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Alaska State Legislature

Joint Gas Pipeline Committee

1024 W. 6th Ave.

Anchorage, Alaska 99501

OIL & GAS NEWSLETTER #1 December 1980

The information presented below is a brief summary of recent oil and gas industry developments of interest to Alaska legislators.

A. North Slope Oil Activity Booms

A new record for drilling activity in Alaska was set this year, led by exploration of the Beaufort Sea, initial development and delineation of the Kuparuk field to the west of Prudhoe Bay, and the development and expansion of the Prudhoe Bay field. As of December 10, 134 drilling permits had been granted, with several more applications expected before the end of the year. The activity includes:

1. Beaufort Sea Exploration - Sohio has spudded an exploratory well at the west end of the Beaufort Sea sale area, and has constructed 2 gravel islands for test drilling in the section of the sale area to the north of Prudhoe Bay. Exxon, Amoco, Tenneco, Phillips, Chevron and Marathon/Amerada Hess all plan to test tracts acquired at the December 1979 sale as soon as wells can be completed (1-3 years). Several of the tracts to be tested were leased under the state's new net profit share bidding system.
2. Other Exploration - Several exploratory wells are being drilled in the areas adjacent to the Prudhoe Bay Unit by a variety of companies. The Milne Pt., Gwyder Bay and Pt. Thompson areas have all displayed possible commercial discoveries. Other areas being actively explored around the state include the Alaska Peninsula, the Arctic foothills west of the National Petroleum Reserve and the Cook Inlet region. New discoveries were reported this fall in Northern Cook Inlet and at Duck Island adjacent to the Beaufort Sea lease sale tracts, by Simasko and Exxon, respectively, but no details are available.
3. Kuparuk Development - ARCO is drilling several wells in this area with the intent of producing 80,000 barrels/day from the field by April 1982. A total of 40 wells will use natural gas to lift the heavy crude from the formation, which lies to the west of Prudhoe Bay at 6000 feet below the surface (compared to 8500 for Prudhoe). ARCO eventually plans to produce 200,000 b/d from the formation, which will be linked to the Alyeska oil pipeline.
4. Prudhoe Bay Development - More than 80 wells were added to the Prudhoe Bay field this year; approximately 300 more will be added during the next decade. The Prudhoe Bay producers also plan to spend two billion dollars on a waterflood program for the field. Designed to maintain field pressure, the secondary recovery program involves the construction of seawater intake, treatment and distribution facilities as well as the drilling of some 150 water injection wells. The additional oil recovery expected from the investment is one billion barrels. Sohio has contracted with the Parsons Co. for the design, engineering and management of the facilities on the western side of the field, while ARCO has retained Bechtel to oversee work for the offshore and eastern field facilities. Several new drill rigs are being constructed in the state to meet the demand for Arctic exploratory drilling and the hundreds of development wells planned for the North Slope area.

B. Alaska Natural Gas Transportation System Moves Forward

1. Prudhoe Bay gas producers, gas pipeline partners and the State of Alaska entered into a cooperative agreement in June 1980 for design and engineering of the Alaska gas pipeline and gas conditioning plant. The costs of the work, estimated at 500 million dollars, are to be split 50/50 between the producers and the pipeline sponsors. Contracts have been awarded to the Parsons Co. for design and engineering of the conditioning plant, and to Gulf Interstate and Baker, Inc. for design and engineering of the gas pipeline.
2. Construction of the southern Canadian portion of the gas pipeline began this summer; construction of the western U.S. leg was initiated this month in northern Idaho. Gas supplies are expected to flow through the line from Alberta to the U.S. West Coast by mid-1981.
3. Financing for the eastern U.S. leg of the pipeline was finalized this month. One billion dollars was raised from a large consortium of Canadian and U.S. banks while the N. Border Pipeline Co. sponsors provided 350 million dollars. Construction of the eastern segment is slated to begin in April 1981. A federal suit against the N. Dakota Public Service Commission, for failure to approve the pipeline route through the state, is not expected to delay construction due to the strength of the federal case.
4. Some progress has been achieved in arrangements for financing of the gas pipeline. Four large gas transmission companies (Texas Eastern, TransCanada, Columbia and Texas Gas) joined the sponsoring partnership led by Northwest Energy Co. this summer. Several sources report that federal legislation will be introduced next year to allow for an equity role by the Prudhoe producers (Exxon, ARCO & Sohio) in the project. Such an investment by the producers would have a significant positive effect on the project.
5. The most recent cost estimates for the Alaskan portion of the gas pipeline are in the 15 - 20 billion (as-spent) dollar range. Total project cost estimates range from 25 - 40 billion dollars.
6. The recent federal Right-of-way permit grant to Northwest Alaska Pipeline was of largely symbolic significance, due to the many uncertainties still remaining for the project. The permit did include strong provisions for the training and hiring of Alaskan natives.

The most optimistic timetable for the gas pipeline:

1981	Financing in place, final key federal regulatory decisions
1982	Civil engineering (pre-construction)
1983	Construction
1985 - 1986	Completion

Key federal regulatory decisions include: revision of cost estimate for pipeline tariff determination; disposition of gas conditioning costs; and reimbursement of local socio-economic impact costs. Significant technical problems for gas pipeline construction may still exist, as evidenced by the recent expansion of the Northwest frost heave testing program.

avg. premium received
(above weighted average
in-value price) : 92.57

C. Royalty Oil Auction To Be Held

The first competitive sale of the state's Prudhoe Bay royalty oil will be held on December 19. Approximately 85,000 barrels a day will be auctioned off in lots of 5,000 b/d. The winning firms will receive one year contracts, and will bid a premium above the in-value price currently paid to the state by North Slope producers. Firms which refine or market products in the state will be able to match the lowest of the winning bids. Forty-nine firms have filed successful applications to bid, including the three major North Slope producers - Exxon, ARCO and Sohio.

