ecological losses (fish?) and necessary projects which cannot be funded under the loan program.

It is hardly likely that Alaska will get the lion's share of the grant funds... .

Mr. Larry Vavra of Union Oil furnished information on the Collier plant in Kenai and its happy tax status. I should point out that the Collier plant has been paying only about 1/3 of what it should have paid in the North Kenai Fire Service Area. There has also been heavy (and uncompensated) impact on Keani and Soldotna, as Representative Malone can verify.

Mr. Wiles quoted the preparer of the Mathematerial Sciences Northwest study, "who spent more than three weeks in Scotland, Shetlands," to the effect that the "local authorities in Scotland, with the active cooperation of the oil companies and contractors had been able to effectively plan for on-shore development..." Some idea of the active cooperation may be gleaned from Appendix 2. (Baldwin, ibid).

A final point. Mr. Wiles discussed possible constitutional problems. Although not a lawyer, I'll venture the opinion that there are two sides to the case. See, for example, K & L Distributors, Inc. v. Murkowski, 486 P.2d 351(1971).

What schools?

no approp of funds by congress must not be important.

Collier plant no tax - history of that.

Introduction

Why should Americans look to Scotland for lessons about the impacts of offshore oil, when an offshore industry has operated in the Gulf of Mexico for nearly 40 years?

At first glance, the Gulf of Mexico experience might seem to provide a sufficient guide for future oil developments elsewhere in the United States. Yet a closer look reveals important differences between oil experience in the Gulf and the prospects elsewhere in the United States, particularly along the Atlantic and Alaskan coasts. In these areas, climate, sea conditions, landscape, and perhaps even the social structure more closely resemble the North Sea coast of Scotland than the shores of Texas and Louisiana.

For one thing, the discovery of offshore oil and gas in the Gulf of Mexico followed many years of nearby onshore production, complete with pipelines, refineries, storage tanks, and a work force of thousands. Thus, the industry began its marine operations in the Gulf with trained local manpower and sophisticated facilities. This was not the case with the North Sea—nor will it be with the continental shelves of the Atlantic or the Gulf of Alaska. An even more significant difference between Gulf of Mexico operations and new offshore developments in the United States lies in the fact that the Gulf industry grew in the 1950's and 1960's at a pace that was far more gradual than that of the crash programs required by today's oil shortages. Rapid growth in energy use combined with the current drive to reduce energy imports and the

Appendix 1

severe problems associated with expansion of coal production and nuclear power have now turned the attention of American government and industry toward prospects for expanding oil supplies. Since onshore oil reserves in the United States are declining, most future expansion must come from offshore.

The continental shelves of the Atlantic Ocean and the Gulf of Alaska represent great untapped potential sources of new oil and gas for the United States. Consequently, these regions loom large on the drawing boards of the oil companies and the managers of the federal oil domain in the Department of the Interior. Current plans call for an expanded federal program specifying as much as 10 million acres of offshore lands for leasing to oil companies in 1975.

This level of leasing represents an enormous jump from earlier policy, and is cause for concern. Federal leasing of 10 million acres in 1975 would double, in a single year, the total offshore acreage leased since the program began in 1953. Never before has the total for a single year surpassed even two million acres, and only six million were under active federal lease in early 1975. The levels anticipated for such untapped regions as the Middle Atlantic and the Gulf of Alaska seem particularly large; some 3.5 million acres would be leased in each area.

Acreage figures do not, of course, indicate the level of oil production that we might expect from these frontier areas in the future. Normaily, it takes four to eight years to bring a new oil field into production, and this lead time cannot even begin until extensive exploratory drilling confirms the presence of commercial quantities of oil. It is therefore safe to say that there will be virtually no Atlantic or Alaskan production before the end of this decade. Until exploratory efforts

are well underway, estimates of outer continental shelf (OCS) production in frontier areas are little better than guesswork. But it could be folly to base predictions of onshore environmental effects on the Gulf of Mexico experience. In 1969—after 30 years of state and federal offshore operations in the Gulf of Mexico—the average daily production level in Gulf waters reached one million barrels per day. In the North Sea, by contrast, that level of production will be surpassed before 1980, or less than ten years after British Petroleum discovered the first major oil field in the British sector. But because massive oil and gas reserves are still being discovered in the North Sea, the 1980 production level could be closer to 2.5 million barrels a day; indeed, many experts predict production of four to five million barrels a day by 1985.[1] These numbers dwarf the Gulf of Mexico operation.

Planners who hope to be ready for potential oil development in new areas of the United States would be wise to examine the impacts on the coastal environment of such rapid build-up to high production levels. There is barely time now to learn from the North Sea oil experience and to plan for oil development in Atlantic and Alaskan coastal regions with the benefit of both the successes and the failures of planning efforts in Scotland.

Our report thus focuses on both sides of the Atlantic: it is a description of the Scottish experience, based on observation, interviews, and literature review carried out in the spring and summer of 1974, accompanied by conclusions and recommendations for the United States. It is an environmental study in the broad sense of that word. We have been concerned in part with the impact of oil development on the natural environment, including the land, the scenery,

dominant position in the Islands' political and economic affairs. While Brae and the other three "growth villages" near Sullom Voe will not begin to rival Lerwick in population, they will together form a new educational, commercial, and, of course, industrial center for the northern half of Shetland.

The oil facilities at Sullom Voe will also require new infrastructure, especially new roads. Existing roadways are narrow and winding. Many are limited in their capacity to handle heavy loads because they lie above Shetland's ubiquitous peat bogs. Some of the new roads will therefore require excavation of the peat and its replacement with a more solid fill. Getting the roads built during the next few years, simultaneously with the oil industry's development and community housing and related facilities, will require great ingenuity on the part of Shetland's planners.

While there is no precise American equivalent to the Shetlands, remote communities in northern Maine and in Alaska could well experience demands similar to those now facing Shetland if oil were discovered nearby. It is possible that the local spirit and determination to maintain a quality environment in such places would match those qualities in Shetland. It is encouraging to recall that the Shetland Islands began without sophisticated planning controls or even a planning body at the local level. There is no reason why American communities could not plan as well. By 1980, it may be possible to applaud the Shetland deepwater port, with its related development, for being as successfully brought off in reality as it appears today on paper.

Shetland's success thus far in meeting oil head-on and remaining firmly in the driver's seat is

Appendix 2

due in large part to an unintimidated attitude of local officials toward the oil industry. It was apparent to oil men early in their discussions that Shetland was not to be cowed by the money and power of multi-national oil companies. At one point, negotiations between the industry and the county broke down temporarily after Shell executives showed their frustration with Shetland County's tight planning controls. They reminded the County Clerk that the oil companies could always give up their plans for Shetland and take their development, their riches, and their jobs elsewhere.

"That's the best news we've heard since you arrived," the County Clerk replied, as he and his staff members rose to leave the meeting.[40]

Such confidence and lack of anxiety at the thought of doing without oil convinced the oil companies that they had to accommodate local wishes, rather than the other way around.

The concentration of large oil fields near the Shetland Islands will give the Sullom Voe terminal the largest oil throughput of any British port. The impacts of the Shetland terminal will outpace all the other tanker terminals associated with North Sea oil. Nonetheless, two other terminals, currently under construction, are worth mentioning.

The Orkney Islands, sister group to the Shetlands, are similarly remote and sparsely settled. Occidental Oil is now constructing a deepwater tanker terminal on the Orkney island of Flotta, where oil from the Piper field will land by pipeline for transfer to tankers in the sheltered waters of Scapa Flow. Since the Flotta terminal will serve only one field and one company, its impacts will be less noticeable to Orkney residents than Sullom Voe will be to Shetlanders.

Analysis of HB 219 as Proposed February 15, 1977

The bill proposes to establish a shore facilities construction permit system, and to charge a permit fee based on the difference between "gross impact cost" and "development revenue" to be estimated by the Department of Community and Regional Affairs.

The "gross impact costs" are determined by multiplying the per capita costs of state and local government services in the area with the maximum anticipated population increase anticipated in conjunction with the offshore development in the area. "Development revenue" is to be determined by estimating petroleum property taxes, general property taxes, estimated income tax collections, and anticipated outer continental shelf oil and gas development grants.

The bill is unclear with respect to several items:

1. It appears that the permit fee to be assessed is aimed at covering costs of governmental services which will not be funded from other sources. The bill refers to per capita state and local government cost without specifically indicating which cost items are to be included, especially state costs.

2. It is unclear whether the permit fee assessed is supposed to reflect estimated total cost for the 20-year period, or whether it is to be based on the maximum impact at one point in time. The question of the 20-year coverage occurs because of the reference to the discounting of the cash flow on the revenue side. This implies that on the revenue side, the whole period will be taken into consideration.

3. In this connection, the question occurs why the inflationary impact is to be taken into account on the revenue side while no reference to this is made on the cost side.

4. If the permit to be assessed is to reflect the otherwise unfunded portion of state and local costs, all state and local revenue sources applicable should be incorporated. This would include a local sales tax, if applicable, school taxes, all excise taxes, license fees and other revenue sources, especially at the state level. However, most of these revenues, as well as some of the expenditure items, cannot yet be traced to specific localities. Because of this, the concept incorporated in the bill appears to be unworkable, at least in its present form.

February 21, 1977

RE: Basic Tax Information / Purpose and Authority

State Tax System

Personal Income Tax: Should stand-out as the single most important revenue instrument in the state tax system and should produce close to 25% of total state-local tax revenues.

General Sales Tax: As the other major state tax it should produce 20 to 25% of the total state-local tax revenue without imposing an extraordinary burden on low income families. Retail sales tax rests on the belief that consumption is an appropriate basis on which to distribute a substantial part of the state tax load.

Local Tax System

Property Tax: Provides 5 out of 6 local tax dollars.

In many states there are existing constitutional and statutory restrictions on the taxing powers of local governments in terms of specific rates or allowed rates of increase, coupled with requirements for specific referendum approval of proposed property tax levies.

The State Role

The state has a useful and significant coordinative role to play in the administration of local income taxes as well as in other non-property taxes. Income taxes are preferable to sales and many other types of taxes because they can be structured to distribute their burden in conformity with ability to pay and with necessary regard to the taxpayer's family obligations.

Income tax limitations for use at the local level:

- frequently people live in one jurisdiction and work in another.
- people often supplement their wages and salaries from local sources with investment and other unearned income from other parts of the state; however, local jurisdictions that now use these taxes generally limit them to income from wages and salaries, the type of income most easily taxed.

D R A F T
May 24, 1977

Options for CRA Input on HB 219

A. Justification for bill.

Document the actual potential for onshore impacts , and the inability of local governments to plan for, control, and pay for these impacts.

In a narrative, describe how HB 219 provides a mechanism for control.

B. Local concerns.

Examine and address anticipated local concerns and objections to HB 219. For example, discuss the bill's effect on local property tax, on local regulatory powers and autonomy, on the localities' ability to attract development, and on the development of facilities not included within the bill's coverage.

C. Legal issues.

Explore legal issues which could be used by onshore developers to challenge the bill. Federal issues are interstate commerce, preemption, conflict and equal protection. State issues are local legislation, double taxation, delegation, and preemption.

D. Planning issues.

Does the Act accomplish its pupose? What powers are given to local units? Are regional needs addressed? Is the role of CRA appropriate for it? How does the

Coastal Management bill (HB 342) affect HB 219, especially in terms of local actors and pertinent issues? Does the proposed severance tax potentially alter the role of HB 219?

E. Drafting.

Suggestions for improvement in drafting HB 219 either to reflect the same substantive/procedural goals at present or to add to those goals.

F. Alternative means under existing law.

What techniques presently exist for local and state authorities to plan and pay for onshore developments related to OCS energy development. For example, are special assessment bonds (AS 29.63.085) or special tax rates (AS 29.63.010) or special tax zones (AS 29.53.405) useful in passing the additional costs of development to the developer? Will loans under the Coastal Energy Impact Program be useful to local units.

Role of local zoning powers, especially ~~contraband~~ conditional use.

heating oil because of inadequate insulation in their houses.

