



United States Department of the Interior



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JUN 10 2009

Mr. Ira Rosen
Project Manager, IPP
ADEC/SPAR
555 Cordova, Street
Anchorage, AK 99510

Subject: Comments on the “Comprehensive Evaluation and Risk Assessment of Alaska’s Oil and Gas Infrastructure: Proposed Risk Assessment Methodology,” Revision 1, dated March 20, 2009.

Dear Mr. Rosen,

Please find our comments on your Oil and Gas Infrastructure Risk Assessment Plan, dated March 20, 2009, in our attached report, ANC-09-E-008. Our comments strictly address the Trans Alaska Pipeline System.

If you have any questions, please contact Doug Lalla of our office at (907) 257-1354.

Sincerely,

Jerry Brossia
Authorized Officer
BLM/OPM

Enclosure:

ANC-09-E-008 - Comments on the “Comprehensive Evaluation and Risk Assessment of Alaska’s Oil and Gas Infrastructure

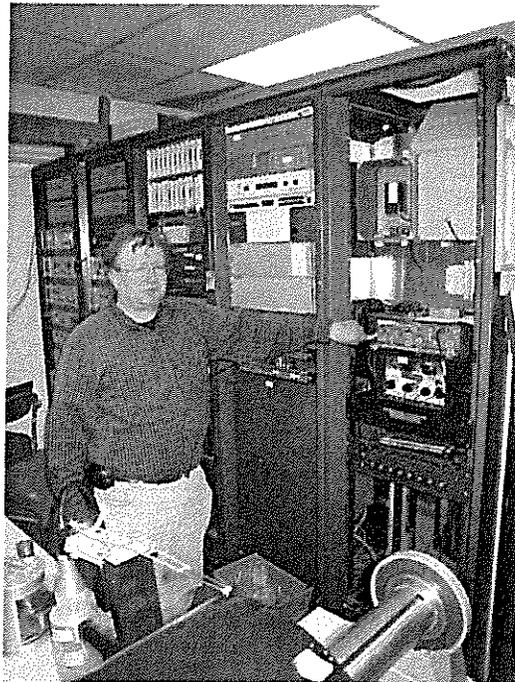
cc:

Joe Correa, BLM/OPM
Nolan Heath, BLM/OPM
Becky Spiegel, DEC/JPO

Comments on “Comprehensive Evaluation and Risk Assessment of Alaska’s Oil and Gas Infrastructure, Proposed Risk Assessment Methodology”, Revision 1; In Regards to the TAPS

Agreement and Grant of Right-of-Way for the
Trans-Alaska Pipeline and Related Facilities
Stipulations: 1.21.1

Doug Lalla



**Comments on Alaska Oil and Gas Infrastructure Risk Assessment Plan in Regard to
TAPS**

Executive Summary

This report comments on completeness and accuracy of the TAPS pipeline major system descriptions presented in the Alaska Oil and Gas Infrastructure Risk Assessment Plan – “Proposed Risk Assessment Methodology,” dated March 20, 2009.

A review of the plan found that the description of the current TAPS communication system was inaccurate. On page 63 of 165, the TAPS Communications and Control is listed as using Satellite as the Backup communication system, this formerly was the case. The system is now backed up by GCI fiber optics circuits. I confirmed this with Betsy Haines, Alyeska Oil Movements Director on April 7, 2009.

A review of the risk assessment plan found that the following systems associated with TAPS were not addressed. In Section 4.3 of the report, which describes the TAPS infrastructure, there is no mention made of relief systems at active pumping stations (1, 3, 4, 7, 9) and the Valdez Marine Terminal. This is a major element for the safe operations of TAPS. Another major system element which is not listed is the backpressure system at the Valdez Marine Terminal.

These comments were emailed to Kathleen George <kathleen@nukaresearch.com> on June 2, 2009, who is compiling comments on the risk assessment plan.

1.0 Purpose: This report comments on completeness and accuracy of the TAPS pipeline major system descriptions presented in the Alaska Oil and Gas Infrastructure Risk Assessment Plan –“Proposed Risk Assessment Methodology,” dated March 20, 2009 (“*The plan*”).

2.0 Scope: The report only provides direct comments on the TAPS related portion of the study.

3.0 Overview of Risk Methodology Proposed:

The proposed methodology consists of 5 major parts:

1. Definition of the Physical Scope of the Infrastructure- *The plan* calls for the infrastructure to be divided into significant nodes, for operational hazard and natural hazard assessment.
2. Preliminary risk screening will be used to eliminate unnecessary nodes- Preliminary consequence screening of infrastructure nodes will be applied for each of the four types of consequence:
 - a. Safety Consequence Screening: This screening includes safety impacts on both infrastructure and to members of public.
 - b. Environmental Consequence Screening: This screening is limited loss of containment/spill events of a hydrocarbon or seawater stream that have the potential to create adverse effects on the external environment.
 - c. Reliability Consequence Screening: In this screening, reliability is defined in unexpected loss oil measured in barrels and gas in barrels of oil equivalent.
 - d. Common Cause Analysis: Events that may affect nodes that individually do not meet preliminary screening criteria, but that may contribute and result in cumulative consequences leading to a severe impact.
3. A risk analysis, operational and natural hazards impacting the nodes and segments between nodes. For the Operational Hazards Assessment, *the plan* proposes to use the following methods:
 - a. Hazard Identification (HazID)
 - b. Event tree analyses
 - c. What if analysis
 - d. Consequence analysis methods
 - e. Failure mode and effects analyses (FMEAs)

For the Natural Hazards Assessment, *The plan* states that it will be based on the American Lifelines Association Guidelines.

4. A summary of the risk analysis: Results will be a list of infrastructure nodes within the scope of the risk assessment that are potentially significant contributors to the risk in at least one of the potentially significant consequence categories.
5. The documentation supporting the risk analysis.

4.0 Comments on TAPS System Description:

On page 63 of 165, the TAPS Communications and Control is listing using Satellite as the Backup communication system, this formerly was the case. The system is now backed up by GCI fiber optics circuits. I confirmed this with Betsy Haines, Alyeska Oil Movements Director on April 7, 2009.

Section 4.3 of the report describes the TAPS infrastructure that will be analyzed. Other than for Station 5 which is described as a relief station, no mention is made for the other active pump stations and the Valdez Marine Terminal of their relief systems. The relief capability is a major element for the safe operations of TAPS. Another major system element which is not listed is the backpressure system at the Valdez Marine Terminal.

6.0 Signatures:


Doug Lalla
Geophysicist


Joe Correa
T&DR Supervisor

6/3/2009