D. Successful State North Slope Lease Sale Held; Other Leasing News

The Alaska Dept. of Natural Resources leased 77 previously ignored or relinquished North Slope tracts to the oil industry on September 16. The tracts, located to the west, south and east of Prudhoe Bay field, were leased under a bonus bid system, with a 20% royalty and a 30% net profit share reserved to the state. Over 12 million dollars was collected from winning bidders, who included Sohio/BP, Mobil, Phillips, Chevron, Geopole, Amoco, Texaco and various consortiums led by Cliff Burglin. The sale included tracts relinquished last year due to non-development of the leases by the previous owners in the proposed Duck Island Unit extension.

An October 21 eastern Gulf of Alaska OCS lease sale by the federal government was dominated by ARCO, which successfully bid on 23 of the 35 tracts leased at the sale. Two hundred ten tracts were offered; over 100 million dollars in high bids was collected for the 35 tracts. Shell Oil and a consortium led by Chevron picked up the other tracts leased at the sale.

Upcoming state oil and gas lease sales include:

- Upper Cook Inlet and Susitna Basin - 2nd quarter 1981
- Kenai Peninsula - 3rd quarter 1981
- Lower Cook Inlet - 1st quarter 1982

Beyond early 1982, sales are scheduled for the Prudhoe Bay uplands, the Beaufort Sea, Middle Tanana and Copper River Basins, Norton Basin, Bristol Bay Basin and the Minchumina Basin. The state's Division of Mineral and Energy Management has called for comments on possible sales in the Chukchi Sea, Hope Basin and Holitna Basin in 1985.

Glenn Harrison was named director of the Division of Minerals and Energy Management in November, replacing Tom Cook, who resigned last May to take a job with Chevron. Mr. Harrison worked as a roughneck in Cook Inlet, and is a petroleum engineer who has worked for industry and the state in that role. Kay Brown was named deputy director of the division, having formerly served as acting deputy director.

E. Alpetco Changes Name, Continues Work

The Charter Oil Co. has changed the name of its venture, slated to process 100,000 b/d of state royalty crude at Valdez, from Alpetco to the "Alaska Oil Co." The firm began taking 75,000 b/d of state royalty crude in July but has been unable to realize expected profits from the oil. Charter is counting on income from the early taking of the crude to help finance the planned refinery. Approximately 2.5 million dollars was spent on site-clearing activities this year; additional work for soil investigation and process and

- E. facilities design continues. The case "McKinnon, Parker & Akp'ing v. Alpetco & State of Alaska, " which challenges Alpetco's compliance with its contract benchmarks and the legality of the June 1980 contract amendment, will be heard on appeal by the Alaska Supreme Court next year.

F. Dow-Shell Group Petrochemical Production Feasibility Study Underway; Exxon Also Studying Feasibility

A ten-member consortium, led by the Dow Chemical Co. and the Shell Chemical Co. has begun a multi-million dollar study aimed at determining the feasibility of petrochemical development based on Prudhoe Bay natural gas liquids. The study is the result of an agreement between the State of Alaska and the companies signed in September 1980. A detailed progress report on the study effort was mailed to all legislators by the Dow-Shell Group on December 9.

The study group has initiated discussions with the Prudhoe producers concerning procurement of the natural gas liquids, the foundation for any petrochemical development in the state. They are also advising the state in the technical discussions concerning the design of the Prudhoe Bay gas conditioning plant, of central importance to maximizing the volume of natural gas liquids available for the project.

The sites under active consideration in the petrochemical study are Valdez, Pt. McKenzie, Kenai and Seward. The Dow-Shell Group plans to submit a final report to the state in September 1981.

Exxon has announced that it has retained Flour Engineers to assist it in a multi-million dollar effort to determine the feasibility of petrochemical production in Alaska. Exxon expects to complete its evaluation during the latter half of 1981.

G. National News of Note

1. A federal Court of Appeals ruled in October 1980 that the federal government must immediately implement alternative bidding systems, such as net profit share bidding, mandated by the 1978 amendments to Outer Continental Shelf Lands Act. The decision was the result of a suit brought by Energy Action, a consumer group which charged that the government's use of bonus bidding in lease sales blocked competition and failed to return fair value for the resources.
2. The U.S. Supreme Court has agreed to hear a challenge to Montana's 30% (effective rate 27½%) coal severance tax. The suit, brought by a group of electric utilities, charges that the Montana tax places an excessive burden on interstate commerce. The tax was upheld by the Montana Supreme Court.
3. President Carter's signature on the D2 Alaska Lands bill allows seismic exploration of the William O. Douglas (Arctic) Wildlife Range to begin. Leasing in the area, considered one of the most prospective regions of Alaska, is prohibited during the next five years by the legislation.

4. Reagan officials have announced that they hope to speed up the pace of offshore oil leasing in Alaska, and are especially interested in areas such as Bristol Bay, the North Slope Outer Continental Shelf and the W.O. Douglas Wildlife Range.
5. Earth Resources Co. of Dallas, owner of the North Pole refinery, will be purchased by Mapco, Inc., if approval from Earth Resources shareholders is forthcoming. Mapco shareholders have approved the purchase plan.
6. An all-time record count of active drilling rigs in the U.S. was set this fall. The week of December 8 was the fifth straight week that over 3200 units were in operation. Significant oil and gas discoveries reported in recent months include several fields in a 60 mile stretch of the Rocky Mountain Overthrust Belt on the Utah/Wyoming border, and several deep fields in the southcentral Louisiana Tuscaloosa Trend.

* * *

This newsletter was prepared for Alaska legislators by Mark Wittow, staff to the Joint Gas Pipeline Committee, at the request of Speaker of the House Terry Gardiner. If further information on any of the topics discussed above is desired, please leave a message with the Anchorage Legislative Information Office, 278-3668.



JUNEAU ALASKA

Alaska State Legislature

Joint Gas Pipeline Committee
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Juneau, Alaska 99811

OIL & GAS NEWSLETTER July 1981 (Vol.2 #1)

The information presented below is a brief summary of recent oil and gas industry developments of interest to Alaska state legislators.

