trans-Alaska pipeline which transports the oil from Prudhoe Bay to Valdez. The pipeline is owned by Alyeska Pipeline Service Company, a consortium of eight oil companies. The owners, and their shares, are:<sup>35</sup>

Sohio	33.34
Arco	21.00
Exxon	20.00
BP	15.84
Mobil	5.00
Union	1.66
Phillips	1.66
Amerada-Hess	1.50

From the pipeline terminal at Valdez the oil continued via tanker to a refinery. Currently, some of the oil is being refined on the West Coast while the rest is being shipped through the Panama Canal to Gulf Coast refineries.

At least some of the companies who own Prudhoe Bay oil and a share of the pipeline also own tankers to carry the oil and refineries to process it.

Each of these separate operations is designed to make a profit. The production profit comes from the sale of the oil at the refinery. The transportation profit is built into the rates charged for the service.

#### The Uncertainties of Oil and Gas Revenues

Unlike these "vertically integrated" companies, the state takes its primary ownership revenues, royalties, from the value of the oil in the marketplace.

This value is the wellhead value, computed by taking the current

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<sup>35</sup>These figures are from the ICC staff protest of the pipeline tariffs requested by the owners as shown in TAPS Tariffs, Milt Barker, Fiscal Analyst, Division of Legislative Finance, November 15, 1977

sale price of the oil in the marketplace and deducting the costs of delivering it.

The wellhead value also is critical in determining revenues from the state's severance tax.

Because it is affected by a number of factors, the wellhead value is unstable, making revenue based on it uncertain. Some of these factors are matters of dispute between the state and the oil industry.

A brief discussion of these disputes follows.

#### Field Gathering

The Prudhoe Bay owners are deducting from the wellhead value for royalty payments charges for gathering, cleaning and dehydrating the oil between the well and the pipeline. The state contends that these deductions should not be made. The matter is currently in state Superior Court.

#### Pipeline Tariffs

The state and others contend that the tariffs (that is, charges for transporting oil) requested by the pipeline owners are too high. Lower interim tariffs were established by the Interstate Commerce Commission. These interim tariffs were set aside temporarily by the United States Supreme Court, which has yet to make a final decision on the interim tariffs. Meanwhile, the Federal Energy Regulatory Commission, the successor to the Interstate Commerce Commission in handling pipeline tariffs, has begun its process for determining final pipeline tariffs.

#### Tanker Charges

Recently, the state suggested that tanker charges for transporting Prudhoe Bay oil from Valdez to the refinery are too high.<sup>36</sup> The Department

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<sup>36</sup>See Recommended Changes in Alaska's Oil and Gas Production Tax Rates for 1978, the Alaska Department of Revenue.

of Revenue has received money from the legislature to study these tanker charges in more detail.

Each of these disputes affects the amount of revenue the state will receive from its primary ownership source, royalties. Likewise, lower wellhead values reduce the state's revenue from severance taxes because the value of the oil is a factor in computing the tax.

In short, each additional penny paid to owners and shippers is something more than a penny of potential revenue that will not flow to the state.

Besides these disputes between the state and the oil and gas industry, other factors bear directly upon the state's revenues from Prudhoe Bay.

A brief discussion of these follows.

#### Production Schedule

The production schedule for Prudhoe Bay calls for the rapid removal of oil, rising to a peak and then turning downward in 1985.

The production schedule raises two revenue-related questions.

First, are the economic interests of the other owners and the state the same? Some have suggested that the other owners are interested in producing the most oil in the shortest time even at the expense of total production from the field. The state, on the other hand, is interested in producing the most possible oil, even at the expense of rapid production.<sup>37</sup>

Second, is the oil worth more to the state in the ground? This question arises because the value of oil is appreciating. By investing

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<sup>37</sup>This possible difference in interests is based on a theory called the "discounted cash flow" rate of return. Simply put, the DCF theory dictates that companies make an investment as late as possible and recover it as early as possible so that the money invested and the profit it earns can be reinvested as quickly as possible. So, oil produced late in the production schedule has a diminishing value because it cannot be reinvested quickly, and because of erosion caused by inflation.

the dollars it gets for its oil, the state can make a certain rate of return. The question is whether that rate of return is greater or lesser than the appreciation of the value of the oil in the ground.

