Working Document of the NPC Study: Arctic Potential: Realizing the Promise of U.S. Arctic Oil and Gas Resources Made Available March 27, 2015

Paper #7-16

THE NEXUS OF WESTERN SCIENCE AND TRADITIONAL KNOWLEDGE -GAINING THE SUPPORT OF THE ALASKAN NATIVE POPULATION

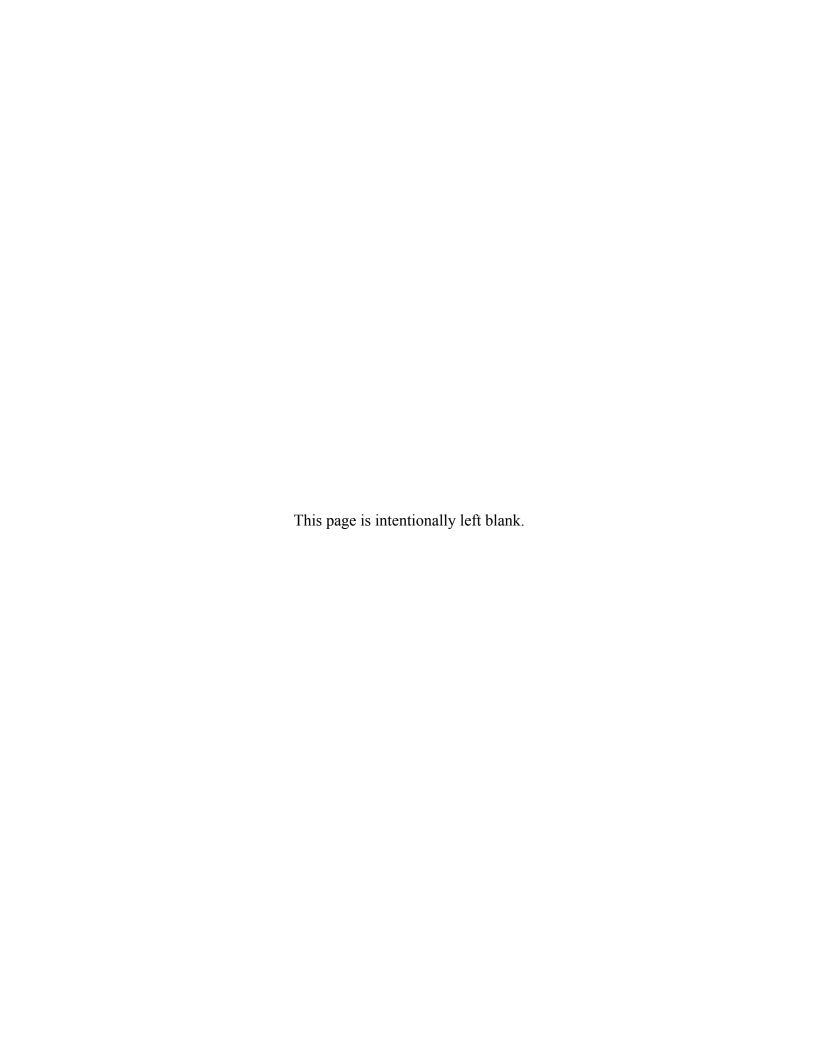
Prepared for the Technology & Operations Subgroup

On March 27, 2015, the National Petroleum Council (NPC) in approving its report, *Arctic Potential: Realizing the Promise of U.S. Arctic Oil and Gas Resources*, also approved the making available of certain materials used in the study process, including detailed, specific subject matter papers prepared or used by the study's Technology & Operations Subgroup. These Topic Papers were working documents that were part of the analyses that led to development of the summary results presented in the report's Executive Summary and Chapters.

These Topic Papers represent the views and conclusions of the authors. The National Petroleum Council has not endorsed or approved the statements and conclusions contained in these documents, but approved the publication of these materials as part of the study process.

The NPC believes that these papers will be of interest to the readers of the report and will help them better understand the results. These materials are being made available in the interest of transparency.

The attached paper is one of 46 such working documents used in the study analyses. Appendix D of the final NPC report provides a complete list of the 46 Topic Papers. The full papers can be viewed and downloaded from the report section of the NPC website (www.npc.org).



