

## **Role of the Alaska Oil and Gas Conservation Commission in North Slope Gas Sales**

The State of Alaska and other interested parties are engaged in determining how best to bring North Slope natural gas to market. The Alaska Oil and Gas Conservation Commission (“AOGCC”) has an important responsibility in this process – to protect the public’s interest by preventing waste and insuring greater ultimate recovery of oil and gas. To fulfill this role, the AOGCC must determine what gas offtake rates should be allowed from North Slope fields, most notably the Prudhoe Oil Pool and the Pt. Thomson gas condensate reservoir.

There are over 35 trillion cubic feet of gas reserves within these two fields. However, hundreds of millions of barrels of oil and condensate could be lost if gas offtake from these fields is not correctly managed.

In general, maintaining reservoir pressure enhances oil recovery, but producing gas depletes reservoir pressure. Therefore, gas reserves in most fields are usually sold only after the liquid hydrocarbon reserves have been depleted. Until then, the gas that is produced is used to promote liquid production in various ways (including being reinjected so that it can provide the energy needed to get the liquid hydrocarbons to the surface and providing a source of gas for miscible injectant used in enhanced oil recovery operations). And that is exactly what is happening right now at Prudhoe Bay and other North Slope fields.

The North Slope gas sales project will ultimately involve trade-offs between oil and gas recovery. The documents *Role of the Alaska Oil and Gas Conservation Commission in Establishing Allowable Gas Offtake Rate for Prudhoe Bay* and *Role of the Alaska Oil and Gas Conservation Commission in Approving Pool Rules for the Point Thomson Field* explain these trade-offs. This document explains the process the AOGCC is using to insure greater ultimate total hydrocarbon recovery, i.e., recovery of both oil and gas, as the North Slope gas project moves forward.

Normally, the operator of an oil or gas field applies to the AOGCC for “Pool Rules.” These are specific rules that stipulate how to develop the reservoir in a way that maximizes oil and gas recovery. ExxonMobil and their partners at Point Thomson have not yet applied to the AOGCC for Pool Rules.

Nor have BP Exploration (Alaska) (“BPXA”) and their partners at Prudhoe Bay applied for an amendment of the current pool rules to allow for a higher gas offtake rate. The existing Prudhoe Bay gas offtake rate was set in 1977 at 2.7 billion standard cubic feet (BCF) of gas per day. After deducting gas used as fuel and in enhanced recovery operations, this leaves about 2 BCF of gas per day available for sales. However, the gas sales scenarios that are being discussed publicly could require increasing the allowable Prudhoe gas offtake rate.

Normally the AOGCC would wait for an application from the operator and its partners before performing the reservoir studies necessary to establish or increase gas offtake rates. However, that would delay the AOGCC's decision-making such that it could disrupt the timetable for a potential gas pipeline project. The AOGCC needs to complete its evaluations and make its rulings for both Prudhoe Bay and Pt. Thomson so that the operators and their partners have approved allowable gas offtake rates that they can use in the "open season" process that is required under the Federal Energy Regulatory Commission ("FERC") regulations.

Therefore, the AOGCC has chosen a proactive approach. There are two ways the Commission might take a proactive role with respect to such studies. One would be to conduct or arrange for consultants to conduct independent reservoir studies. The other would be to participate with the operators and their partners in their reservoir simulation studies, so that questions can be answered and adjustments can be made up front. Assuming adequate cooperation on the part of the operators and their partners, the latter approach has significant advantages: lower cost to the State of Alaska, less time required to complete evaluation of the studies, more complete and accurate input data, and use of proven, probably more sophisticated reservoir evaluation tools.

In 2005, the AOGCC held hearings regarding whether the gas offtake rate from Prudhoe Bay should be updated. The AOGCC decided that, although the 1977 allowable gas offtake rate was based on the best available data at the time, the appropriate gas offtake rate must be redetermined using the reservoir description and performance information that has become available in the past 30 years. Further, BPXA, their partners and the AOGCC established principles by which to perform collaborative studies. The report of the 2005 hearings and the study principles were issued by the AOGCC on December 5, 2005.

The AOGCC contracted reservoir evaluation consultant to assist its technical staff in performing the Prudhoe Bay study. The BPXA and their partners agreed to provide the AOGCC staff and consultants access to their simulators including the underlying engineering, geologic, geophysical, and simulation information. A data room was set up in BPXA's Anchorage offices, equipped with computers and software allowing review of the simulator results. BPXA and their partners voluntarily offered to make the data room information available. The information meets the standards of AS 31.05.035(d) and 20 AAC 25.537(b), entitling it to be held confidential during and after the study period.

The AOGCC's Prudhoe Bay study process began in January 2006, and was completed on February 28, 2007. BPXA and their partners are not currently prepared to ask for a revised gas offtake rate from Prudhoe Bay, but the AOGCC has scheduled a hearing for June 19, 2007, to consider amendments to Rule 9 of Conservation Order 341D that set the 2.7 BCF of gas per day offtake rate for Prudhoe Bay. If and when BPXA and their partners apply for a revised gas offtake rate for Prudhoe Bay, they will be required to submit for the record reservoir studies that best reflect a reasonable range of offtake options and their effects. The AOGCC may request (including by subpoena) any other pertinent information that has been used in the study but was not included in the

operator's submission of evidence in the hearings. Claims of confidentiality for evidence in the hearings will be determined by the AOGCC during the course of the hearings under governing law.

On April 26, 2006, the AOGCC and ExxonMobil and their partners at Pt. Thomson agreed upon a similar process for studying the allowable gas offtake rate from that field. The AOGCC has contracted reservoir evaluation consultants to assist its technical staff in performing the Pt. Thomson study. Under the agreement, AOGCC staff and consultants would have access to a data room in ExxonMobil's Houston offices. The data room would include reservoir engineering, geologic, geophysical, and simulation information and would be equipped with computers and software allowing review of the simulator results. The study was scheduled to begin before September 2006 and last up to six months, but has not yet begun. The AOGCC received conflicting information from various sources within ExxonMobil about when the study would begin. One source said the study would proceed, while another said the study would be shelved until resolution of legal issues regarding the status of the Point Thomson Unit and leases. On April 24, 2007, the AOGCC sent a letter to ExxonMobil asking them to clarify the status of this study. ExxonMobil informed the AOGCC that they do intend to proceed with the study and that it should begin in early July 2007.