The purpose of HB 219 is to compensate for the on-shore impacts caused by the OCS development.

The State cannot force the Federal Government to furnish such compensation. It can, however, require the companies exploiting the OCS territory to pay for the on-shore impact costs. The bill provides that the amount of uncompensated impact is estimated and that this amount is the price of the building permit for the on-shore facilities.

Draft - 2/25/77

H.B. 219

The Anchorage Times of February 16 reports Senator Ted Stevens as saying that Congress has directed the Interior Department to accelerate off-shore oil and gas leasing. Although Alaska has been successful in delaying the leasing of the Outer Continental Shelf off it shores, it appears that the honeymoon may be over and we may soon see an accelerated program of leasing going on.

The Supreme Court has decided that all of the lands beyond the 3-mile limit belong to the Federal Government. This means that any revenues--severance taxes, royalties or other--will go to the Federal Government. There is no provision for the State to collect any revenue from this activity. The state will, however, have impact on its shores because of the on-shore facilities necessary to support the development.

An estimate by the President's office of Management and Budget gives the impact cost for infra-governmental infra-structure for the State of Alaska as 680 million dollars. A later estimate by the Department of Community and Regional Affairs is somewhat lower. Here the cost is estimated to be somewhat over 400 million dollars. No legislation so far passed by Congress or envisioned, will compensate the State on this order of magnitude.

It is my belief that Alaskan taxpayers should not bear the impact costs involved in OCS production so that persons in other parts of the country may continue to run their air-conditioners, drive their cars at 70 miles per hour or waste

3-10-77

Larry Vavra--Union Oil Company

Data for Collier Carbon:

Investment

Latest gross investment of old plant reported to the State is $63.012 million (undepreciated).

Estimated cost of new plant is about $250 million.

Amounts paid to Kenai Borough

1972	$128,500
1973	126,329
1974	120,191
1975	125,190
1976	228,896
1977	1,547,319 (estimate)

Employees

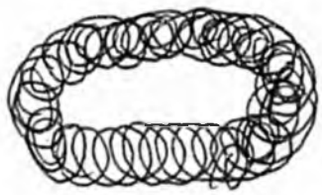
The "old" plant has about 130-140 regular employees. However, in anticipation of the new plant completion, the work force has risen to about 200, the added number being people in training phases. When the new plant is operational, it is estimated that there will be about 240 regular employees.

When Collier first came to Kenai, about half of the work force was hired locally, the others being transferred in from elsewhere because of a scarcity of labor in the area possessing the appropriate skills. Hence, some 60-70 employees were already in the general area.

Of the some 70 people or so currently added to the regular work force, some 85-90% of them are local people from the area and are not "lower 48" transferees. It is Collier's policy to hire locally as much as possible and a training program has been going for some time.

When the new plant is operational, Collier estimates the regular employee work force will be around 240 people. Most of the added personnel will be drawn from the local area.

In addition to regular employees, Collier has contractors who themselves hire workers to do the contract work. Currently, the number of these workers range from a low of about 15 to as many as 300 when the "turnaround" work is done annually, and which takes about a month on a facility. However, even these additional contract employees are hired locally and Collier estimates that some 65% or more come from the immediate area and 35% from the Anchorage area. Very few come from outside Alaska.



Eriksson on HB 219

Probs. 1. Estimating cost of impact

59 2. How much can we expect from feds?

3. How allocate permit fees?

Various ownership arrangements may permit cos. to escape –

Explain diff. bet. exploration, development, & production

HB 219

Questions for Matthews:

1. If 25 yrs. too long, what time period?
2. How much of the fed $400 mil. will be grants, & how much loans?
3. Was he saying no impact at all, or just more during exploration phase?

Ken Showalter - Sohio -

suggests coop inlet development as basis of comparison -

projections must be based on phased leasing schedules -

LSRidra → eliminate exploration phase from permit requirements? (due to probability of dry holes)

Gene Wiles - Chevron

cites study of consultants - projections

291 - empl. 1976 $14.6 mil. salaries - direct & indirect

1486 - 1980 empl.

→ any estimate of addl. state & munic. services? (in study he cites?)

OCS greater initial impact (see sec 6)

interfering w/ interstate commerce? violating equal protection provision?

shd. be provision to repay permit fee if impact does not occur.

HB 219 - Tom Matthews, Exxon

- assumed major impacts
  demands on muni. services } wrong

bill incls. - rental, lease
today impacts non-existant
100,000 new people a "worst case" assumption

impact in Seward
30 acres in Seward
Small tract near RR dock

200 - work crews
25 are AK. residents
175 go outside on R+R -

Work force 4 in Seward
8 others
13 in Anch + Yakutat

$750,000 month (they spend)

Onshore will be 5 yrs. away - gives time for planning

They now pay in Seward - 3% sales tax
wharfage tax
prop. tax
local wages

→ (bill says less devel. revenues
→ if no impact, why worried
→ "onshore" facility does not incl. docks

AK. will get $400 mil. from fed. impact $
→ Calif. law?

3/9 -

Gene Wiles - cont'd.

→ Does he have another period, aside from 20 yrs., to suggest?

~~Has~~ What costs of state & local gov't. shd. be included? Too much discretion for administrators

→ Others (native corps?) have to get permit.

Ward Shelley - Mobil

→ Are wells in use now?

3/10 - Bill Hopkins

Bill does attempt to base fare on actual impact & expenses

States estimates are lower than federals letter to K. Arnold from OMB -

Larry Vaura

Colliers exp. in Kenai

turnaround work - annual c. 300 -

'76 payroll $6.3 mil.

New plant c$10 mil. reg. empls.

"classification is arbitrary"

"not imposed on others similarly situated"

disadvantage of interstate commerce

taking prop. before it's in existence

Testifiers : HB 219

Larry Powell — Mayor - Yakatak

-Yakutat socio-economic survey. Wanted not large scale impact but some improvement in life, w/ constraints -

Industry purchased property -
Developed zoning ord. '75-'76

1st knowledge of dale '74. City budget c. $100,000
→ '75 budget goes to — grants — (where get?)
'78 " " " $300,000

$53,000 { Pipeline (impact com.
AFN - $5,000
CRA - $10,000
½ Match { CRA $40,000

→ What make your costs?

→ Cap. Improvement Projects: (?)

→ '75 - Land trade - Vill. corp./City - change of attitude by industry

Community sure of its direction. That helped industry

c. $500,000
Now need capital for planning studies - need - office space, police bodies, new water sources, sewer, new municipal dock, recreation
→ Increase in population - ? 30-40

Prop. taxes '77 - fall - they will collect -

Helicopters, hangars - 30, 40 people -
airport is used a great deal - drilling
→ rig crews - (how decided?)

Prop. taxes have gone up for citizens,
because of oil cos. paying high for
land. — 21 mills now
12 " in '74
Total assessed val. $13,000,000
per capita income - less than $10,000
now $12-15,000
fed - state - vill. corp - biggest landowners
75% of pop native

Absolute necessity to have money for
planning effort

1500 tons a month by barge for servicing
rigs through Yakutat. 5 200' work boats
operate out of Yakutat daily.

"It's the nature of the beast" to get out
of hand. "Very volatile thing."

{ Cooperation of vill. corp - city
control of land situation
(land speculation was a threat)

HB 219

construction
provision of servs.

~~3/10 - Bill Hopkins~~

3/16 - Kevin Waring

→ Where stat getting $ for community aid? Any avail. to communities?

→ Need for bill?

→ Econometric model?

→ Where did Kodiak & Yakutat get $ for comprehensive plans?

→ What basis for their pop. & employee figures?

→ Grants based on "hist. oil. development."

Offshore Oil Facility Siting on Kodiak

The Department of Community & Regional Affairs has announced the award of a consultant contract to evaluate possible sites on the Island of Kodiak, suitable for use by the offshore oil industry. The study will be carried out by Woodward-Clyde, Inc., with assistance from Earl and Wright Engineers of San Francisco.

The directive to the consultants is to study all possible sites on Kodiak Island which might be suitable for use either as oil transhipment and storage terminals, L.N.G. plants with their associated Marine loading facilities or onshore supply bases. Each site will be ranked for its suitability for oil industry operations and its impacts on the environment and community life of Kodiak. The objective is to produce a list of recommended sites which match the oil industry's requirements and high environmental standards, and best fit in with the existing pattern of life on Kodiak.

Sites initially under consideration are:

Kazakof Bay
Kizhuyak Bay
Monashka Bay
St. Paul Harbor
Kalsin Bay
Ugak Bay
Old Harbor
Cape Chiniak
Barling Bay
Three Saints Bay

This list is not an exclusive one and other sites may emerge in the course of the study which would merit consideration.

The study, sponsored jointly by the Department of Community and Regional Affairs, the Kodiak Island Borough, and Koniag, Inc., is funded to plan for OCS development. The timing of this project is particularly important as it is scheduled to be completed prior to the Kodiak Shelf OCS lease sale, now scheduled by the Department of the Interior for November, 1977. In this way, local groups will have an opportunity to influence company location policy.

Since the views of the Kodiak Islanders are an important input to the project, the contractors have been directed to take careful note of any site preferences expressed at a series of public meetings schedules to be held in Kodiak this spring.

The study will start in mid-April and should be complete by the end of November. For further information, please contact:

Commissioner Lee McAnerney
Department of Community and Regional Affairs
Pouch B
Juneau, Alaska 99811 Phone (907) 465-4700

my file HB 219

highways
small boat
harbors

sewers
schools
hosp. brds -

disc - what can be related to offshore activity?

Jack - How can boro reach offshore. Jurisdiction?

OCS vs. state leases -

relate cost of facility to cost of impact -

Oz - input by muni.

Singletary - Atlantic Richfield
— simpler ways - legis. for any com. to apply to state for impact funds -
Chenoweth - what happens while fee being appealed to ct.
Time frame for action o permit -
→ Appeal of denial of fee -

Darrel Schaefermeyer - (City of Seward)
— shit or get off pot

Harlan Martins -

Lisa -
for your comm
Charlie

COLLIER CARBON & CHEMICAL CORPORATION
JAPAN GAS-CHEMICAL COMPANY, INC.
ALAP CORPORATION

CERTIFICATE OF INDUSTRIAL TAX EXEMPTION

(AS 43.25 as amended)

THIS IS TO CERTIFY THAT pursuant to AS 43.25 and AS 44.45.020(a)(12), the Commissioner of Economic Development, for the State of Alaska, has determined that the urea and ammonia plant and related facilities proposed and being built in the Cook Inlet area by the Collier Carbon and Chemical Corporation (hereafter sometimes referred to as "Collier" or as one of the "applicants") and Japan Gas-Chemical Company, Inc. (hereafter sometimes referred to as "Japan Gas" or as one of the "applicants") and Alap Corporation (hereafter sometimes referred to as "Alap" or as one of the "applicants") is an "eligible business", manufacturing a product as defined in AS 43.25.160(a)(1) and that said applicants be and are hereby granted a tax exemption with the terms and conditions set forth below:

A. Those facilities and properties of the aforesaid applicants upon which this exemption is granted are those described in the application and which are located near Kenai, Alaska, on the Cook Inlet, consisting of:

1. The land on which the urea and ammonia plant and related industrial facilities are constructed.

2. The urea and ammonia plants, storage tanks, dock (wharf) facilities, plant and loading lines, and other attendant plant facilities and improvements, and personal property.

CONFIDENTIAL

3. Related facilities located at the plant site include, but are not limited to, the following items:

(a) The furniture, office equipment, and machinery used in the administration of the exempt business.

(b) Administration building and control laboratory.

(c) Shop and warehouse combination buildings.

(d) Equipment and machinery used in the maintenance and transportation facilities, including but not limited to, automobiles, trucks, buses, graders, dozers, fork lift, payloaders and cranes and watercraft.

(e) Equipment and machinery owned by the applicants and not leased or under a lease option contract which are used in connection with the supplying of utility services similar to that supplied by a public utility. Included among these items, but not necessarily limited thereto, are:

(i) Natural gas distribution, including spur pipelines and equipment, running from the plant premises to trunk gas pipelines from which gas is supplied to the plant premises.

