

**AOGCC Reservoir Depletion Studies Prior to Major Gas Sales**

**FY2009 Request: \$1,500,000**  
**Reference No: 45396**

**AP/AL:** Appropriation

**Project Type:** Planning

**Category:** Natural Resources

**Location:** Statewide

**Contact:** Eric Swanson

**House District:** Statewide (HD 1-40)

**Contact Phone:** (907)465-5655

**Estimated Project Dates:** 07/01/2008 - 06/30/2010

**Brief Summary and Statement of Need:**

The AOGCC must independently evaluate depletion plans for reservoirs prior to start of major gas sales from the North Slope of Alaska. Withdrawal of gas prior to the end of oil productive life may cause severe loss of hydrocarbons. The Commission will be required to rule upon offtake rates, timing, and depletion plans for the fields being developed before gas sales are approved. Significant reservoir evaluation studies will be necessary in order to accomplish these tasks. The AOGCC has completed a portion of the necessary work, but does not currently have the resources to complete these studies.

<b>Funding:</b>	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Total
AK Cap Inc	\$1,500,000						\$1,500,000
Gen Fund		\$500,000	\$500,000				\$1,000,000
<b>Total:</b>	\$1,500,000	\$500,000	\$500,000	\$0	\$0	\$0	\$2,500,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
<u>One-Time Startup:</u>	0	
<b>Totals:</b>	0	0

**Additional Information / Prior Funding History:**

\$1.2 million was appropriated in FY2006. \$1.0 million was appropriated in FY2008.

**Project Description/Justification:**

The existing AOGCC Prudhoe Oil Pool gas offtake rate rules were established at the time of commencement of production from the Prudhoe Oil Pool and are now almost 30 years old. Prior to commencement of major gas sales from the Prudhoe Oil Pool, applicable law requires the gas offtake rate to be substantiated by the most current available information. Failure to do so could result in significant waste of valuable oil resources.

Gas offtake rates have never been established for the Pt. Thomson or other North Slope reservoirs, and pool rules will also need to be adopted for these reservoirs prior to commencement of production.

The technical work and reservoir modeling needed to support current rule making will require significant time and resources to complete.

Problem To Be Solved:

The AOGCC must independently evaluate depletion plans for reservoirs prior to start of major gas sales from the North Slope of Alaska. Withdrawal of gas prior to the end of oil productive life may cause severe loss of hydrocarbons. The Commission will be required to rule upon offtake rates, timing, and depletion plans for the fields being developed

before gas sales are approved. Significant reservoir evaluation studies will be necessary in order to accomplish these tasks. The AOGCC has completed a portion of the necessary work, but does not currently have the resources to complete these studies.

Solution: The AOGCC has hired independent expert consultants to assist the Commission in verifying the impact of major gas sales upon ultimate hydrocarbon recovery, determine appropriate depletion plans for the fields, and rule upon mitigation measures to ensure that the sale of gas does not waste hydrocarbon resources. The main fields to be studied are Prudhoe Bay and Pt. Thomson fields, though remaining fields will later be studied. The magnitude of the proposed work compares to \$7 million spent on consultants' studies performed in the late 1970's, which led toward formulation and AOGCC approval of depletion plans for the Prudhoe Reservoir.

Benefits: These studies will enable the Commission to fulfill its mandate to ensure greater ultimate recovery and prevent waste of hydrocarbon resources. Millions of barrels of oil, and trillions of cubic feet of gas are at stake with gas sales from the North Slope. The State of Alaska will clearly benefit from acquiring the necessary information with which to responsibly develop its valuable gas resources.

What We Propose to Buy: The consultants working with Commission staff will deliver technical studies and reservoir evaluation tools (models), recommendations concerning appropriate depletion strategies, and will be available for testimony in public hearings.

Prior Funding History: \$1.2 million was appropriated in FY2005 and \$1.0 million was appropriated in FY2008.

Timeline: This project began on March 1, 2005, and is expected to be completed on or before June 30, 2011. The cost and time to complete these studies continues to be dependent upon the producers' willingness to share the details of their reservoir studies. Assuming we have full cooperation from the producers to share their technical information, the cost of this effort is anticipated to be \$4.7 million. Proposed allocation of funds are:

FY2005 - \$1.2 million  
FY2006 - \$0  
FY2007 - \$0  
FY2008 - \$1.0 million  
FY2009 - \$1.5 million  
FY2010 - \$0.5 million  
FY2011 - \$0.5 million  
Total - \$4.7 million