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A. Gasline Progress Uncertain

Alaska gasline progress hinges on negotiations now occurring in Congress and on Wall Street.

Institutional investors are being asked to put up \$22 Billion for the project's debt financing, as proposed in the May 21 financing agreement between the pipeline sponsors and the Prudhoe Bay producers. The gas transmission companies are to provide \$5.25 billion in equity, and the producers \$2.25 billion in equity. For purposes of financing the line, the "as spent" costs of the project are assumed to be:

Conditioning Plant	\$ 6 Billion
Alaskan pipeline	21 Billion
Completion pool	3 Billion

Although the financing agreement represents a major accomplishment, two major uncertainties will delay consideration by potential investors. Deregulation of natural gas prices, which is under active consideration by the Reagan Administration, could have harmful effects on the project, depending on the manner in which it is accomplished. The nature of the "waiver package," to be decided by Congress, is the second major uncertainty which must be resolved

before lenders will consider commitments. Informed observers still disagree over whether or not the project can be financed without federal guarantees, due to its uncertain economic feasibility. Texas Gas Transmission Company, one of the members of the sponsoring partnership, recently announced its withdrawal from the gasline project, citing the high costs of continuing to participate as a partner. By leaving the partnership, the company sacrifices its chance to recover after project completion several million dollars of already-sunk costs.

The project sponsors have asked Congress to approve waivers of several provisions of existing federal regulatory and energy laws. The key aspects of the "waiver package" would:

- a) allow Prudhoe Bay producers to own an equity interest in the project
- b) include the gas conditioning plant as part of the gas pipeline system
- c) expedite the regulatory approval process
- d) allow for commencement of billing the costs of the project to consumers after a major segment of the project is completed.

Key Senators have reached agreement on the above provision and are expected to ask the Reagan administration to submit the package to Congress and urge House adoption. House leaders have balked at the proposed provision to allow early billing to consumers for the costs of building the line, thereby stalling approval of the waivers until compromise is reached with the Senate. Resolution of the issue is expected by September.

Construction is proceeding with the Eastern and Western legs of the project, which will carry Canadian gas to U.S. markets in the Midwest and West Coast until the northern links to Prudhoe Bay gas are completed. Western gas deliveries are expected to begin in October 1981; eastern deliveries are scheduled for October 1982.

Northwest Alaskan Pipeline Company, the project sponsor, is continuing work on technical problems such as frost heave mitigation and proximity to the TAPS oil line, including placement through Atigun Pass. The most optimistic project schedule has construction commencing in 1983, with completion in 1986.

B. Oil Prices Stabilize as Worldwide Production Declines

Although several major oil producers have dropped their price by as much as \$4 per barrel, in response to poor market conditions caused by declining demand and the high rate of Saudi oil production (10 mm b/d), other large producers -- Libya, Nigeria, Kuwait and Algeria -- have instead opted to cut production by over 2 mm b/d, or almost half, in order to maintain their relatively high crude oil sales prices. No major price drops have been announced by any producers since mid-June.

Oil analysts disagree on future oil price movement. Many see the Saudis realizing their goal of stabilizing oil prices in the mid \$30's/barrel range, if they continue to maintain high production rates and if no new crises occur which limit Mideast oil exports. A few commentators expect continuing erosion of world oil prices, based on declining consumption and fuel substitutions. Other analysts point to the current pickup in spot market prices at some trading centers as an indication that contract prices will begin to climb upward late in the year.

The most recent Alaska royalty oil price report (May 1981) shows an average wellhead value of approximately \$23.87, down from the April value of \$25.11 and the March 1981 high of \$25.91. The Department of Revenue's current projections for FY 82 revenues assume an average wellhead value of \$27.74 for the fiscal year.

C. U.S. Supreme Court Upholds Montana's Coal Severance Tax; Congressional Battle Over Energy Resource Taxes Begins.

In a 6-3 decision announced on July 2, the U.S. Supreme Court upheld the constitutionality of Montana's severance tax on coal, which is set at varying rates of up to 30%. The majority opinion, written by Justice Marshall, stated that the legislative, not judicial, arena was the most appropriate forum for determining the rate of taxation, and that, unlike Louisiana's First Use Natural Gas Tax, which the court held unconstitutional in June, the tax was assessed equally on coal destined for use both in Montana and outside the state. "We decline," Justice Marshall wrote, "... to prescribe a test for the validity of state taxes that would require state and Federal courts, as a matter of Federal Constitutional law, to calculate acceptable rates or levels of taxation of activities that are conceded to be legitimate subjects of taxation."

In partial response to the Court's decision, Congress conducted hearings in mid-July on the effect of energy severance taxes on relations between the states. Both critics and defenders of state energy resource taxes spoke during the sessions, which will continue in the fall. Alaska's oil tax collections were specifically criticized at several points during the hearings.

D. Federal OCS Schedule Focuses on Alaska; Approach Challenged by States.

Interior Department Secretary Watt made minor revisions to the OCS oil and gas leasing schedule announced in May. The schedule still includes 16 sales in Alaskan offshore areas during the next five years, more than one-third of the sales, and more than one-half of the acreage of the entire program. The dates for Alaska 1982-3 offerings:

- | | |
|-------------------------------------|-------|
| a) Beaufort Sea | 9/82 |
| b) Norton Sound | 11/82 |
| c) St. George Basin (S. Bering Sea) | 2/83 |
| d) N. Aleutian Basin (Bristol Bay) | 4/83 |

Governor Hammond has publicly strongly criticized the federal schedule. Alaska, along with several other states, has joined a suit brought by California against the federal government which charges the Interior Department with ignoring valid state concerns in a recent California sale. A similar suit has been brought by North Carolina on an upcoming Atlantic sale. On July 27, a federal district court judge issued a permanent injunction against portions of the California sale, agreeing with that state's charges that the federal government had ignored its concerns in the conduct of the sale.