#### West Coast Surplus

Currently, not all Prudhoe Bay oil can be sold on the West Coast. This has caused some owners to have to ship their oil through the Panama Canal to the Gulf Coast. The added tanker charges lower the wellhead value of this oil, thereby lowering the state's severance tax revenue from that oil.

#### Federal Pricing Decisions

The federal government has the power to set the value of Prudhoe Bay oil in the marketplace through decisions on pricing and entitlements treatment.

The government's initial decisions were the best that could be asked, setting the price of Prudhoe Bay oil at the level of imported oil and allowing equal treatment with imported oil under its entitlements program.<sup>38</sup>

Later, the government subjected Prudhoe Bay oil to an entitlements penalty in California, lowering the California sale price an estimated 50 cents to 75 cents per barrel.

Further entitlements action is expected soon.<sup>39</sup>

#### The "Free Market Theory"

In addition to the uncertainties that apply "specifically" to

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<sup>38</sup>The entitlements program is designed to equalize the purchase and processing costs to refiners across the country. Thus, in theory, lower-cost oil is penalized in order to equalize the position of refiners having to purchase higher-cost oil.

<sup>39</sup>Federal Pricing Decisions Relating to Prudhoe Bay Oil, Richard G. Haggart, Research Analyst, Division of Legislative Research, January 11, 1978

Prudhoe Bay oil, there is an overriding uncertainty, based on the "free market theory" of oil value.

Under this theory, Prudhoe Bay oil competes with all other oil for sale in the world.

Prudhoe Bay oil suffers in this competition because the high costs of field development and operations and transportation make it more expensive in the marketplace.

Balancing these disadvantages somewhat are federal energy policy, which has a stated preference for domestic oil, and the fact that Prudhoe Bay provides a "secure" source of supply; that is, by domestic standards, a large volume of oil in a free enterprise location.

But these factors do not make the future of Prudhoe Bay oil certain. The same federal energy policy, for example, places a premium on conservation efforts. Insofar as these efforts are successful they will shrink the market, forcing Prudhoe Bay oil into competition in a smaller market.<sup>40</sup>

A second example is potential competition from Mexican oil. Continuing large finds of oil in Mexico, a relatively secure location closer to major U. S. markets than Prudhoe Bay oil, may serve to further reduce the market for Prudhoe Bay oil.<sup>41</sup>

A third example is potential competition from oil produced on the East Coast's Outer Continental Shelf, particularly the Baltimore Canyon. Any oil found would be closer to East Coast markets and would

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<sup>40</sup>For more on the implications of federal energy policy, see Preliminary Report for 1977, State Energy Policy Committee, January 10, 1978.

<sup>41</sup>Implications of Certain Petroleum Developments, Norman Bailey, February 19, 1978.

probably be cheaper to produce.<sup>42</sup>

These are not all the factors influencing the revenue from Prudhoe Bay oil, but they serve to illustrate the complexity and uncertainty of predicting and obtaining that revenue.

### Other Issues

In addition to these sources of uncertainty, the state currently faces a number of questions that relate directly to future oil and gas revenues.

A brief discussion of these follows.

#### Royalty Oil

The royalty oil question involves the state's ownership revenue. As an owner of oil with no transportation, refining or distribution capacity, the state's single option in obtaining ownership revenue is to sell its oil.

As a matter of ownership revenue, the important question is how much the state receives for its oil. By selling its oil down the pipeline to the Lower 48, the state receives, in theory, the "best price".

Proponents of in-state use of the state's royalty oil say they can pay this best price while offering added tax revenue and social benefits, particularly employment.

This position is embodied in a proposed royalty oil contract currently before the legislature.

#### Gas Pipeline Financing

Another matter involving the state's ownership revenue is a proposal from Northwest Alaskan Pipeline Company that the state participate in the

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<sup>42</sup>Implications of Certain Petroleum Developments, Norman Bailey, February 19, 1978.

financing of the Alaska Highway Pipeline Project, designed to deliver Prudhoe Bay gas to market in the Lower 48.

Proponents of state participation offer roughly the same types of incentives as those supporting the royalty oil contract: ownership and tax revenues and a variety of social benefits.<sup>43</sup>

The gas pipeline financing proposal differs from the royalty oil contract proposal in that currently there is no price, best or otherwise, for Prudhoe Bay gas. Because gas prices are regulated by the federal government, pricing policy and levels are currently before Congress.