(ii) Electric power generation with building and distribution system.

(iii) Raw water distribution and supply system including water wells with pump houses, whether located on or off the plant premises, and iron removal system with building.

(iv) Cooling water distribution and supply system including cooling tower and pump house.

(v) Steam generation and distribution facility including condensate system.

(vi) Boiler feed water treating system with building including facilities for instrument air, utility air and inert gas generation.

(vii) Equipment, machinery, piping, used in the treatment and distribution of waste material and to pollution control, including but not limited to:

(1) Septic tanks.

(2) Waste water disposal system including pump house, chemical treatment with building, and retention pond, and including deep wells, and related piping and facilities in connection therewith.

(f) Equipment, machinery or supplies used for communication, which are owned by the applicants and not leased or under lease with an option to purchase and are located on the premises of the exempted plant, including but not limited to:

(i) Telephonic, telegraphic, teletype or microwave systems.

(ii) Radio communication systems.

(iii) Firefighting and safety equipment.

(iv) Fencing.

(v) Security stations and equipment.

Those facilities and property considered for exemption purposes in this certificate, including those specifically set forth above, are only those which in fact actually meet the definition of "property devoted to industrial development" as defined in AS 43.25.150(a)(11).

B. Property not deemed to be a part of the described property is:

1. Except as elsewhere noted herein, any property not located or based at or on the plant premises.

2. Any residence or living quarters, except those living quarters or facilities not constituting a permanent residence, which are located on the plant premises for the convenience of employees while in the course of performing their official duties, such as watchmen.

3. Commissaries, except that food items may be made available to employees on the plant premises for consumption during their hours of work. Any equipment used in connection therewith shall be deemed to not constitute commissary.

4. Vehicles, vessels and aircraft which are used away from the plant premises <u>are not exempt</u> from taxation, except the vessels used exclusively for water testing and line handling.

5. All facilities and appurtenant machinery pertaining to or used in connection with the supplying of utility services for other than the applicants' exclusive use. However, in the case of emergency, such as a power failure temporary use of such facilities for others than the applicants will not

make that property taxable or put the applicants in violation of this exemption certificate. Temporary means not more than 72 hours. For any use longer than that permission of the Commissioner of Economic Development, or his delegate, shall be obtained if the applicants are not to be in violation of this certificate.

6. Docking facilities - See paragraph No. C which follows:

C. If the trestle and wharf facility of the exempted business subject to this certificate is used in connection with the transportation of items not produced by or used in the operations of the exempted business, a portion of the value of such facility shall be deemed to be non-exempt property, as hereafter determined, to the extent such facility is used in connection with the transportation of items not produced by or used in the operations of the exempted business.

The percentage of use of the trestle and wharf facility in connection with the transportation of products not produced by or used in the operations of the exempted business shall, for any year covered by this certificate, except the first year (1969) and the last year (1978) of the exemption, be determined by computing the percentage of total tonnage during the preceding year of items transported across the trestle and wharf facility which represent products not produced or used in the exempted business. That percentage of the total value of the trestle and wharf facility shall be subject to taxation by political subdivisions who, under state law, could levy taxes on that property. In valuing the property AS 29.10.396 shall be followed. (For example, if the facility were used 50% for non-exempt purposes in 1969, then 50% of the value of that facility on January 1, 1970 would be subject to property taxes in 1970 and would not be considered to be tax exempt.)

ATTORNEY GENERAL, STATE OF ALASKA
STATE CAPITOL
POUCH K, JUNEAU, ALASKA
PHONE 586-5391

For the calendar year 1969, the percentage of use shall be deemed to be 15 percent.

In the last year of the exemption (1978) the same formula used for years 2 through 9, as explained above shall be followed except that the period used to compute total tonnage and the percentage of non-exempt use shall consist of the 9th year tonnage plus the tonnage of each month of the 10th year which ends prior to the date the tax roll is certified.

The applicants shall prepare and submit annually to the Assessor of the Kenai Peninsula Borough a determination of the percentage of use, as provided herein, for any period to which this certificate applies, starting with the calendar year 1969. Such determination for each of the years 1969 through 1977 shall be submitted at or prior to the time the property tax returns are filed within the Kenai Peninsula Borough (including any extension of time for filing such returns). Tonnage figures on use during the months of 1978 (the last year under this exemption) to be used in computing the percentage of non-exempt use for that year shall be furnished by the applicants to the Borough Assessor not later than the 5th day of the month in which the tax roll will be certified. Notice of that date shall be furnished to applicants by the Borough.

D. The applicant shall be exempt from the following taxes presently or hereafter levied or imposed upon the property defined in paragraph A, or the receipts therefrom:

1. All ad valorem taxes on real or personal property which may be imposed by the State, borough or other political subdivision or taxing jurisdiction.

2. All sales and use taxes and taxes measured by sales or profits on sales levied by the State, borough or other political subdivisions or taxing jurisdictions in the State.

ATTORNEY GENERAL, STATE OF ALASKA
STATE CAPITOL
POUCH K, JUNEAU, ALASKA
PHONE 586-5031

3. All franchise taxes levied by the State in excess of $1,000 per year and all franchise taxes levied by the borough or other political subdivisions or taxing jurisdictions in the State.

4. All business receipt taxes and business licenses levied by the State, borough or other political subdivisions or taxing jurisdictions.

5. All income taxes levied by the State, borough or other political subdivisions or taxing jurisdictions.

E. The tax exemption granted in this certificate shall apply, inure to, and be transferred to the benefit of:

UNION OIL COMPANY OF CALIFORNIA. In the event of a complete liquidation of COLLIER in which all of the assets owned by COLLIER in the exempted business are transferred to UNION as part of a distribution in complete cancellation or redemption of all of Collier's shares of stock owned by UNION, and

To a Subsidiary American Corporation of Japan Gas which is 100% owned by Japan Gas, and which subsidiary is the transferee of all of the assets owned by Japan Gas in the exempted business.

Any of the transfers described above which occur before the expiration of the period for which the exemption is granted shall not extend the period for which any exemption from taxes is granted. The transfer of rights under this numbered paragraph will be valid only if the transferees, Union Oil or the Subsidiary of Japan Gas, notify the Department of Economic Development within thirty days after the transfer has taken place. Such notice to be in writing by registered letter. In the event of transfer, the transferee shall be subject to

all restrictions and requirements of this exemption certificate, together with any amendments which may be added from time to time.

A transfer under this numbered paragraph shall not relieve the applicants or their successors from the statutory requirements of AS 43.25.020 and .030.

F. The exemptions referred to in paragraph D shall be for a period of ten years commencing January 1, 1969, but these exemptions may be terminated sooner under any provision contained in paragraph K of this certificate.

G. Only those exemptions from taxes specified in this certificate are granted to the applicatns.

H. The applicants shall make all reports required by the Alaska Industrial Incentive Act or provided for hereafter or that the Commissioner may from time to time request pertaining to the exempt property. A copy of all reports made to other Alaska State Departments or agencies under the Industrial Incentive Act shall be sent to the Commissioner of Economic Development or other State official subsequently administering the Industrial Incentive Act.

I. All income tax returns and other tax returns required to be filed with the Department of Revenue or other departments shall be complied with as though no exemption existed and copies of all returns shall be furnished to the Commissioner of Economic Development on their due dates, including any extension of time granted by the department whose tax returns are involved. The applicants shall indicate on or attached to the returns what portion of the receipts, income and expenses are derived from the exempt property as defined in paragraph A and may show on the returns the amount of credits claimed.

The fact that an applicant may be included as a member of a consolidated group which files a consolidated income tax return with the State of Alaska shall not operate to deny the exemption from Alaska income taxes granted herein to any such applicant. However, if consolidated returns are filed the amount of the tax credit granted shall be only that amount that would be allowed if separate returns had been filed. For example, the exempted business may have a net income for tax purposes (computed as if no exemption existed) of $100,000 and a tax of $8,370. Whereas, a consolidated return showing $1,000,000 in taxable income would have a tax of, say, $93,000. (Part of its tax being in a higher tax rate classification.) The amount of tax credit claimed on the consolidated return would be $8,370 and not the amount of tax arising on $100,000 income if it were computed as coming off the top at the higher tax rate. (Note: The income and tax figures used in this paragraph are hypothetical. Actual figures would have to be used in each instance.)

J. Only those items of income and/or expenses of the applicants which are necessary to the operation of the tax exempt business referred to above may be charged to the exempt business. Operation of a store or stores (inventory) department which makes sales to employees or third persons shall not be deemed to be necessary to the operation of the exempt business.

K. The above described exemptions may be revoked by the Commissioner of Economic Development or other State official charged with administering the Industrial Incentive Act for any one or more of the following reasons:

1. Any violation of or failure by one or more applicants to comply with the Industrial Incentive Act.

2. Any violation of or failure by one or more of the applicants to comply with this exemption certificate.

3. Any failure by one or more of the applicants to timely pay any State or borough or city license fee or tax not exempt under this certificate.

4. Any failure of one or more of the applicants to timely make any payment to the State, borough or other political subdivision on any agreement.

5. Any failure of one or more of the applicants to comply with the State's oil and gas conservation regulations.

In the event of any violation or failure by any of the applicants to comply with 1, 2, 3, 4, or 5 above, the State or political subdivision shall give the applicant or applicants 30 days' notice by registered mail to the applicant's plant or their registered agent or agents in which to cure the defect, and if the applicant or applicants cure the defect within the 30 day period, the exemption shall not be revoked for that violation.

In the event of a good faith dispute existing as to whether a violation of 1, 2, 3, 4, or 5 has occurred and is being contested in a court of law, the applicant shall have 30 days after the final order by the court of competent jurisdiction in which to cure the defect, except where revocation is mandatory under the Industrial Incentive Act. However, when a revocation occurs, its effective date shall be that specified by AS 43.25.060. Nothing herein shall operate to deny an applicant the right to appeal adverse decisions as provided in the Industrial Incentive Act.

DATED this 25th day of March, 1969, at Juneau, Alaska.

FRANK H. MURKOWSKI
COMMISSIONER
DEPARTMENT OF ECONOMIC DEVELOPMENT

Approved as to form:

G. KENT EDWARDS
ATTORNEY GENERAL

By Vernon L. Snow
Vernon L. Snow
Assistant Attorney General

EXHIBIT I

COMPARATIVE EMPLOYMENT DATA
1961-1974
KENAI-COOK INLET LABOR AREA

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	% Increase 1961-1970	% Increase 1961-1974
Total Civilian Work Force	2,512	3,123	3,274	3,318	2,914	3,883	5,415	6,475	6,262	5,560	5,508	5,967	5,748	6,179	121%	146%
Total Employment	2,102	2,664	2,723	2,830	2,510	3,383	4,936	5,892	5,510	4,745	4,594	5,022	4,831	5,375	126%	156%
Total Unemployment	410	459	551	488	404	500	479	583	752	815	914	945	917	970	99%	137%
Non-agricultural wage and salary employment	960	1,284	1,322	1,397	1,754	2,462	3,677	4,470	4,153	3,576	3,454	3,822	4,049	4,487	273%	367%
Mining	155	169	159	179	212	415	915	1,099	966	652	525	528	560	503	321%	225%
Contract Construction	57	94	99	128	259	**	821	1,209	736	354	398	433	343	441	521%	674%
Manufacturing	138	198	236	266	265	258	260	333	482	583	524	553	629	716	322%	419%
Transportation, communications and utilities	90	104	94	107	124	141	306	267	273	293	254	280	296	404	226%	349%
Trade	113	134	152	151	219	303	357	432	528	507	466	502	507	627	349%	455%
Finance, insurance and real estate	27	34	44	**	**	**	**	**	**	**	**	79	81	90	**	233%
Services	86	154	135	**	180	263	334	401	364	339	338	446	596	671	294%	680%
Miscellaneous	*	*	*	*	**	**	**	**	**	**	**	55	90	88	**	*
Government	294	397	403	38[illegible]	445	595	611	641	701	751	873	946	947	947	155%	222%