Topic Paper

(Prepared for the National Petroleum Council Study on Research to Facilitate Prudent Arctic Development)

	The Nexus of Western Science and Traditional
7-16	Knowledge - Gaining the Support of the Alaskan
	Native Population
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SUMMARY

Topic paper discusses the approach of blending technological solutions with traditional knowledge/local content to get the best possible answer while developing support of the Alaskan Native population.

PURPOSE

The purpose of this topic paper is to provide clarity to the Federal Government about the many entities impacted within the North Slope Borough while creating the path forward to blend Traditional Knowledge with Western Science while upholding contemporary traditional uses and gaining support and partnering with local North Slope Borough regional and village corporations fostering in a new phase of arctic oil & gas development with local uses and inputs that bridges the gap with local governments such as the North Slope Borough and its residents.

BACKGROUND

Over the last 20+years of Oil & Gas exploration and development in the North Slope Borough, the north-slope has seen great expansion and opportunities that benefited the State, the NSB and Industry. By better understanding the development climate and the regulatory processes, a more streamlined approach has facilitated the growth of local village and regional corporations while ushering in major oil and gas development.

- Projects like "Northstar" turned the gentlemen's agreement (oiler/whaler agreement) into what we see today as the Conflict Avoidance Agreement sponsored by Shell Exploration and Production Company. This is a tool created by the Alaska Eskimo Whaling Commission to manage indigenous whaling activities and offshore oil & gas activities, which is supported by the North Slope Borough land use ordinance Title 19.
- The ConocoPhillips "Meltwater Project" where elevated pipelines vs buried pipelines resulted in the change in Pipeline heights to protect caribou migration and accessibility for subsistence activities.

- Alpine Satellite project, in the heart of the Nuiqsut area of influence, on surface Kuukpik lands created the "North Slope Borough Mitigation Fund Advisory Committee"; annually funded by the industry to mitigate subsistence activities in otherwise village hunting lands.
- The development of offshore manmade islands like "Oogurook" and "Spy Island" in collaboration with the local government minimized the risk of an offshore oil spill by "developing" inside tanks that could pump spilled oil down the subsea pipeline as the first line of defense to prevent oil from entering the Beaufort Sea.

I want to emphasize that putting people together and putting industry and local corporations together have proven to be a successful path where all parties work together to achieve a balance that residents can live with. And finally, the North Slope Borough developed the NPR-A technical report with recommendations to facilitate co-operation between the Federal Government, the State of Alaska, Industry and the North Slope Borough to help identify issues and potential policies for the continued oil and gas expansion that have implications borough-wide. Perhaps just as the "2007 Oil & Gas forum" brought entities together, Oil & Gas forum # 2 would bring folks back and review the NPR-A technical report and facilitate cooperative agreements and potential Title 19 revisions.

DISCUSSION/POTENTIAL AREAS OF FURTHER RESEARCH

The success of engagement opportunities as described above are examples of how important it is to blend the positive impacts that Western Science affords through industry exploration and development with the environmental considerations and Traditional Knowledge possessed by the Alaskan Native population developed over a millennium of experience. When carefully balanced and considered, the outcome is always more positive than an uninformed approach. This proven teaming can achieve the desired outcomes in a manner that supports all parties involved and contributes to the highest degree possible the growth of the communities while protecting the rich cultural values that the residents possess. In this regard, strong consideration needs to be applied in the following areas:

A. Develop robust stakeholder and community engagement strategies

- i. Identify who the stakeholders are in the geographic area of interest.
- ii. Be honest of what the prize is.
- iii. Explain your technology and goals. What are you trying to accomplish and what technologies are being proposed to accomplish it?
- iv. Identify issues and seek to resolve. Solicit input from the residents and resolve any differences. Be transparent.