From an ownership revenue standpoint, once a price is set the question becomes whether the project can deliver Prudhoe Bay gas to market at a cost low enough to allow repayment plus profit to those who financed it, including the state. The price also would have to be high enough, and the cost low enough, to allow the state to derive tax revenue.

Another revenue question is the effect on oil recoverability of removing the gas for shipment.<sup>44</sup>

#### Oil and Gas Conservation

A package of legislation, called the Malone-Chatterton bills, would restructure the state's Oil and Gas Conservation Commission and remove

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<sup>43</sup>See Statement of John G. McMillian and accompanying fact sheet presented February 15, 1978 to the House Special Committee on Royalty Oil and Gas and the Senate Resources Committee and Approximate Distribution of Benefits and Costs from Alaska Highway Gas Pipeline by the Federal Energy Regulatory Commission staff presented to the same committees February 16, 1978.

<sup>44</sup>See Review and Analysis of the Proposed Operating Plan and of the Studies and Computer Simulations of the Dynamics of the Sadlerochit Reservoir, Todd M. Doscher and Elmer L. Dougherty, Jr., October 1977.

it from the Department of Natural Resources.<sup>45</sup> Proponents of the bills cite the apparent conflict of a regulatory body being part of the agency charged with administering many of the state's ownership rights.

The addition of a power to regulate production of oil and gas to prevent "economic waste" would give the state a major tool with which to stabilize its revenues. The power to lower production to prevent economic waste would allow the state to preserve its oil and gas during times of low wellhead values or, as is the case now, surpluses in the best paying markets.

#### State Leasing Policy

A bill now before the Legislature would make substantial changes in the way the state leases its land.<sup>46</sup>

Leasing is a function of ownership, but, since it dictates the pace of exploration and development, it also is critical in the generation of oil and gas tax revenue.

Through leasing policy the state can control the timing, location and terms of its sales. Each of these elements is important in the generation of revenue.

Timing allows the state to lease when it needs revenue or clearly sets the need for future revenue.

Location allows the state to lease land which is likely to harbor oil and gas when revenue is needed.

Terms allow the state to match its rules for a sale to its revenue needs.

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<sup>45</sup>The package contains House Bills 791, 792, 815 and 830.

<sup>46</sup>The current leasing policy revisions are contained in House Bill 854.

In each case, broad discretion is important. To use leasing policy to stabilize state revenues, those administering state land should have the flexibility to match that policy with the state's revenue policy.

#### Federal Power

As illustrated by the cases of Prudhoe Bay oil pricing and entitlements and Prudhoe Bay gas pricing, the federal government has fairly broad discretionary powers over the future of state revenue. Other examples of this power abound.

First, the federal government is a large landowner in Alaska with oil and gas lands of its own to lease. This may mean that the state and federal government will compete for exploration efforts and markets.

Second, the federal government has banned the export of crude oil, cutting the state off from markets, particularly Japan.

Third, federal energy policy emphasizes conversion from gas and oil to coal for power production. If effective, this part of the policy will further constrict the market for Prudhoe Bay and other Alaska oil and gas. On the other hand, it may make the state's large coal deposits more attractive commercially.

These are but a few obvious examples of federal power, but they serve to illustrate the point that state policy must come to grips with that power.

#### Facts and Options

Even a brief review such as this points up the complexity of the state's oil and gas revenue picture. Adding such things as "second

generation dollars"<sup>47</sup> and "social impact"<sup>48</sup> generated by the oil and gas industry shows that to properly answer any specific question, like oil taxation, an understanding of complex and interrelated interests and conditions is required.

In addition, "facts" of Alaska oil and gas revenue are subject to interpretation according to the vested interest or philosophical bent of the reviewers.

But attempting to leave such interpretation aside, a short set of facts about state revenue is:

First, the state is heavily dependent upon oil and gas revenue and is likely to be for some time.

Second, the majority of that oil and gas revenue comes from Prudhoe Bay oil and is likely to do so for some time.

Third, the state receives two types of oil and gas revenue, ownership and tax.

Fourth, tax revenue is not sufficient to finance the state budget.