*Services and miscellaneous aggregated
**Withheld to comply with disclosure regulations

VALUATION

Rate of Permit Fee	$5.0 Million	$20.0 Million	$100.0 Million	$500.0 Million	$1,000 Million
A. 2% up to $5 million 1% - 5 to 20 million ½ over 20	$100,000	$250,000	$650,000	$2,650,000	$5,150,000
B. 3% up to $5 million 1½% 5 to 20 million 3/4% over 20 million	150,000	375,000	975,000	3,975,000	7,725,0(
C. 3% up to 5 million 2% 5 to 20 million 1% over 20 million	150,000	450,000	1,250,000	5,250,000	10,250,000

Permit Fees under CS HB219, Section 41.45.030(b)1)

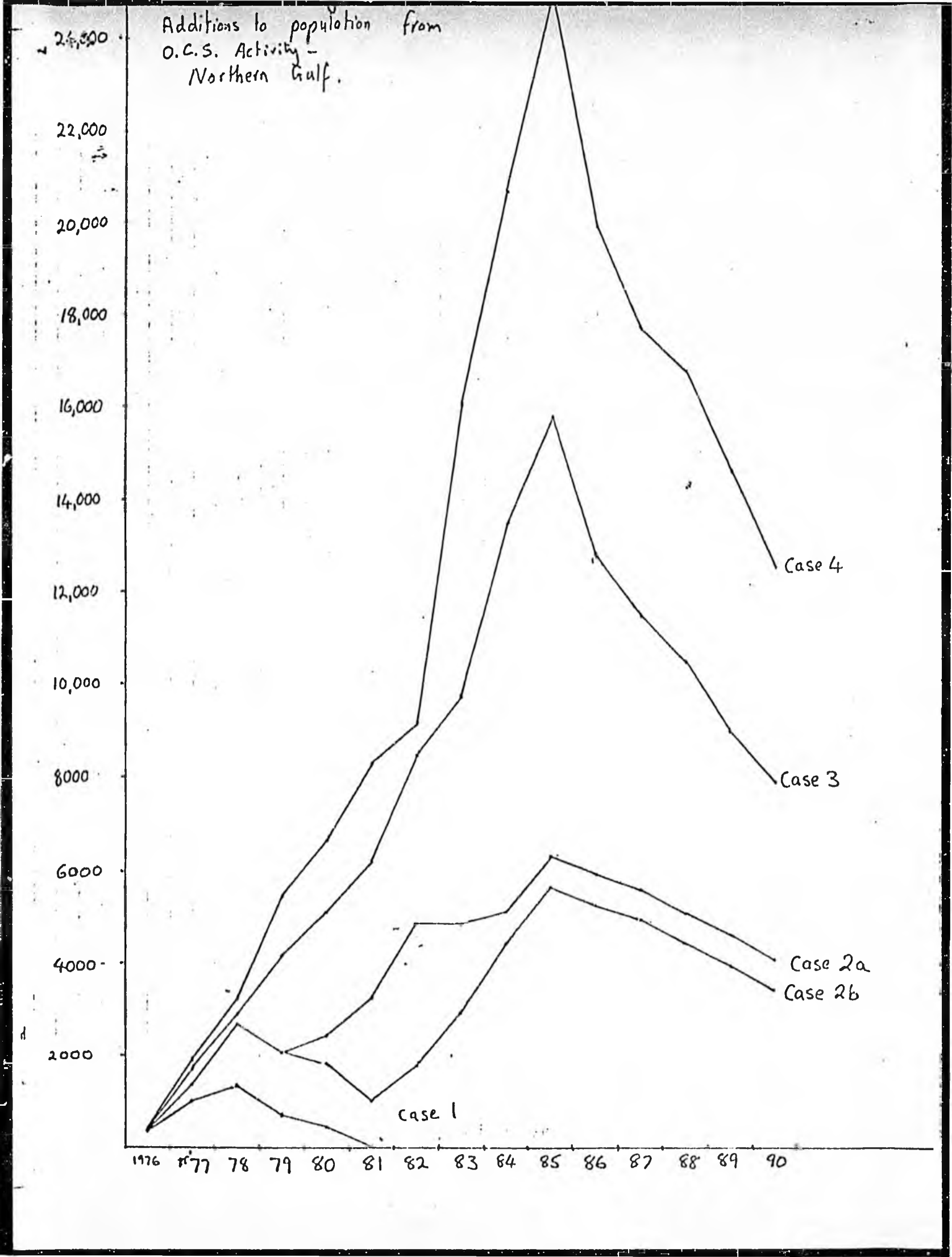
Calculated by Department of Community and Regional Affairs 04/01/77

DRAFT

DCRA-2/76

Table 2 Total ~~Export~~ Employment Direct and Indirect - Northern Gulf

Year	No Find			Moderate Find 2a Pipeline			Moderate Find 2b S.B.M			High Find 3			Bonanza Find 4			Total
	On	Off	Tot	On	Off	Tot	On	Off	Tot	On	Off	Tot	On	Off	Tot	
76	84	156	240	84	156	240	84	156	240	84	156	240	84	156	240	
77	204	466	670	285	621	906	285	621	906	346	777	1123	484	777	1261	
78	285	621	906	548	1242	1790	548	1242	1790	658	1242	1900	884	1271	2155	
79	166	311	477	405	961	1366	405	961	1366	1081	1762	2843	1346	2331	3677	
80	84	156	240	708	961	1669	405	961	1366	1369	2171	3540	2414	2331	4745	
81				1375	1011	2386	285	621	906	2064	2311	4375	3719	2421	6140	
82				2034	1208	3242	315	638	953	3409	2296	5705	3536	3145	6681	
83				1233	1458	2691	465	888	1353	2555	2663	5218	5105	4280	9385	
84				968	1392	2360	668	1392	2060	3515	3833	7348	6023	5359	11,382	
85				1148	1775	2923	848	1775	2623	4933	3966	8899	7910	5828	13,728	
86				1118	1621	2739	818	1621	2439	3085	3316	6401	4845	4777	9,622	
87				1065	1534	2599	765	1534	2299	2280	3069	5349	3645	4603	8,248	
88				1005	1364	2369	705	1364	2069	2160	2727	4887	3525	4278	7,803	
89				945	1193	2138	645	1193	1838	1958	2215	4173	3340	3578	6,918	
90				863	1022	1885	563	1022	1585	1815	1856	3671	2978	2862	5,840	


Additions to population from O.C.S. Activity – Northern Gulf.
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8000
6000
4000
2000
Case 4
Case 3
Case 2a
Case 2b
Case 1
1976
77
78
79
80
81
82
83
84
85
86
87
88
89
90

OIL INDUSTRY EMPLOYMENT IN SCOTLAND

TABLE 5.6 CHANGES IN OIL INDUSTRY EMPLOYMENT, MARCH 1973–DECEMBER 1974

	Mar. '73	*Jun. '73*	*Sep. '73*	*Dec. '73*	*Mar. '74*	*Jul. '74*	*Oct. '74*	*Dec. '74*
Inverness and Easter Ross	1 840	1 795	2 040	3 205	4 175	4 375	3 520	4 025
Remainder of Highlands and Islands	50	65	50	85	395	930	1 365	1 565
North East	1 410	2 305	2 305[b]	3 730	4 065	4 715	5 495	6 925
Tayside	25	35	95	135	150	280	475	765
East Central[a]	665	770	910	975	1 815	2 530	2 430	2 080
West Central[c]	110	170	250	480	675	785	855	870
Total	4 100	5 140	5 650	8 610	11 275	13 615	14 140	16 230

a. East Central is equivalent to the Firth of Forth region as described in Chapter 6.
b. No fresh figure was published for this quarter, therefore previous total has been carried forward.
c. The figures for West Central Scotland do not include workers engaged in rig construction work in Clyde shipyards, e.g. Marathon, Clydebank. In December 1974 workers in this category numbered 1935.

Source: Department of Employment.

SOURCE: Hutcheson, MacGregor and Hogg, Alexander, Scotland and Oil, 1975, p. 61.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

January 28, 1977

Mr. Keith Arnold
Assistant Manager
Alaska Oil and Gas Association
308 G Street, Suite 217
Anchorage, Alaska 99501

Dear Mr. Arnold:

The enclosed paper describes the approach used to derive the direct employment estimates for Alaskan OCS development underlying the figures cited in the Coastal Zone Management Newsletter enclosed in your letter of January 21.

We do not consider the figures quoted in the Newsletter to be valid estimates of the expected impacts in Alaska of OCS development. Those figures were prepared in an analysis done in May of 1975. The purpose was to determine the rough order of magnitude of OCS development impacts based upon deliberately pessimistic assumptions. It would then be possible, despite the great uncertainties, to credibly say that the likelihood of even more severe impacts would be negligible.

The estimates, therefore, were deliberately biased upwards at several stages in the analysis in order to produce an "upper limit" or "worst case" estimate. Some of the major sources of bias are:

- The leasing scenario used was the OCS planning schedule which was later published in June of 1975. It was recognized as a very ambitious and optimistic schedule for Alaska. Actual leasing in Alaska is likely to be spread over a substantially longer period than that schedule had anticipated. The impacts will also be spread over a longer period, reducing the infrastructure needs toward a level based on the "permanent" direct employment.

- The development scenario following each lease sale assumed very rapid exploration and development.

- It was assumed that all direct employment in every affected Alaskan region will be of people new to that region. This is clearly unrealistic.

The paper calculated a peak direct employment of 19,200 and a permanent direct employment of 8,100 resulting from the OCS development scenario examined. In order to arrive at a total population increase figure and a total infrastructure cost figure, the following steps were taken:

- The peak and permanent direct employment were averaged, giving 13,650. It was assumed that public infrastructure needs would be based on this volume of direct employment.

- It was assumed that all direct employment was by people new to the Alaskan areas in question.

- This direct employment of new residents was multiplied by a direct to total employment multiplier of 2.75 and a total employment to population multiplier of 2.5, giving a total additional population of 94,185.

- The total infrastructure cost was derived from this population figure by using $7,250 per capita.

It is unfortunate that these figures are receiving a wide circulation which characterizes them as OMB projections of future OCS impacts in Alaska. Their purpose was not to project the most likely future, but rather to show that, even when unrealistically pessimistic assumptions are used in the analysis, the calculated impacts are manageable.

I believe that the paper and the further steps described above are self-explanatory. However, if you have any further questions about the analysis, we will be glad to address them.

Sincerely yours,

Donald E. Crabill
Deputy Associate Director
for Natural Resources

Enclosure

Socioeconomic Impacts of OCS Development

The following package describes the bases for our estimates of OCS onshore impacts. Attachment 1 is a description of the approaches used in making the estimates. Attachment 2 describes our own analysis to produce an upper limit estimate of direct employment impact. Attachment 3 includes a paper on Alaska impacts and Atlantic impacts describing the conclusions of existing impact studies on those areas. Attachment 4 is a summary of conclusions which can be drawn from North Sea (Scottish) experience.

The impact estimates finally derived from these analyses are basically the direct employment figures of Attachment 2 blown-up by multipliers to get total employment including induced employment and total population. The multipliers were taken from the earlier impact studies.

The resulting estimates should be treated as order-of-magnitude estimates which are deliberately biased toward the high side. Uncertainties about how much oil will be found, where, and over what time period are very large. Additional uncertainties exist about the response of local economies to the temporary influx of exploration and development workers.

Induced employment and population in short-term boom situations are likely to be less than the induced employment and population which would eventually result if the boom level of activity were to continue indefinitely. However, the multipliers used here are those usually considered suitable for estimating long-term equilibrium results, so they bias the peak employment period results toward the high side.

Another source of uncertainty in Alaska is the unknown degree to which companies during the exploration and development phases will provide facilities and services for their employees because they are about totally absent in the local economy.

METHODOLOGY OF IMPACT ESTIMATIONS

Two approaches used

Two approaches to impact estimates were taken:

1. In the papers "Alaska Impacts," "Atlantic Impacts," and "California Impacts," existing impact studies pertaining to specific OCS areas were reviewed and estimates were derived from them. These studies estimate direct employment based upon assumed levels of production and apply multiplier factors to obtain total number of "new residents."