B. Work with local governments

- i. Understanding the NSB process and use the existing systems designed to engage public approval of large projects, tying in the cities and villages to the process.
- ii. Sit down with the North Slope Borough Mayor's branch / Planning branch of NSB. Over time, developed offshore islands have more potential as proven technology and may help to mitigate various coastal and terrestrial impacts.
- iii. Review the North Slope Borough NPR-A technical report. Understand the priorities and drivers.
- iv. Work with communities, the city, tribes and corporations and gain input

C. Provide meaningful economic opportunities

i. It is the policy of the North Slope Borough to foster relationships between developers and local village and regional corporations. Where it is feasible and prudent, use and contract

- with local corporations of the Arctic developed by Congress in the passage of the Native Land Claims Settlement Act.
- ii. Develop an economic opportunity plan designed to put local residents to work. There is a difference between an Alaska hire and a North Slope hire. Know the difference of this important distinction. Employment opportunities for city and village residents are key and a very powerful planning tool for industry and the Federal Government.

D. Understand the local governments energy needs and plans

- If roads and pipelines systems are part of the overall way forward, work with the local governments that may already have developed potential corridors for local energy distribution to minimize duplication. It is highly likely that these planning corridors already exist.
- ii. It is the policy of the North Slope Borough for locally produced fuels to be utilized to lower the cost or materially contribute to reducing the cost of power.
- iii. The North Slope Borough is developing village comprehensive plans. A partnership with the Borough can help influence the development of these plans.

E. Adjusting to local climate change / use innovative technologies to minimize impacts

- i. Understand concerns raised by local observers as climate change creates challenges to both subsistence activities and infrastructure.
- ii. Strongly consider the use of offshore islands that will potentially minimize terrestrial and coastal impacts as the North Slope Borough jurisdiction is out to 3-miles offshore.
- iii. Work with the local government and residents on pipelines corridors and "Roads to Resources" to minimize impacts to large scale movements of caribou and there distribution patterns within the North Slope Borough
- iv. Identify activities that have potential to adversely impacting harvest levels for terrestrial and marine subsistence resources and work with local entities to provide a means of mitigating those impacts.
- v. Blend Traditional Knowledge to enhance your development proposal.

RECOMMENDATIONS

The following recommendations are multidimensional: Federal Government, State of Alaska, Boroughs, Cites, Villages and the Oil &Gas Industry. It is important to understand that future success can be greatly facilitated by strong relationships. These relationships should be as transparent as possible allowing each entity to fully understand the effects of future logistic, infrastructure and operational decisions. Achieving that end, success can be better achieved with all parties working closely together. Specific recommendations include:

- A . Know the cultural fabric life of the communities. Show a willingness to understand and be sensitive as communities may have to adapt -- empower them by being open
- B. Do not reinvent the wheel. The North Slope Borough has zoning and land use powers -- engage directly and be open. The North Slope Borough has worked directly on behalf of the communities to balance development. The North Slope Borough has important information on infrastructure and

¹ Roads to Resources is a State of Alaska Project which is chartered to consider infrastructure planning and resourcing to areas rich in natural resources. For more information: http://dot.alaska.gov/roadstoresources/index.shtml

erosion issues; has concerns over the 500K caribou that come to calve in the North Slope which is an important subsistence resource. Work with us on every level to gain a though understanding

- C. Economic opportunity is a priority. Create jobs and training programs. We may not have the entire work force needed to accomplish the work, but contracting with our village and regional corporations that have revenue sharing programs can be viewed as hiring "a little old lady" who depends on a dividend to pay her heating bill in an area where heating cost are highest in the nation, in the American arctic.
- D. Periodically meet with the North Slope Borough, the tri-lateral committees of the communities impacted, the regional tribal entity, and the Inupiat Community of the Arctic Slope (ICAS) to forge lasting and positive relationships.
- E. Work with us when "Roads to Resources" are planned. We may have ideas that could maximize potential uses along with industry and minimize impacts where potential pipeline corridors could be planned to minimize impacts to subsistence activities and the large scale movements of terrestrial mammals.

The next phase of large scale industrial expansion should bring entities together; work off the same sheet of paper; create long-lasting cooperation; develop tools and infrastructure to benefit the Arctic; and to recognize the increasing open water of the Arctic oceans and the traffic of the Northern routes. Understanding all of this is needed to work together and to create the needed tools to support the continued traditional uses and rights of the indigenous peoples.

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