

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number: 1
 Bill Version: CSHB 57(O&G)
 (H) Publish Date: 2/26/03

Revision Date/Time (Note if correction): 2/11/2003 Dept. Affected: Natural Resources
 Title: Royalty Gas Contracts BRU: Oil and Gas Development
 Component: Oil and Gas Development
 Sponsor: Chenault
 Requester: House Oil and Gas Component No. 439

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()		**See Revenue Impact Analysis Below**		
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2003) cost: 0.0
 Check this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)
 **This bill amends AS 38.05.180(aa) requiring DNR to enter into agreements with lessees to use the price for gas established in contract between the lessee and a manufacturer as the value of the state's royalty share. HB 57 will result in a loss of state revenues. Should only one manufacturer apply under AS 38.05.180(aa), the state could lose an estimated \$33.4 million in royalties over a period of seven years (see Table 3, below). However, proposed amendments in HB 57 are worded more broadly than just one company. Interpretation of "manufacturer" may be broadly interpreted to apply to disposition of all royalty gas subject to in-state processing (e.g. LNG, NGIs). Therefore, this \$33.4 million could significantly understate the total revenue impact of HB 57. Furthermore, a much larger revenue impact could occur with a major sale of North Slope royalty gas, since both Prudhoe Bay's existing Central Gas Facility and any new gas treatment facilities are apt to add value to gas treated in these facilities.

Prepared by: Mark D. Myers Phone 269-8800
 Division: Oil and Gas Date/Time 2/11/03 1:09 PM
 Approved by: Tom Irwin, Commissioner Date 2/11/2003
 Agency: Natural Resources

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ANALYSIS CONTINUATION

The estimates in Table 1 show the impact HB 57 would have had on the value of royalty gas dispositions to the Nikiski fertilizer plant operated by Agrium U.S. Inc., had HB 57 been in effect during the period 2000-02. The cumulative impact would have been approximately \$8.2 million in nominal dollars.

The estimates in Table 2 illustrate the forward impact of HB 57 on state royalty revenue based on the assumption that Unocal supplies all of the input gas requirements to the Nikiski fertilizer plant through FY 2009. The estimates in Table 2 indicate that the state would forego approximately \$36.6 million in royalty revenue or about \$5.2 million per year over the period FY 2004-09. The benefit to Agrium would be half of these amounts because the Unocal-Agrium gas supply contract requires that both parties share equally in any royalty adjustments.

Table 1. Impact of HB 57 on State Royalty Revenue, 2000 - 2002

	Gas Production from State Leases (Thousand Cubic Feet per Year)	State Royalty Share	State Royalty Percent (%)	Contract			Royalty Foregone (\$ per Year)	Discount/Compound Factor 0.08	Discounted Royalty Foregone (\$ per Year)
				Value	Royalty Value	Diff			
2000	26,337,176	3,431,229	13.03%	\$1.20	\$1.70	\$0.50	\$ 1,715,614	121.2%	\$ 2,079,597
2001	27,004,457	3,573,255	13.23%	1.38	2.20	0.81	2,907,105	112.2%	3,262,844
2002	24,315,609	3,353,117	13.79%	1.47	2.55	1.08	3,621,743	103.9%	3,763,826
Average				\$1.35			\$8,244,462		\$9,106,267

**Table 2. Impact of HB 57 on State Royalty Revenue: Fixed Supply
FY 2003 - 2009**

FY	Gas Production from State Leases (Thousand Cubic Feet per Year)	State Royalty Share	State Royalty Percent (%)	Contract			Royalty Foregone (\$ per Year)	Discount/Compound Factor 0.08	Discounted Royalty Foregone (\$ per Year)
				Value	Royalty Value	Diff			
2003	25,885,747	3,452,534	13.34%	\$1.20	\$2.37	\$1.17	\$ 4,045,087	96.2%	\$ 3,892,387
2004	25,885,747	3,452,534	13.34%	1.20	2.43	1.23	4,219,421	89.1%	3,759,389
2005	25,885,747	3,452,534	13.34%	1.20	2.57	1.37	4,701,181	82.5%	3,878,355
2006	25,885,747	3,452,534	13.34%	1.20	2.70	1.50	5,182,941	76.4%	3,959,069
2007	25,885,747	3,452,534	13.34%	1.20	2.84	1.64	5,664,700	70.7%	4,006,545
2008	25,885,747	3,452,534	13.34%	1.20	2.98	1.78	6,146,460	65.5%	4,025,264
2009	25,885,747	3,452,534	13.34%	1.20	3.12	1.92	6,628,220	60.6%	4,019,226
							\$36,588,010		\$27,540,236

The analysis in Table 3 is similar to Table 2 except that the current contractual gas supply commitment to the plant declines sharply after FY 2005. Cumulative royalties foregone for this supply of gas would be \$22.0 million (as before, this benefit would be shared equally between Agrium and Unocal). The implied yearly gas shortfall during FY 2006-09 is supplemented with **new gas** from 3rd-party producers. Royalty production from new gas also would be eligible for cumulative HB 57 benefits equal to \$11.4 million. In this situation, Agrium is assumed to realize 100 percent of the benefits. Table 3 indicates that the state would forego a total of about \$33.4 million in royalty revenue or about \$4.8 million per year (undiscounted) over the period FY 2004-09. Detailed assumptions used for the estimates in Tables 2 and 3, plus several sensitivity scenarios, are described below.