Only eleven oil companies responded to an April 30 solicitation for interest in leasing federal onshore lands for oil and gas. The federal agency expressed surprise at the low level of interest to its request.

Upcoming state oil and gas lease sales are:

- | | |
|---|------------|
| a) Kenai Peninsula (lower eastern & Cook Inlet) | 8/81 |
| b) Lower Cook Inlet | 1/82 |
| c) Prudhoe Bay Uplands | 5/82 |
| d) Beaufort Sea | 5/82, 5/83 |
| e) Middle Tanana/Copper River Basin | 8/82 |
| f) Norton Sound | 1/83 |
| g) Upper Cook Inlet | 9/83 |

The Department of Natural Resources expects moderate interest for the August Kenai sale, which consists entirely of previously offered tracts.

E. Dow-Shell Group Ready to Report on Petrochemicals

An international consortium, led by Dow Chemical and Shell Oil, is in the final stages of a multi-million dollar effort to determine the feasibility of petrochemical production based on Prudhoe Bay natural gas liquids. The group's report will be presented to the Governor on September 9 and will contain a detailed assessment facility costs, including liquids extraction, pipelines and manufacturing plans; expected markets; site reviews; infrastructure and energy needs assessment; environmental and industrial hygiene considerations; evaluation of benzene and methanol manufacture at Fairbanks; construction scenarios; and employment and training benefits. Sites under consideration include Valdez, Kenai, Fairbanks, Seward, Pt. MacKenzie, and Anchorage (Fire Island).

A state inter-agency technical team will review all aspects of the report, including economic, environmental, community and health issues. Related reports in preparation by the state include the findings from a public attitudes and concerns projects initiated by the Dept. of Environmental Conservation and an assessment of instate needs for propane and butane. The Citizen's Petrochemical Advisory Committee will also present a report in October 1981.

All of the above work will be evaluated by the state administration before a decision is made concerning submission of a long-

term contract for the state's natural gas liquids to the legislature. (A trade of royalty methane for producer natural gas liquids is not under consideration by the administration.)

Exxon's chemical division is also completing a multi-million dollar feasibility effort aimed at the feasibility and initial planning for a petrochemical plant. Exxon controls a major portion of Prudhoe Bay natural gas liquids.

If the feasibility of petrochemical manufacturing in Alaska is confirmed, some sort of joint venture between Prudhoe Bay producers and members of the Dow-Shell Group is likely, due to the magnitude of the project and the need for all producers to contribute their share of the natural gas liquids to the project.

F. Royalty Oil Disposition; Auction Oil Returned

The Department of Natural Resources will issue a request in early August for proposals for long-term royalty oil contracts. At least 84,000 b/d will be offered, and another 75,000 b/d will be available if the Alaska Oil Co. (Alpetco) contract is terminated or cancelled in December as expected.

Market conditions have forced firms which purchased royalty oil from the state at its December 1980 auction to return the oil to the state. Effective February 1982, the state will take the oil in value instead of in kind. Until that date, the state will collect approximately \$40 million more than it would have under pre-auction arrangements. Although Shell, Union, Tesoro and Oasis have followed the provisions of their auction contracts in returning the oil, Alaska Petroleum, a subsidiary of Coastal States, has defaulted on its contract for 20,000 b/d and will likely be sued by the state.

G. Alaska Drilling Notes

With several development wells in progress, oil from the Kuparuk reservoir, west of Prudhoe Bay, is expected to begin flowing through an almost-complete 26-mile, 16-inch pipeline to Pump Station One in early 1982. Initial production will be about 80,000 b/d from 40 wells. Arco's initial investment in the field is estimated at \$460 million. If the gas lift and water injection systems designed to increase recovery of the heavy crude are successful, ultimate production from the reservoir could total 550 million barrels. Because the Kuparuk field, like all new fields north of the Arctic Circle, is exempt from the federal Windfall Profits Tax, production from it will be taxed at approximately half the rate of Prudhoe Bay.

Drilling activity to delineate possible commercial fields adjacent to Prudhoe Bay is in progress. Conoco has several wells planned for its Milne Point and Gwyder Bay properties immediately northwest of Prudhoe Bay. Drilling to better define the Duck Island Unit, just west of Prudhoe Bay, and the West Mikkelson Unit, to the south of Duck Island, has been initiated by the major oil companies with interests in those units. Although no definitive plans have

been announced, the Milne Point and Duck Island units may be in commercial production by the end of the decade.

In mid-July, Exxon announced a gas discovery at a well drilled 50 miles east of Prudhoe Bay, just south of the Point Thompson Unit. The Division of Minerals and Energy Management has estimated that the Pt. Thompson Unit contains three to six trillion cubic feet of gas; the characteristics of the new discovery have not been announced. Additional drilling in the area by Exxon and Phillips is planned.

Beaufort Sea exploration will continue this fall, with Amoco, Tenneco, Exxon, Sohio, Chevron and Phillips ready to spud wildcats on state tracts from existing barrier islands and specially-created gravel islands. Chevron is drilling two exploratory wells in the Arctic Foothills for the Arctic Slope Regional Corporation, while Union is drilling a wildcat at Carnery Loop, just east of Kenai.

Prudhoe Bay development activity includes constant increases in the number of production wells, expanded and more sophisticated field facilities and preparations for the initiation of the waterflood secondary recovery program.

A huge flotilla of barges carrying equipment modules destined for increasing Prudhoe Bay production and developing the Kuparuk oil field will begin arriving at the Prudhoe Bay West Dock around August 8, coinciding with the short opening of the Arctic ice pack. The Seattle-based barges will be joined by six smaller barges carrying drill pipe, moving west to Prudhoe Bay from Canada via the Hay and MacKenzie Rivers. Several drill rigs, including one constructed in Anchorage, are in the process of moving to the Slope for fall exploratory activity.

