Kenai Peninsula Gas Production
Curtailments due to LNG Plant Closure

ConocoPhillips Alaska, Inc. (Conoco) and Marathon Alaska Production LLC (Marathon) own the Nikiski LNG plant, and also operate a number of Kenai Peninsula gas wells that supply the plant. Concerns have been expressed regarding the wells once the LNG plant is closed. Because the closure poses the possibility of gas well production curtailments, the AOGCC asked Conoco and Marathon each to provide production plans. Both companies promptly supplied detailed plans, described below.

Marathon’s Plan

Gas well production curtailment can cause an increase in the proportion of water produced with the gas. In a marginal well, the increased hydrostatic pressure resulting from increased water cut cannot be overcome by the well’s natural pressure. One way to overcome this problem is to install a smaller diameter tubing string, called a velocity string in the well. A velocity string makes it possible to artificially pressurize the well’s production tubing, essentially using injected compressed gas to blow the load water from the well. The well can then flow gas on its own. Marathon operates 6 wells in which water build-up may be a problem. Marathon plans to address the problem with installation of velocity strings in these wells. In addition, Marathon has an approved underground gas storage facility, into which it will inject and store curtailed gas.

Conoco’s Plan

Conoco operates a few sensitive gas wells for which water build-up may be a problem. If necessary, Conoco plans to vent some gas to avoid shutting those wells in. However, most of Conoco’s wells do not have associated water production and should therefore not be susceptible to water build-up problems.

The AOGCC’s Role

At this point the AOGCC continues to gather and review information regarding the gas wells of both Marathon and Conoco. The AOGCC has requested that Conoco report the number of sensitive wells that might have a problem with water build-up and the number of non-sensitive wells it operates, and that it provide an estimate of the amount of venting anticipated. If at the time it completes its review, either operator’s plan fails to demonstrate to the AOGCC that it will not cause waste, then the AOGCC will notice a public hearing to assess the appropriate course of action.