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ANALYSIS CONTINUATION

**Table 3. Impact of HB 57 on State Royalty Revenue: Changing Supply
FY 2003 - 2009**

Unocal Commitments Under Existing Gas Supply Contract								
FY	Total (1000 Cubic Feet per Year)	State Leases	Non-State	State Royalty Share	Contract	Royalty	Diff	Royalty
					Value	Value		Foregone
					(\$ per Mcf)		(\$ per Year)	
2003	53,500,000	25,885,747	25,885,747	3,453,159	\$1.20	\$2.37	\$1.17	4,045,820
2004	51,900,000	25,885,747	25,885,747	3,453,159	\$1.20	\$2.43	\$1.23	4,230,642
2005	53,500,000	25,885,747	25,885,747	3,453,159	\$1.20	\$2.57	\$1.37	4,713,683
2006	38,600,000	19,300,000	19,300,000	2,574,620	\$1.20	\$2.70	\$1.50	3,874,594
2007	21,199,999	10,600,000	10,600,000	1,414,040	\$1.20	\$2.84	\$1.64	2,325,817
2008	14,000,000	7,000,000	7,000,000	933,800	\$1.20	\$2.98	\$1.78	1,666,540
2009	9,100,000	4,550,000	4,550,000	606,970	\$1.20	\$3.12	\$1.92	1,168,156

Royalty Losses Under Existing Gas Supply Contracts = **\$22,025,252**

New Gas Produced from Other 3rd-Party Producers								
FY	Total (1000 Cubic Feet per Year)	State Leases	Non-State	State Royalty Share	Contract	Royalty	Diff	Royalty
					Value	Value		Foregone
					(\$ per Mcf)		(\$ per Year)	
2003	1,728,506	1,728,506	-	230,583	\$2.00	\$2.37	\$0.37	\$ 85,691
2004	1,728,506	1,728,506	-	230,583	\$2.00	\$2.43	\$0.43	98,033
2005	1,728,506	1,728,506	-	230,583	\$2.00	\$2.57	\$0.57	130,287
2006	14,100,000	9,447,000	4,653,000	1,260,230	\$2.00	\$2.70	\$0.70	888,360
2007	31,500,001	21,105,001	10,395,000	2,815,407	\$2.00	\$2.84	\$0.84	2,378,463
2008	38,700,000	25,929,000	12,771,000	3,458,929	\$2.00	\$2.98	\$0.98	3,405,960
2009	43,600,000	29,212,000	14,388,000	3,896,881	\$2.00	\$3.12	\$1.12	4,382,316

Royalty Losses Under New gas Supply 3rd-Party Contracts = **\$11,369,110**

Total Royalty Losses from Existing & Potential 3rd-Party Contracts (Nominal) = **\$33,394,362**

Total Royalty Losses (Discounted) = **\$25,481,582**

Assumptions

1. Annual gas consumption at the fertilizer plant is equal to about 52 billion cubic feet per year (Bcf), based on historic rates of gas usage over the past five years.
2. State leases account for approximately half (initially about 25.9 Bcf per year) of the total gas usage at the plant; the remaining one-half is from federal and private leases.
3. The state royalty share of gas dispositions to the plant is 13.34 percent.
4. The contract value used in transactions between Unocal and Agrium is \$1.20 per thousand cubic feet (Mcf) of gas; \$1.35 per Mcf is used for sensitivity analysis (below) based on the average of the contract price observed over the past three years, due to high ammonia spot prices.
5. Royalty value is indexed to the Alaska Department of Revenue prevailing value for Cook Inlet Gas (DOR PV). The Division of Oil and Gas forecasts DOR PV to increase from about \$2.50 per Mcf today, to \$3.12 per Mcf in FY 2009, based on the historic, long-term trend observed over the period 1995-02.

ANALYSIS CONTINUATION**Assumptions (Continued)**

6. The underlying analysis in Table 2 is built on the assumption that Unocal supplies 100% of plant input-gas requirements through FY 2009. The analysis in Table 3 draws from the "Annual Contract Quantity" (ACQ) commitments contained in the existing Unocal-Agrium gas supply contract. During the later years of the contract, the ACQ falls from the approximate plant capacity of about 53 Bcf per year in FY 2005 to 9.1 Bcf per year in FY 2009.
7. The implied gas shortfall in Table 3 is made up of **new gas** from 3rd-party producers but at a higher cost of \$2.00 per Mcf. This implies a smaller contract-price differential for new gas dispositions to the plant when compared with the forecast of DOR PV. It is further assumed that about 2/3 of new gas is produced from state leases that are subject to the provisions of HB 57; the remaining 1/3 is new gas production from private and federal lands.

Sensitivity Analysis

Several alternative gas-supply scenarios are considered. **Case A:** Assume that the average formula-driven, gas-supply contract value is \$1.35 per Mcf instead of \$1.20 (see assumption #4). All else equal, this would lower the estimate of royalties foregone from \$33.4 million to \$31.0 million. **Case B:** If the fertilizer plant operates at 75% capacity due to input gas supply shortages from both existing and 3rd-party producers then, all else equal, estimated royalties foregone would fall from \$33.4 million to \$25.0 million. **Cases A and B combined** would reduce royalty foregone from \$33.4 million to \$23.3 million.