A group of oil companies led by Arco are planning to drill three off-structure test wells in the Bristol Bay area during the next two summers, in preparation for upcoming federal lease sales. Geophysical crews are active at various locations in the Bering and Chukchi Seas, also in preparation for OCS leasing, while the Arctic Slope Regional Corporation is conducting a geophysical survey of potential petroleum properties in the Arctic Foothills.

H. Other Items of Interest

-- Governor Hammond signed a major revision of the state's oil and gas tax structure (FCCSB 524) into law on July 27. The main features of the law repeal the existing oil and gas corporate income tax law, based on separate accounting; adopt a modified apportionment formula for calculating oil and gas corporations' income tax; and increase the effective severance tax rate to 15%. Detailed information on the bill is available from this office or the Department of Revenue.

-- Trans Mountain Pipeline Company has postponed its plans to develop a system for carrying oil, largely produced in Alaska, from the U.S. West Coast to mid-continent, citing declining demand,

production uncertainties in California and Alaska, and high interest rates as the principal reasons for its decision.

-- Two Japanese groups (the Committee for Energy Policy Promotion and the Institute of Energy Economics) were joined by the Atlantic Council of the United States in proposing export of Alaska crude oil to Japan. Mexican oil officials are interested in the proposal, which would send their oil to the U.S. instead of Japan, in exchange for the Alaskan oil. The reduced transportation costs should benefit all parties to the "swap." Reagan officials are studying the proposal, and may introduce it to Congress. Congressional opposition to the oil exchange is expected to be weaker than in previous years.

-- Although both state and federal officials are interested in using Alaska royalty oil to help to fill the Strategic Petroleum Reserve, negotiations have stalled over price and security provisions.

-- U.S. Senator Frank Murkowski will chair hearings by a Senate Energy subcommittee on small hydro regulations in Alaska on August 17. Federal Energy Regulatory Commission licensing procedures will be examined. The Reagan administration has proposed exempting all hydropower projects with a capacity of 15 megawatts or less. FERC now exempts projects of less than 5 megawatts at existing sites.

-- Members of the House Merchant Marine Committee are planning to introduce legislation to share federal OCS oil and gas leasing revenues with coastal states, partially in response to phase-out of the Coastal Energy Impact program. Hearings and markup of the legislation are scheduled for September. In early August, Senator Murkowski plans to introduce legislation to earmark OCS receipts for Arctic Research.

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This newsletter was prepared by Mark Wittow, staff to the Alaska State Legislature's Joint Gas Pipeline Committee, for members of the legislature. Background information and further detail on items in this newsletter can be obtained by contacting Mr. Wittow at the following address:

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The next issue of this newsletter is planned for late September or early October.

Alaska State Legislature



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OIL & GAS NEWSLETTER

October 1981
(Vol.2 #2)

The information and analysis presented below are a summary of recent oil and gas developments of potential interest to Alaska state legislators. The contents are current as of October 6, 1981. Additional information about this newsletter can be found on page 11.

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Oil Prices Steady; Revenue Projections Down

Sluggish world oil demand has continued the pressure on major oil producers to drop prices in order to expand shrinking sales. The current liquidation of record inventories of oil stocks is expected to strengthen this trend. Most analysts forecast steady oil prices during the next year and beyond, with the Saudis achieving their goal of a \$34/barrel marker crude price at the December OPEC meeting. However, some oil analysts predict further price drops as producers scramble to increase their market share. The possibility of major disruptions affecting the Persian Gulf oil producers is not considered in these predictions.

The average wellhead value for Alaska's royalty oil has dropped from a high of \$25.02 in February to \$22.62 in June and \$21.99 in July. Preliminary figures for August show a wellhead value of approximately \$22.60; however, Sohio announced a significant price drop for its crude, effective Sept. 1, which should bring the September figures back to the July level.

The Dept. of Revenue's figures for the fall revision of their revenue projections:

<u>FY</u>	<u>Unrestricted Revenues</u>	<u>\$ Change from June</u>	<u>% Change</u>
1981	\$3,716,800,000 (actual)	up \$ 56,000,000	1.5%
1982	4,401,700,000	down 493,600,000	11.2%
1983	4,858,600,000	down 907,900,000	18.7%

The Dept. of Revenue's June revenue projections were based on an average wellhead value of \$27.74 for FY 82 and \$33.21 for FY 83. The fall projections assume an average wellhead value of \$22.82 for the 1982 fiscal year, and \$27.81 for 1983. All told, the Department's projections show approximately 1.45 billion dollars less available for appropriation in fiscal year 1983 than was assumed in June 1981. Income from oil and gas production accounts for 89% of unrestricted revenues; 96% of that income is from Prudhoe Bay, with the remainder from Cook Inlet and Kenai Peninsula fields.

Legislative Finance Division analyst Milt Barker estimated expected FY 82 & 83 revenues in early September. Barker's "Medium" figures for those years are each about \$180 million less than the Dept. of Revenue estimates.

Alaska policymakers may be interested in the effect falling oil prices have had on other states with significant oil and gas income. California's oil revenues are derived from royalties from production on state lands, and are traditionally used for non-operational expenditures such as capital improvement projects. Their oil revenue estimates for FY 82 and FY 83 have dropped by 10% and 15%, respectively, since the end of their legislative session, to \$490 million for the current fiscal year and \$510 million for the next. (The total state budget is about \$24 billion.) The drop in revenues will require legislative adjustment of their capital improvement program at the next legislative session.

Texas budget officials refused requests from the state legislature to revise their conservative oil revenue estimates, which did not include increased collections resulting from Reagan's immediate decontrol of oil prices in January. As a result, the Texas December 1980 projections have almost exactly matched current and expected collections, and no legislative action will be needed. The Texas Revenue Estimating Division

expects to collect \$1.487 billion from oil production taxes in FY 82 and \$1.635 billion in FY 83; natural gas production taxes amount to about a billion dollars a year. All royalty receipts are dedicated to permanent funds whose earnings support public schools and the state university. The Texas FY 82 budget is about \$13 billion.