2. In the paper "Estimates of OCS Employment Impacts," estimated acreages to be leased under the planning schedule along with assumptions about exploration and development rates and percentage of exploratory success were converted into primary employment using unit employment estimates furnished by the National Ocean Industries Association. Production phase employment was derived using those unit employment estimates and production assumptions from the Project Independence Report. Estimates are shown both for total direct employment and new residents directly employed, with the latter based on Gulf of Mexico experience.

   Multipliers to derive indirect employment and total new population were not used in this approach because the base conditions differ so significantly area by area, and the number of uncertainties in the projections make it almost impossible to derive a general multiplier that would be considered valid.

Defects of each approach

The estimates based on the production level approach suffer from several defects:

- The exploration activity and, to a lesser extent, the development activity associated with a given production level are not determinate. Since the exploration and development phases are the peak employment period, the uncertainties about peak employment are both large and ill defined.

- Under this approach, the exploration and development employment (the peak employment) is derived by extrapolating back in time from an assumed production level in some given future year. However, the time schedule and volume of leasing actually determine the exploration, and to some degree, the development employment levels and timing because of the fixed time period after lease issuance in which exploration must occur to avoid forfeiture of the tract.

- The total direct employment is assumed to be the appropriate base for calculating the total population increase due to OCS activities, even though a large percentage of direct employees (particularly during the production phase) will not be new residents of the locality.

The estimates based on the leasing level approach also suffer from defects:

- Since they assume exploration and development to occur at very rapid rates after leasing, the peak employment estimates are probably upper limit estimates rather than most likely estimates.

- The development employment assumptions are based on Gulf of Mexico exploratory success rates and development drilling rates; therefore the corresponding employment figures for new areas are subject to substantial uncertainty, although that uncertainty is not likely to result in the peak employment estimate being substantially exceeded.

- The production phase employment is based upon production level estimates which are highly uncertain.

- Production phase employment includes employment in platform operations which is derived from acres leased plus Gulf of Mexico exploration and development experience. This platform operation employment may not be consistent with Project Independence Report production estimates.

Comparison of results

Total direct employment at its peak is substantially larger when estimated by the leasing level approach than in the available studies using the production level approach. This is to be expected since the assumptions in the leasing level approach were selected to produce upper-limit estimates. However, the size of the discrepancy, a factor of 3 to 13, suggests that the production level approach studies do underestimate the total direct employment during the exploration phase.

Total direct employment during the production phase is generally similar in the two approaches, except in Alaska. In the case of Alaska, the platform operation employment estimate in the leasing level approach probably implicitly assumes substantially higher production than does either the Project Independence Report or the impact study based on the production level approach.

Attachment No. 2

ESTIMATES OF OCS EMPLOYMENT IMPACTS

Estimates were made of OCS employment impacts using the following assumptions:

Sale	Tracts Sold
Alaska 11-75	305
Alaska 4-76	87
Alaska 12-76	305
Alaska 9-77	305
Alaska 10-77	174
Alaska 7-78	174
Alaska 9-78	87
Pacific Coast 9-75	174
Pacific Coast 9-76	174
Pacific Coast 5-77	87
Pacific Coast 2-78	87
Gulf of Mexico 2-76	69
Gulf of Mexico 2-77	260
North Atlantic 8-76	260
North Atlantic 12-77	260
Middle Atlantic 5-76	305
Middle Atlantic 7-77	305
South Atlantic 10-76	260
South Atlantic 5-78	260

It was assumed that these tracts were explored and developed in the following percentages based on Gulf of Mexico historical information:

	Alaska	All other areas
Undrilled and relinquished in primary term	25	25
Undrilled but extended by unitization	25	10
Drilled and productive	25	32.5
Drilled and unproductive	25	32.5

All exploratory drilling done in 1st through 5th years following sale year at rate of 2 wells/tract drilled

Mobile rig field definition drilling done in 2nd through 6th years after sale at 5 wells per tract with discovery.

1 platform installed per productive tract. Platform drilling done in 4th through 8th years after sale

For each of the three Atlantic areas in turn it was assumed that the following production resulted:

Year	Millions of barrels annually
1978	17
1979	34
1980	51
1981	79
1982	107
1983	135
1984	163
1985	190

This level corresponds to the Project Independence Report level for the entire Atlantic OCS. It was allocated in turn to each of the areas in order to provide an upper limit estimate of direct employment, given the very great uncertainty about what reserves might be discovered and developed in each area by 1985.

The assumed production for other OCS areas above 1976 production levels:

Oil, millions of barrels annually

Year	Gulf of Mexico	Alaska	Pacific
1977	19	0	9
1978	56	0	49
1979	94	0	90
1980	132	0	130
1981	174	32	179
1982	216	64	232
1983	258	96	283
1984	300	128	334
1985	343	161	385

Table 1 gives the estimated total employment per unit of OCS activity and the number of employees which are both new to the area and are residing locally.

ESTIMATES OF OCS EXPLORATION IMPACTS

Table 1

Facility	Total Employment	New Resident Employed
Exploratory rig	113	45
Development rig	65	37
Platform production operations 1/	16	1
Onshore operations base 2/	136	25
Onshore office 2/	42	26
Gas processing plant 3/	21	8
Pipeline shore terminal 2/	17	4
Service support 4/	143	53

1/ Per platform.
2/ Per 200 K BOPD.
3/ Per 300 K MCFD.
4/ Per 10 to 20 rigs served.

Table 2 shows the maximum total employment calculated in turn for each Atlantic OCS area using the above assumptions. Table 3 shows the similar estimates for new residents employed in OCS activities. Tables 4 and 5 show similar information for the other OCS areas.

Table 2
Total employment

	North Atlantic	Middle Atlantic	South Atlantic
1977	1,200	1,400	1,200
1978	2,500	2,900	1,300
1979	4,000	4,700	4,000
1980	6,800	7,900	5,300
1981	8,400	9,800	7,200
1982	7,800	9,000	7,600
1983	7,300	8,200	8,300
1984	6,500	7,200	6,200
1985	4,400	4,600	5,600
1986	3,400	3,400	4,400
1987	3,400	3,400	3,400

Table 3
New residents employed

	North Atlantic	Middle Atlantic	South Atlantic
1977	500	600	500
1978	1,000	1,200	500
1979	1,600	1,900	1,600
1980	2,900	3,400	2,300
1981	3,700	4,300	3,000
1982	3,200	3,800	3,200
1983	2,800	3,300	3,300
1984	2,300	2,600	2,300
1985	1,100	1,200	1,600
1986	400	400	1,100
1987	400	400	400

Table 4
Total employment

	Gulf of Mexico	Washington, Oregon, and California	Alaska
1977	500	2,100	1,300
1978	3,100	3,200	4,300
1979	5,400	4,700	7,400
1980	6,000	6.000	16,100
1981	8,300	6,200	19,800
1982	8,500	5,600	15,500
1983	6,800	5,100	19,200
1984	5,100	4,500	13,800
1985	5,300	3,800	10,700
1986	3,800	3,700	9,300
1987	3,800	3,400	8,100

Table 5
New residents employed

	Gulf of Mexico	Washington, Oregon, and California	Alaska
1977	200	800	500
1978	1,200	1,300	1,700
1979	2,100	2,000	3,000
1980	2,500	2,500	6,700
1981	3,600	2,600	8,300
1982	3,500	2,200	6,600
1983	2,600	1,900	8,600
1984	1,700	1,700	5,000
1985	1,600	900	3,100
1986	500	700	2,100
1987	500	500	1,100

No estimate was included above for refinery employment because total refinery capacity needed is dependent on domestic consumption levels rather than upon the availability of domestic crude oil. Refinery capacity will be built; it will process OCS crude if it is available and foreign crude if OCS crude is not available. Table 6 shows the direct employment for processing the estimated OCS production.

Table 6

Refining incremental OCS production 1985
(Above 1970 base)

Area	Annual crude oil consumed (M bbls.)	All employees
Gulf of Mexico	343	8,100
Alaska	161	3,800
Pacific	385	9,100
Atlantic	190	4,500
	1,079	25,500

Existing refinery capacity used for processing foreign crude already (as of June 1974) equals or exceeds the estimated incremental OCS production in the Eastern region for Atlantic production and in the South for Gulf of Mexico production. The Pacific Coast and Alaskan OCS crude production estimate for 1985 is substantially greater than the present capacity in the West which is processing foreign crude. This may mean that crude from the Pacific and Alaskan OCS would be processed in new refinery

capacity in the West which in the absence of OCS crude would be located elsewhere in the country and utilize foreign crude. Alternatively western OCS crude in excess of the region's needs might be transported to other regions in unrefined form. In any event, Alaskan OCS crude is not likely to be refined in Alaska. Table 7 shows these comparisons.

Table 7

Refinery region (OCS area)	Incremental OCS production estimate, 1985 (K bbls./day)	Using foreign crude 6-74	Refinery capacity (K bbls./day) Total 6-74	Total 3-75	Annual rate of (%) change
South (Gulf of Mexico)	940	942	5,275	6,223	24.7
West (Pacific & Alaska)	1,496	894	1,996	2,303	21.0
East (Atlantic)	521	1,325	1,519	1,760	21.7

Increased refinery capacity will probably be achieved largely by adding capacity to existing refineries rather than building new refineries from the grass roots up. Existing capacity increased very substantially between 6-74 and 3-75 without any significant additions of grass roots capacity. This will minimize fiscal impacts since existing refineries are largely in or very near urbanized areas so that refinery employees and their households are a negligible part of the local population.

Construction employment estimates have not been included for the following reasons:

- Mobile rigs will probably continue to be built in shipyards now in that business. Any additions to capacity are likely to be where there are already harbor and shipyard facilities. Such areas are usually already urbanized.

- Platform construction is also likely to be located where there are major harbor and shipyard facilities. (One possible rural site has been identified across the mouth of Chesapeake Bay from Norfolk.) Some of these areas, such as Boston, already have significant problems of unemployment and excess facilities that are not merely short term consequences of current economic conditions.

Conclusion

The employment figures summarized in Table 8 below are probably the maximum or upper limit direct employment impacts that will result from OCS exploration and development. They assume very rapid exploration and development. Using total direct employment figures as a measure of fiscal impact on coastal jurisdictions implicitly assumes that all direct employees are new residents. The figures in Table 9 summarizes estimates of new residents resulting from OCS exploration and development. They

are largely based on Louisiana experience but there is no reason to suppose that experience elsewhere will be drastically different except in Alaska. In Alaska the remoteness of the areas of exploration and potential development from all but the smallest of villages will probably mean that practically all employees in the exploration and development phases probably will be brought in from outside by the oil companies and will be housed, both on and off duty, in substantially self-contained company facilities. For this reason impacts on local governments during the peak exploration and development period are likely to be less than the figures on new residents would indicate.

Table 8

Maximum total employment from incremental OCS activities

Area	Peak development period	Production period
North Atlantic	8,400	3,400 1/
Middle Atlantic	9,800	3,400 1/
South Atlantic	8,300	3,400 1/
Gulf of Mexico	8,500	3,800
Pacific Coast	6,200	3,400
Alaska	19,800	8,300

Table 9

Estimated new residents employed in incremental OCS activities

Area	Peak development period	Production period
North Atlantic	3,700	400 1/
Middle Atlantic	4,300	400 1/
South Atlantic	3,300	400 1/
Gulf of Mexico	3,600	500
Pacific Coast	2,600	500
Alaska	8,600 2/	1,100 2/

1/ This figure is the total for the Atlantic region as a whole but is shown against each sub-region (as an upper-limit estimate for the sub-region) in the absence of an allocation of the Project Independence report production estimate among sub-regions.

2/ These are the calculated figures for Alaska using Gulf of Mexico experience. They are considered unrealistically small for the reasons described in the text above.