Fifth, all oil and gas revenue based on oil and gas value is unstable. This includes the state's two largest sources of revenue, royalties and severance taxes.

Sixth, the oil industry is among the forces causing this instability.

Before continuing, some explanation of fact six is in order.

Oil and gas companies with similar interests band together to act

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<sup>47</sup>A "second generation" oil revenue dollar would be, for example, a dollar of personal income tax paid by an industry employee.

<sup>48</sup>A "social impact" of oil and gas activity would be, for example, higher unemployment caused by an influx of pipeline workers who could not find other jobs when the pipeline was completed.

in those interests. In situations where the state's interests are opposed to the entire industry's, such as oil taxation, the industry and the state act as adversaries.

The same is true in situations like the pipeline tariff and the field gathering disputes, in which oil companies with similar interests have banded together in an attempt to extract maximum income. In the process of doing so, the companies are in effect attempting to deny revenue to the state.

So, from the point of view of state revenue, the industry and various segments of the industry are causing instability by forcing the state to defer, and perhaps forego, revenue.

This is not meant as a criticism. Since the industry and the companies that make it up are motivated by profit, their advocacy of their interests is logical, legal and necessary.

There are situations, such as pricing and entitlements for Prudhoe Bay oil, in which the state's interest and the industry's interest are similar. But in cases where the state and the industry are attempting to capture the same money, it is difficult to imagine them as anything but adversaries. State policy, then, must concentrate on defining and defending the state's interests.

What is the state to do to eliminate its revenue instability?

First, it must eliminate as many factors of uncertainty as possible. This will be done, eventually, in the field gathering and tariff disputes, although by third parties.

Likewise, the state can at least pare the size of its severance tax uncertainty by adopting what seems to it to be a reasonable cents-per-barrel floor. This is particularly necessary if information indicates that

the wellhead value is being manipulated through the charging of higher than necessary transportation fees.

Second, the state can attempt to evaluate those factors of uncertainty it cannot directly control. This must be done by developing the best information on matters as disparate as oil field engineering and the possible application of federal discretionary powers.

Third, the state can apply the lessons learned by it and other states and nations.

But, most important is that the state must attempt to create a policy to replace its current handling of oil and gas revenues.

The key to such a policy is the split nature of oil and gas revenues. The fact that the state receives two types of revenues dictates two main options.

The first is to make a policy of the current state of affairs. This requires a melding of the state's ownership and tax rights and revenues and the establishment of a total oil and gas revenue figure.

This option involves a variety of philosophical and practical problems. The main philosophical, and perhaps legal, problem is that as an owner/taxer the state possesses a peculiar combination of powers. The exercise of these combined powers raises questions about the rights of government.

The main practical problem is that the Prudhoe Bay deal has been cut. The state cannot easily, if at all, increase its ownership share of Prudhoe Bay. This means that any increase in the state's oil and gas revenues must come from taxes. Unless the state is prepared to substantially raise its taxes in one step, oil and gas tax stability would be unlikely.

The second option is to create a policy based on the split nature of oil and gas revenues. This requires a separation of the state's ownership rights and revenues from its tax rights and revenues.

The exercise of this option creates a whole series of choices, but two seem to stand out.

First, the state could combine all of its oil and gas ownership rights and revenues in a single department in the executive branch. The legislature and the governor would make policy and the state Department of Energy, to give it a name, would carry it out. In addition, the department would have clear responsibility for developing information and advocating the state's ownership position in the political process.

A benefit of this approach would be to separate and clarify the question of oil and gas taxation. Currently, all oil and gas revenue is the same in that it flows as unrestricted revenues into the state budget. Much of the debate over taxation involves its relationship to the state's total oil and gas "take". But the critical question in taxation is not how much the taxpayer gets but rather how much the taxpayer pays. In oil and gas taxation, the question from the state's viewpoint is whether or not oil and gas companies are paying taxes commensurate with the profit they are extracting from the state.

Second, the state could combine its ownership rights and revenues in a publicly-owned corporation, a state oil company. This company would function much as a private oil company functions, with the citizens of the state as "stockholders".

Making either of these choices would create further problems to be solved. But the process of examining these options and choices is fruitful because it reveals a final fact about state oil and gas revenue.

Alaska is an oil company as well as a state.

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