Oklahoma's revenue estimates are constrained by a constitutional provision which limits the estimate, and the amount available for appropriation, to the revenues collected during the previous year, plus an increase equal to the average yearly percentage increase in revenues over the past five years. Because of this limitation, Oklahoma's revenues have consistently exceeded appropriations in recent years.

New Mexico oil revenues are down about 17% from what lawmakers had expected during their writing of the state budget. Their shortfall has been almost exactly balanced by unexpected increases in interest earnings and personal income tax collections.

Federal Windfall Profit Tax revenue projections have declined sharply, further depleting the already-squeezed budget. The July Treasury Department WPT forecast is down about 18% for FY 82 from January expectations, a drop of \$6 billion. Congressional Budget Office officials expect the decline to be upwards of \$7½ billion. FY 81 collections are down by over a billion and a half dollars.

Alaska Natural Gas Pipeline Sponsors Seek Congressional Action

Efforts to build a pipeline to carry Prudhoe Bay natural gas to market are currently focused in the halls of Congress. President Reagan has submitted legislation requested by the gasline sponsors and their financial backers. The measure consists of a number of "waivers" of various legal and regulatory provisions affecting the project. (See the July 1981 issue of this newsletter for a detailed list of the requested exemptions.) The Alaska Natural Gas Transportation Act of 1977 provided for such waivers, requiring the President to prepare and submit them to Congress, which would then have 60 days to approve them, with no amendment permitted.

House and Senate leaders on the issue currently disagree on one key provision contained in the legislation: whether or not the pipeline sponsors should be allowed to bill consumers for the costs of the line before actual delivery of North Slope gas. (Some call this provision "a small risk with a huge price tag.") The pipeline's potential financial backers have declared this to be essential to private financing of the line, and are supported by key Senate members, including the Alaska delegation, and by the chairman and chief counsel of the

Federal Energy Regulatory Commission. Key House chairmen have expressed strong reservations about the provision; two leading Republican Congressmen, Clarence Brown of Ohio and John Broyhill of North Carolina have stated that they would attempt to block passage of the waivers if such a provision is included. Because Congress cannot amend the waivers package, any opposition to its approval must face the charge of "killing" the gasline. The project sponsors, along with potential lenders, have stated that the passage of the waivers is essential to the success of the project.

Natural gas decontrol, which is being pushed by some members of Congress and the administration, could potentially raise additional problems for the line. Although decontrol has the support of the Reagan administration, action this year is unlikely, due to strong objections from virtually all elected officials from the Northeast and Midwest. If decontrol is achieved, a reduction in the wellhead value of the gas during the early years of the pipeline is among the options under consideration for improving the marketability of Alaska gas. This approach could significantly lower revenues to the state from royalties and severance taxes on the gas. Innovative financing and rate structures are also being studied as possible aids to the gasline's viability.

The first shipments of gas through the western pre-build section (Alberta to Southern California) of the gasline began this month. The eastern pre-build section of the line, which will run from Alberta to Illinois, is on schedule and under budget for its startup date next fall. Canadian federal officials have opposed expanding exports to the U.S. unless the Alaska portion of the line is built.

Northwest Alaskan, the project sponsor, is continuing field work which includes test holes, environmental monitoring, reconnaissance and frost heave testing. Several hundred people were employed during the year in Alaska in project-related activities. Pipeline construction is scheduled for startup in 1983, with completion in 1986.

Royalty Oil Disposition Studied; Whither Alpetco?

Alaska will have 159,000 b/d of royalty oil available for disposition, beginning February 1982. The Dept. of Natural Resources solicited proposals for use of the oil in July; 27 were submitted by the September deadline, although 5 have since been withdrawn. The proposals are under evaluation by DNR as part of general study of the state's royalty oil policies. Commissioner Katz is scheduled to meet with all proposers this month. Long-term contracts will be forwarded to the legislature for approval.

The proposals include plans for new instate refineries; expansion of existing Alaska refineries; increased taking by the North Slope producers; both long and short-term supplies for major crude oil refineries in the lower 48; and a request from a new refinery to be constructed in Arizona.

Among the proposals was a letter from Alaska Oil Co. (Alpetco), which asked for consideration of their plan to construct a 100,000 b/d refinery at Valdez. The state's existing contract with the company was terminated by an August 17 agreement. Alaska Oil's obligation to purchase royalty crude ends on January 12, 1982.

The company has refused to pay the state 17 million dollars for oil purchased in May, June and July, claiming that the prices submitted by the producers, which determine the oil's value, are in excess of the market value of the oil. State officials are investigating the charges, which are being presented by Alaska Oil as a "good faith" price dispute under Section 9.3 of their contract with the state. The company will likely be withholding several million dollars a month until resolution of the dispute, which is expected by January. The state is in litigation with the North Slope producers over the question of royalty oil pricing (Count V, State of Alaska v. Amerada Hess et al.); a loss in that case would result in the state owing Alaska Oil about thirty million dollars, plus interest at market rates. However, if the state is successful, it could collect more than a billion in back royalties from other takers of royalty oil (largely the North Slope producers).

A lawsuit challenging the validity of the Alaska Oil Contract was dismissed the by state's Supreme Court. The suit was filed by then-Reps. Joe McKinnon and Bill Parker and the Alaska Public Interest Research Group in the summer of 1980, following legislative approval of major amendments to the contract.

Alaska Oil Export Uncertain

A proposal to remove the ban on exporting North Slope oil is under serious consideration by the Reagan administration, along with proposals to allow export of other U.S. crude production. The Dept. of Energy estimates that the federal government would collect some 520 million dollars a year in additional tax revenues if 600,000 b/d of Prudhoe Bay oil went to Japan instead of the U.S. Gulf Coast; the state would collect an additional \$267 million per year, while the producing companies would gain only \$30 million a year. (The producer's gain would be substantially higher from upcoming Kuparuk production, since that field is exempt from the federal Windfall Profits Tax.) Informed sources report that new

numbers have been given to Cabinet officials which show federal revenues increasing by a billion dollars a year if Alaska oil were to go to Japan, but backup for the claim is not available.