Atlantic Coastal State Population Projections 1/
(Thousands)

	1975	1985
Maine	1,005	1,081
New Hampshire	765	861
Massachusetts	5,664	6,219
Rhode Island	931	989
Connecticut	3,254	3,713
New York	19,776	21,688
New Jersey	7,805	8,893
Delaware	589	685
Maryland	4,155	4,801
Virginia	5,027	5,640
North Carolina	5,394	5,902
South Carolina	2,765	3,035
Georgia	4,933	5,477
Florida	7,275	9,012
	69,338	77,996

1/ IID Series

1975 to 1985 growth is 8,658,000 persons

New infrastructure capital at $5,000 per person is $43.29B

OCS related infrastructure at $100 to $250M is 1/4 to 1/2 percent of total requirements

Alaska Impacts

Reports from and discussions with Mathematical Sciences Northwest have brought out the following points about impacts in the Gulf of Alaska.

- 1970 populations of the most likely towns for development were:

Cordova	1,164	
Kodiak	3,798	
Seward	1,587	
Whittier	130	
Yakutat	190	(A Tlingit Village)

- The total 1970 population of the five census divisions encompassing these towns was 18,857 which includes 3052 (16%) military.

- At a production level of 700,000 BPD by 1985, OCS primary employment is expected to peak in 1980 at 1500 and drop to 900 in 1985. OCS secondary employment will also peak in 1980 at 2800 and drop to 1600 in 1985.

  Total OCS-induced population will peak in 1980 at 8400 and drop to 5100 in 1985.

- With petrochemical and LNG development in addition, the population would peak in 1981 at 12,700 and drop to 6500 in 1985.

- Most of the platform construction and fabrication will take place outside of Alaska in Japan, California, or the Northwest.

- On-site facilities construction will be limited to the summer season (May Sept).

- Virtually all increased employment represents either an inter-state or inter-region population shift.

- With the exception of Kodiak, these areas are 100% rural and generally have higher than State average incidences of Alaskan native population, percent of families with incomes under poverty level, unemployment and substandard housing.

- There are substantial needs for roads, water and sewage treatment, and airport and seaport improvements if the OCS is developed.

- Although the capital cost of the public infrastructure needed in the Gulf of Alaska because of OCS development has not yet been detailed, the estimated total cost should be less than $60M (about $6250 per capita) without LNG and petrochemical development and less than $80M with them.

- Additional annual local operating expenditures, exclusive of Federal contribution, would be about $4M ($500 per capita) at the population peak without LNG and petrochemical development and $6M with them.

- On shore capital investment in the Gulf by the oil companies is estimated to run $80-100M without LNG and petrochemical development. Annual property taxes for on-shore oil facilities would be about $2M without LNG and petrochemical development and $14M with them.

- "If the Federal Government collected 12.5% royalty on a $10.00/bbl wellhead price and shared this revenue with the State of Alaska, revenue which in turn would be expended in the State, the resulting economic impacts would be greater than the total direct and indirect wage effect." (A 25% State share of Federal royalties on projected Alaskan production in 1985 would be $67M, while total wages would only be $45M.)

Alaskan OCS Employment & Population Impacts*
Gulf of Alaska OCS only

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Primary Employment	291	622	936	1,250	1,436	1,440	1,191	940	951	886
Induced Employment	541	1,157	1,741	2,325	2,764	2,678	2,215	1,748	1,769	1,648
Total Employment	832	1,779	2,677	3,575	4,250	4,118	3,406	2,688	2,720	2,534
Primary Population	529	1,167	1,866	2,362	2,805	2,745	2,286	1,828	1,875	1,786
Induced Population	1,104	2,360	3,552	4,743	5,639	5,463	4,519	3,566	3,609	3,362
Total Population	1,633	3,527	5,418	7,105	8,444	8,208	6,805	5,394	5,484	5,148

* Mathematical Sciences Northwest Preliminary draft of "A Social & Economic Impact Study of Oil Related Activities in the Gulf of Alaska (April 4, 1975). Proprietary information, Gulf of Alaska Operators Committee.

Assumes 700,000 BPD by 1985.

Alaskan Employment & Population Impacts of Petrochemical and LNG Development *

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Primary Employment					550	800	550	235	235	235
Induced Employment					1,023	1,488	1,023	437	437	437
Total Employment					1,573	2,288	1,573	672	672	672
Primary Population					994	1,446	994	479	479	479
Induced Population					2,087	3,036	2,087	891	891	891
Total Population					3,081	4,482	3,081	1,370	1,370	1,370
Total population, OCS plus petro-chemical & LNG					11,525	12,690	9,886	6,764	6,854	6,518

* Mathematical Sciences Northwest (4-4-75). (for Gulf of Alaska OCS only)

California Impacts

Los Angeles County's study of OCS impacts (Jan. 31, 1975) made the following statements, which are consistent with the recent studies by Rand (for the State of California) and Western Oil and Gas Association (WOGA).

- OCS exploration and development of a 4 billion barrel find may create 5000 new primary jobs and possibly 15,000 secondary jobs (3/5 of 1% of the 3.1M jobs in L.A. County).

- "Secondary impacts...would involve no large scale changes in either the area's population, or its labor force."

- Significant impacts (including excess demand for construction labor and materials and consequent price rises) might occur if platforms and equipment are constructed locally. Current evidence suggests, however, that the Gulf of Mexico and the San Francisco Bay are more likely sites.

- On-shore impacts from storage and processing will be tied to levels of demand rather than to OCS production. (Present refining and storage capacity are sufficient and no new refineries are projected).

- Overall impacts on local government operation is not expected to be significant, except in the case of an oil spill.

- Significant adverse effects on local industry and employment could occur if adequate alternative supplies of oil and gas are not found to replace the potential, but untapped OCS sources.

The Rand and WOGA studies also point out that the increase of 5000 new jobs would partially offset Southern California's declining employment in on-shore oil production so that the actual net gain in primary employment will be less than 1000.

According to the Chief Engineers of the Los Angeles and Long Beach Harbors:

- Long Beach port improvements necessitated by OCS could be handled on a "routine basis," financed out of current cash flow;

- Los Angeles port improvements would involve an estimated $20-25M for channel deepening financed through bonding with a charge back to the oil companies. (The Federal Government is already involved in a project with the port of L.A. to deepen some channels).

According to the California State Energy Commission, "on-shore or socio-economic impacts in California is a non-issue....We don't want to depend on the Federal Government for our revenues."

The State of California, to raise revenue for OCS-related and other uses, is actively pursuing the idea of a through-put charge (an estimated $280M a year at $.50/barrel). DOI is currently assessing the legality of California's plan. If legal, the availability of such a tax scheme should significantly reduce the states' claim on OCS revenues.

Atlantic Impacts

Magnitude of the Impacts

There is considerable debate about the magnitude of on-shore impacts on Atlantic OCS.

Resource Planning Associates (for CEQ) estimates that a 750,000 bbl/day Atlantic production may induce a population growth of up to 250,000. A study by the State of New Jersey for a similar production scenario says the population impact may be around 100,000. A rough calculation based on industry supplied labor inputs, a production estimate of 190M bbl/year by 1985, and some rule-of-thumb multipliers puts the "new resident" population impact at under 25,000.

According to industry estimates, the capital investment in OCS on-shore support facilities for the Atlantic could run about $100M for 1M bbl/day production, exclusive of refinery, petrochemical, and deep water port development. Annual wages during the production phase for 1M bbl/day (i.e., excluding construction) could run about $25M.

Public capital investment in infrastructure; exclusive of airport or seaport improvements, but inclusive of moderate road building, could run as high as $125M if 25,000 people moved into the region or $250M if 50,000 people moved in.

Potential non-Federal revenues from OCS-related on-shore developments are difficult to quantify because of uncertainties about the location of development and the myriad tax structures of the various Atlantic Coast states. However, in most States OCS related development would be subject to the following major taxes: corporate income, sales, construction, and property. Employees would be subject to income, sales, and property taxes in most states.

It has been estimated (WOGA) that a find of 4B barrels of oil and 8 trillion cubic feet of natural gas would yield revenues of $19.4B to Federal, State, and local governments over the life of the fields (assumed to be 30 years). This breaks down as follows:

	$('73) B
Lease payments	3.6
Royalties	7.5
Federal corporate income	6.3
Federal personal income	.9
	18.3
State & local corporate income	.7
State & local personal income	.1
State & local other than income	.3
	1.1

(The $1.1B State and local revenues is about $36.7M per year. This compares to annual debt service (7%, 20 years) of $10.5M on an initial capital investment of $112M (25,000 x $4500 per capita) and annual operating costs of $10M (25,000x $400 per capita).

It appears, then, that there will be sufficient capital-intensive on-shore industry investment to cover the normal corporate share of local tax revenues. The timing of cash flows and access to capital markets for major public investments, however, may be problems, particularly for small, rural towns with little bonding history, exhausted bonding capacity, tax structures in need of revamping, and a weak existing economic base.

Nature of the Impacts

Construction of Drilling Rigs

Rigs can be built in existing shipyards and towed long distances to drilling sites (Gulf of Mexico to Noth Sea, e.g.). Consequently, the on-shore impacts during this phase are expected to be minimal because few, if any, population shifts or new commitments of land will be involved. The potential for on-shore impacts would be reduced even further to the extent that drilling rigs now used in the North Sea are towed back to the U.S.

Conversations with industry representatives indicate that drilling rigs for the Atlantic will most likely be built in Gulf shipyards and towed out. Some rigs for the Atlantic, however, may be constructed in Atlantic shipyards (Baltimore, e.g.), in which case rig building would reduce the current unemployment in the affected areas rather than add to the population base.

Exploration Phase

During the exploration phase, the major on-shore impact is the demand for harbor supply bases. Communities with harbors near the leased tracts are the most likely to become support centers for oil development.

Population impacts are expected to be relatively small during this phase.

• Construction of Production Platforms

Platform construction is not expected to induce significant on-shore impacts in Alaska and California. Construction of platforms for the Atlantic, however, is likely to involve significant on-shore impacts because it will probably require at least one new site, which is specifically designed for platform building, rather than use of existing shipyards. This is because 1) existing shipyards are not equipped for such construction and are unlikely to commit capital for conversion, given the uncertainty of oil finds and, 2) platform building requires a site which has easy access to both deep water and materials as well as hundreds of acres of level land, a requirement few shipyards can meet.

Brown and Root recently purchased about 2000 acres in Cape Charles (Northampton County), Virginia and has requested the rezoning of 980 acres from agriculture to industrial use for manufacturing platforms, among other products.

Brown and Root employment is estimated to reach 1500 and induce a population growth in the County of about 2900, a 15% increase over the County's 1970 population.

With 40% of the existing housing substandard, a projected severe 5-10 year housing shortage is expected to hit low income and retired persons especially hard as rents are driven up.

Additional annual County expenditures induced by Brown and Root have been estimated at over $900,000 ($313 per capita), not including debt service on $2,000,000 in needed highway improvements.

Additional annual revenues have been estimated at about $1,000,000 which includes $300,000 property taxes from Brown and Root (on $40M capital investment), $150,000 from residential property taxes, $140,000 other locally generated tax receipts, about $400,000 in additional State grants, and $38,000 from Federal General Revenue Sharing.

The apparent $100,000 surplus may be illusory, however, because of a lag in property tax receipts, which the County could correct if it so desired, and because the annual debt service on the highway improvements would exceed $100,000.

Fiscal impacts on the towns within Northampton County may be more noticeable, particularly if the new people choose to live outside Cape Charles, in towns which cannot tax Brown and Root. Likewise, the other counties which receive new people (an estimated 2100 in the families of employees commuting from other counties) may experience some fiscal gaps.

Over the last five years, about one-half the county's income has been from the State, one-fourth from the Federal Government, and one-fourth from local citizens and businesses.

Because of Brown and Root's locating in Northampton, the State's proportional contribution to County receipts would decrease from 50% to 40%. From the State's viewpoint, the fiscal burden of its contribution should be minimal, unless a significant number of the Brown and Root employees were not Virginia residents, because the State contribution would be the same whichever county the people lived in.