The proposal has support from a variety of federal policymakers: budget officials like the increased federal tax collections; House Budget chairman James Jones is interested in promoting U.S.-Japanese trade; other proponents cite its free market philosophy. However, strong legal barriers stand in the way of any export arrangement. The Trans-Alaska Pipeline Authorization Act of 1973, Export Administration Amendments of 1977 and Export Administration Act of 1979 all block the export of North Slope oil. Although the federal Dept. of Commerce recently removed all restrictions on the export of refined products (including propane and butane), the legal barriers to crude exports remain intact.

Opponents include supporters of the U.S. shipping and maritime industry, proponents of the Panama and Northern Tier pipelines, and some guardians of U.S. "energy security." Their objections stem from concerns that non-U.S. tankers would be used to carry the oil to Japan, and that alternative transport options now being developed for Alaska crude would be killed by allowing export. The opponents have slowed down consideration of the export option within the Reagan administration, and can be expected to mount a strong effort in Congress to block the necessary statutory changes. Because of expected Congressional opposition, most observers expect the Reagan administration to delay any formal action until next year.

Pacific-Alaska LNG Project Requests State Assistance

The sponsors of a multi-billion dollar plan to liquefy Cook Inlet natural gas for shipment to California have asked the state for financial assistance. Officials of Pacific Lighting Corp. and Southern Calif. Gas Co., who met with various state officials last month, are seeking either state loans, guarantees or equity investment in the project's Cook Inlet facilities (pipelines, liquefaction plant and terminal). The project was first proposed in 1974, and has faced continuing opposition in California to construction of the receiving terminal. Other factors stalling the project include cancellation of Indonesian natural gas supply contracts and inadequate reserves in Cook Inlet.

Commissioner of Revenue Tom Williams has set up a cabinet-level meeting to discuss the proposal on October 15. The state's general fund, retirement funds and Permanent Fund have all been mentioned as possible candidates for support. If the project is successful, natural gas supplies for Southcentral consumers will likely be both much more expensive and less plentiful.

Leasing Notes

A state lease sale for onshore and offshore acreage on the southern Kenai Peninsula was held on August 25. The sale, which consisted of previously offered tracts, was dominated by Mapco and Texaco, with Simasko, Union, Oxy and Shell among the successful 12 bidders for the 59 tracts receiving bids. The winning royalty bids generally ranged from 20 to 33%, with a few tracts receiving bids of up to 59%; a fixed bonus of \$10 an acre was levied on all tracts.

Little industry interest was shown in a federal Lower Cook Inlet-Shelikof Strait lease sale held Sept. 29, largely due to the ten unsuccessful exploratory wells that were drilled in the Lower Cook Inlet area following a high-interest 1977 lease sale. Chevron was the only successful bidder, acquiring 13 tracts out of 153 offered (subject to a bid evaluation procedure to be completed before the end of the year).

The first private lease sale in the National Petroleum Reserve-Alaska, located west of Prudhoe Bay, will be held on December 16. The state will split the lease sale bonuses, rentals and royalties 50-50 with the federal government. A second sale will be held next May. Noncompetitive petroleum leasing on federal onshore lands is scheduled to open early in 1982, beginning with several block offerings in Interior Alaska. As required by the 1980 Alaska Lands Act (D2), the U.S. Fish & Wildlife Service has invited applications for preliminary petroleum and mineral surveys of the lands it manages, primarily wildlife refuges.

Interior Secretary Watt announced a delay in two federal sales that had been scheduled for 1983 in Bristol Bay and the Bering Sea, following pressure from Governor Hammond's "seaweed rebellion." A proposed federal regulation which would have sharply limited the voice of coastal states in the OCS leasing program was recently withdrawn in the face of pressure from those states. Two federal sales are scheduled for 1982: a September sale in the Beaufort Sea (Diapir) and a November sale in Norton Sound. Several other federal sales are scheduled for the waters north and west of Alaska in later years. A House proposal to share OCS lease revenues with the impacted coastal states is not expected to move past the subcommittee level before next year. All OCS receipts currently go exclusively to the federal government.

The state won the Superior Court round of a legal challenge by Chevron and Marathon of its ability to collect geological data from seismic exploration on state lands. The state uses the data on a confidential basis to help determine the petroleum potential of state lands. Chevron intends to appeal the case to the Alaska Supreme Court. Exxon filed a similar suit in a different Superior Court, but the state was not able to have the cases consolidated. The state has agreed

to wait until December 1 before requiring Exxon to submit data; if Exxon blocks data collection after that date, pending state North Slope lease sales may have to be delayed.

The state's newly-revised oil and gas leasing schedule contains sales at the following locations and dates:

a) Lower Cook Inlet	2/82, 5/86
b) Prudhoe Bay Uplands	5/82
c) Beaufort Sea	5/82, 5/83, 5/84
d) Tanana/Copper River Basin	8/82
e) Norton Basin	1/83
f) Upper Cook Inlet	9/83, 5/86
g) Minchumina Basin	1/84
h) Bristol Bay Uplands	9/84
i) Holitna Basin	1/85
j) Kuparuk Uplands	5/85, 1/86
k) Kotzebue Offshore	9/85
l) Offshore Arctic Wildlife Range	9/86

The post-1984 sales are proposed, pending the results of the call for comments on the schedule.

Northern Tier Disapproval Recommended

An administrative law judge charged with conducting hearings for Washington State's Energy Facility Site Evaluation Council on the proposed Northern Tier Pipeline has concluded that the project application should be rejected. The lack of need for the line was one of the major problems cited in the judge's report, which was based on eighteen months of testimony. Gov. or Spellman will make the final decision on the line's application before December. The Northern Tier Pipeline is slated to carry both North Slope and foreign crude from Port Angeles, Washington to the Midwest. None of the major Alaska North Slope producers has committed crude or any other form of support to the proposed line.