- Development Phase

Manpower requirements peak during this phase. Local communities are expected to be under their most severe strains then because of the short-term (2-4 year) influx of construction workers. The danger of overbuilding public facilities is greatest during this phase, a danger which could be increased by the easy availability of "free" Federal funds.

- Production Phase

This phase is very capital intensive and brings a sharp decline in jobs as construction requirements subside. Small, one-economy towns that grew rapidly to support OCS will be the hardest hit by the decline.

- Pipelines, Terminals, and Storage

The number of pipelines and landfalls depend on the location of the find and of the processing facilities, the number of companies able to share a pipeline, and environmental factors.

Oil can be piped to inland refineries, but coastal processing facilities are necessary for gas pipelines because of the safety factor.

After construction, the pipeline itself requires virtually no manpower. A pipeline terminal for 200,000 bbl/day requires only 17 employees (capital investment of $2.4M).

Fiscal impacts on the towns within Northampton Co.
may be more noticeable, particularly if the new

OCS impacts from storage depend primarily on existing capacity and whether or not OCS production will back out imports. Again, storage facilities are capital intensive.

8- Refineries

The extent to which new refineries will be built also depend on existing capacity and whether OCS production will back out imports. Because it is cheaper to transport crude oil rather than refined products, the siting of refineries depends on the location of the demand or market area, not on the location of the supply. Refineries are very capital intensive with a capital investment of $600-800M and permanent employment of 500.

Atlantic OCS Employment and New Resident Population Impacts

	1976	1980	1985
Primary New Resident Employment 1/	0	3,100	1,600
Induced Employment (Primary X 2)	0	6,200	3,200
Total New Resident Employment	0	9,300	4,800
Total New Resident Population (Employment x 2.5)	0	23,250	12,000

1/ See Attachment 3 for assumptions and calculation of direct employment.

LABOR AND CAPITAL OCS INPUTS
(supplied by American Petroleum Institute)

Type of Operation	No. of Employees	Employees not Hired Locally	Total Wages $/Month	Capital Investment 1974 - $
Per Rig				
1. Exploratory Well	113	71	125,075	-
2. Development Well	65	37	76,750	-
Per 10-20 Rigs				
1. Service Support	174	66	212,150	5,195,000
Per Platform				
1. Production Operations	16	1	18,250	-
Per 200,000 BOPD Production				
1. Onshore Operating Base	136	25	133,175	2,800,000
2. Onshore Office	42	26	60,800	Rental
3. Pipeline Terminal	17	4	20,200	2,400,000
Per 300,000 MCFD Production				
1. Gas Processing Plant	21	8	24,750	24,000,000
Single Facility if Required				
1. Pipeline Tanker and Barge Terminal	25	8	33,100	9,800,000

Attachment No. 4

North Sea Experience

North Sea experiences would indicate that:

1. On-shore impacts are most significant in communities with limited labor pools, existing housing shortages, and no slack in existing public infrastructure.

2. Large cities can absorb OCS-induced growth more easily than small ones.

3. Those towns with a diversified economy can adjust more readily than those which are dependent on a single existing industry (tourism, fishing, etc.).

North Sea impacts which may have bearing for Alaska and Atlantic rural areas include the following:

- Public expenditure on roads, harbors, and airports increased significantly in "oil areas" while they decreased elsewhere in Britain.

- The benefit of new jobs has not been channeled into Scotland's neediest cities.

- Inflationary side effects have seriously affected those individuals and small businesses outside the oil boom.

- Housing shortages have been particularly severe and long lasting, primarily because existing construction capacity is being used for oil facilities and new workers aren't imported because they would only aggrevate the shortage.

- Lack of housing has constrained the in-migration of teachers and other service personnel.

- High land prices (a 30-fold increase in five years) discourage non-oil industries from locating in oil boom towns, thus hindering diversification of the economic base.

- High wages in the oil industry have created labor shortages in several industries and services, particularly factories, retailing, and government.

- Impacts from platform construction have been among the most significant in North Sea communities.

- Shetland County Council levied a per barrel tax on oil passing through Shetland facilities and negotiated with the companies for an advance payment to help with front-end capital costs of public infrastructure.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPT. OF COMMUNITY & REGIONAL AFFAIRS

DIVISION OF LOCAL GOVERNMENT ASSISTANCE / POUCH B – JUNEAU 99811

March 4, 1977

Mayors of Coastal Municipalities:

Yesterday, I received a phone call from Chuck Cohen; who, as you know, is our representative in Washington D.C., with responsibility for doing research and technical analyses of the new Coastal Energy Impact Program. Chuck advised me that a supplemental appropriation for FY '77, as prepared by President Ford and amended by President Carter, and a budget for FY '78, have been presented to the Congress in the following amounts:

FY '77- $10 million - Formula Grants
$110 million - Facilities Loans
$0.00 - Planning
$0.00 - Environmental or Recreational Grants

FY '78- $13 million - Formula Grants
$143 million - Facilities Loans
$0.00 - Planning
$0.00 - Environmental or Recreational Grants

From the proposed appropriations the federal Office of Coastal Zone Management has tentatively proposed to allocate to the State of Alaska and its municipalities the following amounts:

FY '77 (Supplemental)
$700,000 - Formula Grants
$31,900,000 - Facilities Loans
$0.00 - Planning
$0.00 - Enviromental or Recreational Grants

FY '78 (Budget)
$3,200,000. - Formula Grants
$68,600,000. - Facilities Loans
$0.00 - Planning
$0.00 - Enviromental or Recreational Grants

The most obvious omission from the proposed budgetary figures, in our view point, is the lack of appropriations for planning which would ordinarily precede application for facilities loans or formula grants. In other words, it appears the federal administration is putting the "cart before the horse" by providing funding for facilities without any funding being provided for necessary planning. Therefore, this date, Kevin Waring, Director of Community Planning, is preparing a draft of a letter for Governor Hammond's signature to members of our congressional delegation in Washington strongly urging that they amend the proposed FY '77 supplemental and FY '78 budget figures to include funds for planning. By way of this letter we encourage each of you to likewise send letters or telegrams to members of the Alaska Congressional Delegation in Washington, expressing your concern for the need for funding of planning under the C.E.I.P. As in the past, we would appreciate receiving a carbon copy of any correspondence you might send to the congressional delegation. As we understand it, the supplemental appropriation bill and the FY' 78 budget are now in Congressional committees. It is imperative that, if you propose to make your wishes known to the Congressional Delegation, letters or telegrams be sent A.S.A.P.

One week ago today, the Coastal Management Policy Committee of Governor Hammond's Administration, authorized the Department of Community and Regional Affairs to take the lead in the development of the intrastate allocation formula process as provided for in the federal regulations which implement the C.E.I.P. I had earlier requested that Chuck Cohen prepare a draft intrastate allocation formula for our consideration and I expect to receive that first draft sometime next week. Also, while in Fairbanks this coming week Kevin Waring will meet with representatives of the Institute of Social and Economic Research at the University of Alaska, to see if the Institute is willing to also draft a formula for the proposed intrastate allocation. We will be contacting you in the very near future with our proposal. Any finally adopted intrastate allocation formula, as we envision it, will include municipal representation and input regarding the distribution of the federal allocation for formula grants ~~grants~~ and facilities loans made available to the State of Alaska.

We again urge you to contact our congressional delegation in Washington if you share our concern that money should be appropriated for Coastal Energy Impact planning. We also appreciate any comments or concerns you might have as to the manner in which our Department is proceeding in drafting a proposed intrastate allocation formula for the Coastal Energy Impact Program.

Sincerely,

Palmer

Palmer McCarter
Director

cc: City Managers
Don Berry, Alaska Municipal League

McC/pc

copies for committee members

City of Kenai
BOX 580
KENAI, ALASKA 99611
telephone: 283-7535

March 9, 1977

Honorable Lisa Rudd
State of Alaska
House of Representatives
Pouch V
Juneau, Alaska 99811

RE: House Bill #219

Dear Representative Rudd:

House Bill 219, as proposed, clearly makes the developer of OCS resources liable for costs relative to the impacts generated from construction of shore-related facilities.

The principle of this proposed legislation has been long established in American municipalities, though normally called "off-site improvements", required as a result of significant development; commercial, industrial and housing.

The legislation, as proposed, is long overdue. The boroughs ought to be the agencies to establish such legislation, through their planning and zoning mandates; however, in the absence of borough action, then the State is obviously compelled to act.

The City of Kenai has been victimized by the absences of such legislation and, therefore, we are obliged to support this legislation, not only for our own protection, but for the greater good of the State.

If there are any problems in this proposed legislation, it is in Section 41.45.930 "Fees". The language is unclear and needs clarifying.

Our congratulations on the introduction and grateful support for the legislation.

For the Mayor and Council of the City of Kenai, Alaska, I am

Sincerely,

John E. Wise,
City Manager

JW:dd

MEMORANDUM

FROM: Mike Davis, Administrative Assistant

RE: Phone Conversation with Larry Powell, Major of Yakutat. - OCS IMPACT.

DATE: March 10, 1977

"We have had a direct impact since ept. last year. The construction of the service base took pl during the year preceding that."

We have five service boats servicing two rigs with service base.

Presently, some of the city services are impacted.

a. Water supplies
b. All the people working on the rigs move thru the airport. (There is an attempt to not have people in town. But, we are experiencing bad weather, so we can have anywhere from 15-25 people (or more) stuck in town.)

These demands should remain constant for the next two years (from Shell and Arco).

Exxon and Gulf will begin supplying their rigs with five service boats. Some of these will be based in Yakutat (which means a greater movement of people thru town).

We are looking for things to escalate...traffic thru the airport, the service base will need to be enlarged to handle the increased activity.

"Fact: We are faced with increasing our fire protection capability both onshore and offshore (due to the increased industrial activity). We will need to have a full time policeman (currently we have a trooper and a part-time policeman)."

"I would very much like a copy of the bill and background material." (sent 3-10-77).

MED:ab

MEMORANDUM

TO: Members of House Community & Regional Affairs Committee

FROM: Michael Davis

DATE: March 14, 1977

RE: OCS Impact - phone conversation with Darryl Schaefermeyer, City Manager of Seward

We anticipate a great amount of primary and secondary stage development.

Exxon has leased property for pipe storage and other supplies.

We anticipate 200 boat visits per month (these are 200 foot supply vessels) as soon as the weather breaks.

Most immediate impact:

1. They will be taking on large amounts of water, which requires us to upgrade the water system, to install water lines out to the dock area. We will also have to drill new wells and construct storage tanks.

2. A lease has been negotiated with Dresser by the city. It will be a large dock built by the company. We will get revenue from anything that moves across the dock.

3. Private property is being leased for a dock facility.

4. We have acquired land by annexation and plan to develop these.

5. Oil companies have acquired land to be used for storage.

The impact we forsee in the future:

1. The number of transient people which will be in town from boats, etc.

2. We currently have a serious electrical situation and it will need to be taken care of.

3. Seward already has a critical housing shortage without any influx of people.

4. Our local roads will have to be improved.

On HB 219:

1. We do not understand the formula, but from what we do understand, it would help us only if there would be an influx of residents.

EXXON COMPANY, U.S.A.
POUCH 6601 • ANCHORAGE, ALASKA 99502

PRODUCTION DEPARTMENT
ALASKA OPERATIONS

T. M. MATTHEWS
ENGINEERING MANAGER

March 17, 1977

The Honorable Lisa Rudd
Chairperson
House Committee on Community and Regional Affairs
Juneau, Alaska

Re: House Bill 219
Shore Facility Impact Permits

I would like to apologize for not being able to be present for the continuation of testimony on House Bill 219 which occurred on March 14, 15, and 16. However, after reading and hearing some of the testimony that occurred on those days, I would like to submit several comments in regards to the misrepresentations and belittlements made by Messrs. Parr and Waring concerning much of my testimony.