The "unused" PacTex pipeline, the central element of Sohio's 1979 proposal to carry North Slope crude from Southern California to Texas, is now being utilized at full capacity by El Paso to carry Southwest-produced natural gas to California consumers.

Petrochemicals in Alaska?

Petrochemical feasibility studies by the Dow-Shell Group and Exxon Chemicals foiled attempts by headline writers to assign a "yes" or "no" conclusion to their results. Both gave

a qualified "maybe" in answer to the question the studies addressed: is a large (multi-billion dollar) investment in facilities to manufacture petrochemicals from Prudhoe Bay natural gas liquids a profitable proposition? Exxon, as the world's second largest petrochemical producer (after Dutch Shell) and a leading owner of Prudhoe Bay natural gas, is likely to be involved in any effort involving petrochemical production in Alaska; however, only the Dow-Shell Group provided a detailed analysis of the factors upon which project feasibility turn.

Briefly, the future viability of the petrochemical manufacturing in Alaska requires an expansion of Pacific Rim petrochemical markets; at least a 2-3% per year real growth in oil prices; the succesful marketing of propane and the heavier gas liquids outside Alaska (which may be helped by the recent relaxation of export quotas on those products); and attractive feedstock (ethane) costs, which in turn depend on the outcome of the quest to build the Alaska gasline and the value of their alternative uses. The Dow report also pointed to the need for infrastructure development at the plant site, and warned of the problems that would be caused be simultaneous pursuit of other large construction projects, such as the gasline.

Alaska's attributes are its relatively stable political climate and its plentiful slupply of gas liquids. Its primary disadvantage is the higher cost of construction caused by the state's climate and location. Exxon Chemicals officials have pointed out that their study, conducted by Fluor, found this to be the single greatest barrier to feasibility.

One industry analyst has pointed out a key factor in petrochemical facility investment decisions:

"We expect return on investment for ethylene plants built in the 1985 to 1987 timeframe to be below the average company's cost of capital . . . only those companies with prefered feedstock positions should consider building new ethylene plants. Oil companies with such a position and huge cash flows are more likely to make the decision to add capacity."
(T.B. Tarrillon, "Will Profitability Return to U.S. Ethylene?" Oil & Gas Journal, Sept. 7, 1981; emphasis added)

A "preferred feedstock position" for potential Alaskan petrochemical producers will depend on what other value those feedstocks have. North Slope ethane, for example, could be sold to the gas transmission companies sponsoring the Alaska gasline for their value as fuel in the lower 48, used for petrochemical manufacture, or burned as fuel on the Slope.

The Dow study estimated a total investment in Alaskan petrochemical manufacturing facilities (extraction, transportation and plant) of about ten billion dollars. Construction on the project could start anytime after the mid-1980's, with production commencing in the late 1980's or early 1990's. The permanent workforce required would number several thousand, including secondary jobs, and would make a substantial contribution to the local tax base. Expansion of both the primary and secondary manufacturing capacity would be possible.

The Dow-Shell Group has asked the state for continued cooperation and aid in its efforts to plan for possible petrochemical development. The state assistance would include maintenance of Dow's first option on the state's royalty gas liquids; planning and developing infrastructure at possible sites; and consideration in permit requests, tax policy and other administrative and legal matters. A variety of state agencies are currently conducting a detailed review and analysis of the Dow-Shell Group's report. Public hearings at the potential sites will be held in October by a task force of legislators, mayors and commissioners recently appointed by Governor Hammond. The results of the state's review and of the public hearings will be considered by the Commissioner of Natural Resources, who must reach a "best interest" determination before negotiating an agreement with the Dow-Shell Group on further state cooperation. Any agreement negotiated by the Department will be submitted to the legislature for approval during the 1982 session.

Further information on the Dow-Shell Group's report and on followup actions by the state can be obtained from the author of this newsletter, or from Mary Halloran of DNR at 465-2400.

Other Items of Interest

-- The Kuparuk field, located west of Prudhoe Bay, is slated to begin oil production early in 1982. Initial production is expected to be 80,000, climbing to 250,000 b/d by 1986. Total production from the reservoir could amount to over half a billion barrels, depending on the effectiveness of secondary recovery systems. Arco's startup investment in the field is estimated at \$460 million, with two billion dollars estimated as the total development cost.

-- Conoco, recently acquired by DuPont, is in the process of developing its properties at Milne Pt., northwest of Prudhoe Bay, for production in the mid-1980's. Oil from the field would flow into the Kuparuk pipeline midway in its 26-mile run to the Trans-Alaska Pipeline System. Drilling to delineate three other potential oil producing areas in the vicinity of Prudhoe Bay, Gwyder Bay, Duck Island and West Mikkelson, is in

progress or planned by the oil companies with interests in those areas.

-- Sohio, Shell, Amoco, Tenneco, Exxon, Chevron and Phillips are prepared to spud exploratory wells at various locations in the Beaufort Sea during this winter's drilling season; Arco is planning Beaufort drilling for the following season. Geophysical crews are active in Norton Sound area, the Arctic Foothills and the Bering and Chukchi Seas, with additional winter activity planned for the Beaufort Sea. Chevron is currently drilling exploratory wells on Arctic Slope Regional Corp. lands.

-- Sohio has announced a multi-billion dollar plan to maintain Prudhoe Bay production. The projects include the drilling of a large number of additional wells; waterflood facilities; personnel and communications expansion; gas separation, transportation and reinjection equipment; and increased power generation.

-- The New Zealand government will proceed with construction of a billion dollar natural gas-to-gasoline conversion plant in a joint venture with Mobil Oil. The project will be the first major test of the process technology, and will utilize gas from the country's isolated Maui field.

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This newsletter was prepared by Mark Wittow, staff to the Alaska Legislature's Joint Gas Pipeline Committee, for members of the legislature. Background information and further detail on items in this newsletter can be obtained by contacting Mr. Wittow at the following address:

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The next issue of this newsletter is planned for mid-November. Comments, suggestions and criticism are welcome.