First of all, much was said in regards to comparison of North Sea impacts versus Alaska impacts. Mr. Parr cited and attached passages from Baldwin's book on North Sea oil in regards to planned OCS development schedules in the U.S. Baldwin's book was written principally in early 1975. On Page 12, it discusses the OCS leasing schedules that Mr. Parr indicates as evidence of crash program development. If one checks the record, he will see that most of the sales were delayed, cancelled, or reduced in size and certainly today there is no evidence of crash programs. In fact all indications point to further delay pending new Federal OCS legislation and even Federal exploratory drilling in proposed leasing areas. Both of which will postpone industry exploration and development and increase our dependence on foreign imports. A further point on the North Sea is that currently there are 44 exploratory drilling vessels working in the North Sea (and nearly 50 at its recent peak active in the North Sea) compared to the 5 or 6 seen for Alaskan waters and by the end of 1977, approximately 45 major production platforms will be active compared to none for the Alaskan OCS. No one can even in their wildest imagination attest that this has any potential of occurring in the Alaskan OCS.

In Baldwin's book on Page 116, it is interesting to note the author found the North Sea onshore development was accomplished and controlled "without sophisticated planning controls or even a planning body...". It is probable the existing Alaska communities and municipalities could do the same thing without the need of state or Federal bodies imposed upon them.

The principal point I made in my testimony was evidently missed by Mr. Parr. The whole premise of the bill is that an immediate major impact occurs on public and municipal services with the commencement of exploratory work. I attempted to point out that this was false, particularly based on actual data from the Gulf of Alaska. One does not deny that if discoveries are made; if they are economical for development; if permits are obtained to develop; and if development occurs, impacts will occur. But this happens from 5 to 10 years after exploration, not immediately. Necessarily during the exploration phase, major investments are not made due to its uncertainty and only small shore based manpower forces are used to support the activities. Exxon has approximately a total of 25 at Seward, Anchorage, and Yakutat; ARCO/Shell has a total of 36. In both cases these are predominately local hires and essentially all existing Alaskans. The large crews on the drilling vessels are those that travel around the world with the vessel. They work alternate shifts of either two weeks on/two weeks off, or four weeks on/four weeks off, and during their off time are flown back to their home, wherever that may be. Even during this exploratory phase, major revenues accrue to the state and local areas as indicated in my testimony.

Mr. Showalter's testimony, contrary to the implications of Mr. Parr, did not conflict with mine. Mr. Showalter pointed out what then happens during development, the type of impacts realized, and the employment benefits accrued. Also accrued to the local and state entities are revenues and taxes (company, personal, and associated services) that pay for impacts that occur. Mr. Showalter pointed out the people requirements associated with a major industrial, petrochemical, petroleum area like the Cook Inlet and the Kenai peninsula are moderate (2-3,000) and certainly not the 95,000 to 100,000 people indicated in government testimony.

In regards to the population and cost impacts propagated by Mr. Parr and Mr. Waring, attached is a letter from the Office of Management and Budget in Washington, D. C. who developed the numbers back in early 1975. Please note their comments as to the validity of their own numbers.

To get a good understanding of the Federal Coastal Energy Impact Program, one should read 15 CFR Part 931 as printed in the October 22, 1976 Federal Register. Contrary to what Mr. Parr indicates, the program includes the following:

SECTION	ITEM	PERIOD	TOTAL APPROPRIATION
305	CZM Program Development Grants	3 years	$60 million
306	CZM Program Administration Grants	4 years	$200 million
308	Impact Grants	8 years	$400 million
	Impact Fund Grants, Assistance, Loans	10 years	$800 million

310	Technical Assistance Grants	4 years	$40 million
315	Estaurine, Beach Access Grants	4 years	$124 million
-	CZMA Administration	4 years	$20 million
		Total	$1644 million

The grants are allocated based on the formula -

Adjacent leased OCS acreage	1/3
Adjacent OCS production	1/6
OCS production landed in state	1/6
New employment associated with OCS	1/3

Based on this the Federal Coastal Zone Management Administration House-Senate Conference Committee estimated that Alaska would be eligible for 25% of the grants.

The financial assistance or loans are of course based on needs or desires of the state. If there are loans, they are for a maximum of 30 years at interest rates not to exceed comparable market rates and the interest rates are calculated every three months to make sure the state gets advantage of lowest prevailing market rates.

In summary, Exxon's position remains that the bill is not needed. There will not be major immediate impacts and demands due to OCS exploration as evidenced by the Gulf of Alaska. What impacts occur are minimal and even Byron Mallot of Yak Tat Kwaan in a recent interview said the Yakutat impacts were positive. If and when development does occur in 5 to 10 years, then some impact will be realized, but not to the extent dreamed by the bill author's projections; and even then as now, the positive benefits in revenues from property taxes, sales and use taxes, income taxes, franchise taxes, business taxes, service use charges, fuel taxes, etc., will compensate for the impacts and pay for required services if any. In remote area developments, such as Prudhoe Bay/Beaufort Sea or even the Gulf of Alaska, services will be supplied by the base itself in the areas of water supplies, sewage, power, fire, and security. Even in the isolated case mentioned by Mr. Parr, I doubt if the facility ever made use of the fire service facilities.

Thank you for your attention and the opportunity to become involved in this matter.

Very truly yours,

T. M. Matthews

T. M. Matthews

TMM/vk
Attachment

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

January 28, 1977

Mr. Keith Arnold
Assistant Manager
Alaska Oil and Gas Association
308 G Street, Suite 217
Anchorage, Alaska 99501

Dear Mr. Arnold:

The enclosed paper describes the approach used to derive the direct employment estimates for Alaskan OCS development underlying the figures cited in the Coastal Zone Management Newsletter enclosed in your letter of January 21.

We do not consider the figures quoted in the Newsletter to be valid estimates of the expected impacts in Alaska of OCS development. Those figures were prepared in an analysis done in May of 1975. The purpose was to determine the rough order of magnitude of OCS development impacts based upon deliberately pessimistic assumptions. It would then be possible, despite the great uncertainties, to credibly say that the likelihood of even more severe impacts would be negligible.

The estimates, therefore, were deliberately biased upwards at several stages in the analysis in order to produce an "upper limit" or "worst case" estimate. Some of the major sources of bias are:

- The leasing scenario used was the OCS planning schedule which was later published in June of 1975. It was recognized as a very ambitious and optimistic schedule for Alaska. Actual leasing in Alaska is likely to be spread over a substantially longer period than that schedule had anticipated. The impacts will also be spread over a longer period, reducing the infrastructure needs toward a level based on the "permanent" direct employment.

- The development scenario following each lease sale assumed very rapid exploration and development.

- It was assumed that all direct employment in every affected Alaskan region will be of people new to that region. This is clearly unrealistic.

The paper calculated a peak direct employment of 19,200 and a permanent direct employment of 8,100 resulting from the OCS development scenario examined. In order to arrive at a total population increase figure and a total infrastructure cost figure, the following steps were taken:

- The peak and permanent direct employment were averaged, giving 13,650. It was assumed that public infrastructure needs would be based on this volume of direct employment.

- It was assumed that all direct employment was by people new to the Alaskan areas in question.

- This direct employment of new residents was multiplied by a direct to total employment multiplier of 2.75 and a total employment to population multiplier of 2.5, giving a total additional population of 94,185.

- The total infrastructure cost was derived from this population figure by using $7,250 per capita.

It is unfortunate that these figures are receiving a wide circulation which characterizes them as OMB projections of future OCS impacts in Alaska. Their purpose was not to project the most likely future, but rather to show that, even when unrealistically pessimistic assumptions are used in the analysis, the calculated impacts are manageable.

I believe that the paper and the further steps described above are self-explanatory. However, if you have any further questions about the analysis, we will be glad to address them.

Sincerely yours,

Donald E. Crabill
Deputy Associate Director
for Natural Resources

Enclosure

March 18, 1977

Honorable Lisa Rudd
Chairperson
Committee on Community and Regional Affairs
House of Representatives
Juneau, Alaska 99801

Re: House Bill No. 219

Dear Madam Chairman:

Attached is testimony submitted on behalf of Chugach Natives, Inc., expressing opposition to House Bill No. 219, a bill for an Act entitled: "An Act providing for permits and fees for the construction of shore facilities associated with outer continental shelf natural resource extraction; and providing for an effective date."

Because of prior commitments at Cordova, it will be impossible for me to attend personally the hearings scheduled for March 21. I therefore respectfully request that the attached written testimony be incorporated in the record of the hearings, and that copies (which are enclosed) be distributed to members of your Committee.

With best wishes, I am

Respectfully yours,

Cecil Barnes

CECIL BARNES
President
Chugach Natives, Inc.

CB/ab
Encl.

912 East 15th Avenue, Anchorage, Alaska 99501, Phone (907) 274-4558

Chugach Natives, Inc.

Madam Chairperson and members of the Committee on Community and Regional Affairs of the Alaska House of Representatives:

My name is Cecil Barnes. I am President of Chugach Natives, Inc., one of Alaska's twelve regional Native corporations. We appreciate the opportunity to submit our views in opposition to House Bill 219.

As the Joint Federal-State Land Use Planning Commission found in reports to the Secretary of the Interior, and as the Congress of the United States found when it considered the January, 1976, amendments to the Alaska Native Claims Settlement Act, Chugach Natives, Inc. faces some difficult land selection and land management tasks. Our difficulties arise in large part because of the substantial extent of permanently withdrawn federal lands--especially the Chugach National Forest, and the frequently mountainous terrain in our region, and the pending "d(2)" proposals before the Congress.

For these reasons, Congress in the 1976 amendments asserted legislatively the right of our region to select lands in the vicinity of Icy Bay.

Chugach has entered into a contract with Phillips Petroleum Company for on-shore exploration work within the land area we have selected, to determine if petroleum there is of a commercially valuable nature. Needless to say, our corporation and its Native shareholders hope that there will be oil production from Icy Bay, to help assure the prosperity of our company, and to help meet the energy needs of the nation.

We have also had discussions with some of the Gulf of Alaska operators. We want them to know that with careful land use planning, and with fair compensation to our shareholders, Icy Bay could be a natural support and staging area for any developmental phase of Gulf of Alaska activities.

With the aid of Bomhoff and associates, consulting engineers, we have placed before the Corps of Engineers our request for a permit to construct a dock at Icy Bay. At our expense, an environmental assessment of the area, and the proposed dock project, is already under way.

These are the imaginative steps we must take if our shareholders are to receive the full benefit of the Native Claims Settlement Act, and take their rightful place in the economy of Alaska.

With that background, I am sure you can appreciate the basis for our concern about House Bill 219. But permit me to make some specific comments about this measure.

First, we at Chugach believe that the finding that "major resource development projects create an immediate demand for greatly increased state and municipal services in areas contiguous to the project" is overstated and over-simplified. There is no community at Icy Bay, just as there was none--and in many respects still is none--at Prudhoe Bay. A project of unprecedented dimension may have a great impact in an Alaska community; I suppose that the impact of the TAPS project in Fairbanks is a case in point. That does not mean that petroleum discovery in the Gulf of Alaska will have a significant impact on any Alaska community or create a demand

for State or municipal services. If petroleum of commercial quality and quantity is found on corporation land at Icy Bay, we foresee that the development of this resource from our private land could occur with little public impact and with no significant demand for publicly supplied services.

We believe that at the minimum, proponents of House Bill 219 should set out in detail, for public comment, the nature of the "significant impact" and the items of "expense" which petroleum development in the Gulf or at Icy Bay would bring to the State or to any local governments.

It may be answered that much of the impact is expected to be felt in the Yakutat community. If so, we stand ready, willing and able to divert unwanted impact from the existing community of Yakutat to our Icy Bay deficiency land selection area, which is unpopulated. To do that, of course, we would like to enjoy the encouragement and the support of the Department of Community and Regional Affairs--but here I speak of technical and moral support, not financial aid.

Second, the bill recites that "the Legislature considers it probable that the initial demand for publicly provided services related to outer continental shelf oil and gas development projects will exceed corresponding initial tax revenues from the project by an even greater proportion than occurs with resource development projects wholly inside the state." On its face, the assertion appears to be illogical. We know of no evidence, at least, that would support it. We wonder if the proponents of the bill have asked OCS developers what "initial demand", if any, for publicly