SOCIO-ECONOMIC IMPACTS BETWEEN THE NUCLEAR INDUSTRY AND ABORIGINAL PEOPLE

DAVID G MALCOLM, PH.D

Aurora Research Institute, Aurora College

ABSTRACT

The paper explores several aspects of the socio-economic impact of the nuclear industry on Aboriginal people in northern Canada. The issues discussed include decision-making by consensus, community-based development, the role of Traditional Ecological Knowledge and Management Systems (TEKMS), relationships with land and nature, and social and health issues. The issues are discussed with respect to the divergence between Aboriginal and non-Aboriginal cultures, which affect the timelines for project viability as well as the continued harmony between industry and community. It is concluded that economic gains can be achieved through continuous community dialogue from the moment of project inception.

1. BACKGROUND

As the theme of this 1996 CNA/CNS Conference suggests, the nuclear industry is about to enter what we hope will be its *Golden Age* in the 21st Century. At the same time all of science is struggling to be more socially relevant and accountable, with particular emphasis on community-based development. The nuclear industry operates within this changing milieu.

Every nuclear project in northern Canada impacts upon the lives of Aboriginal people. The reaction of northern residents to any nuclear project, whether it be the Nuclear Waste Disposal Concept of Atomic Energy of Canada Limited (AECL), or the Cigar Lake or any other uranium mining project, varies from very negative to very positive. Typically, however, I have observed that the reaction is more negative than positive in northern regions, despite the availability of new employment opportunities for northerners. The situation is complicated by the alienation felt by the residents of sparsely-populated northern areas. These observations come from working with Aboriginal people in the La Ronge region of Saskatchewan for the review of several Environmental Impact Statement (EIS) documents during 1994/95 (1,2) and, since then, in the western Arctic. The purpose of the paper is to explore the reactions of northerners, and Aboriginal people in particular, to the nuclear industry. These reactions are important for harmonious relationships between northern industry and northern workers, and for the reduction of project development and review costs.

In order to obtain data for analysis on socio-economic impacts of nuclear projects, and race relations concerns triggered by the nuclear industry, a detailed survey instrument was distributed to approximately 100 northerners in the La Ronge area in mid-1995, most of whom were of Aboriginal descent. The response rate was approximately 30%. Of the respondents, only about 15% had family members who were working in the nuclear industry, primarily in uranium mining. We might be tempted to say that the results were skewed if the questionnaire was biased toward negative attitudes. However, the anti-nuclear activist respondents blamed us for designing a questionnaire that was biased on the positive side!

The issues exposed by the study strongly suggest that the nuclear industry should take the views of northern residents, particularly the views of Aboriginal people, more seriously. Now that federal funding is being devolved to the Indian Bands, along with self-government, responsibility for health care and resource management and so on, the opinions of Aboriginal people within their communities can spell either profit or loss for the future uranium mining industry in Canada.

The following sections of the paper present several salient issues involved in the socio-economic impacts between the nuclear industry and Aboriginal people, and analyze them with respect to today's prevalent themes of community-based development. Finally, a strong recommendation is made that the nuclear industry should adopt the mind-set of

community-based development in all of its future endeavours, and especially in the development of uranium mining projects.

2. ANALYSIS OF PROMINENT ISSUES

The issues discussed here do not make up a definitive list. However, the following issues appear to be the most important ones affecting industry relations with the Aboriginal community, as well as affecting the timeliness and profitability of projects under the present regulatory framework.

2.1 Decision-Making by Consensus

We believe that the normal project review process is flawed, in that the essential consensus-building mechanisms for decision-making by Aboriginal people are absent in the recommended environmental review process, as promulgated by *The Canadian Environmental Assessment Act*. Why is consensus so important? And why is it not sufficient for the Aboriginal public to be given a voice at the public Panel Review stage? To understand this, we must take a fresh look at the basic differences between the Aboriginal world view and the Euro-centric world view.

The Aboriginal world view can be understood in terms of the hunter-gatherer society, where each unit within the society is interdependent. The Aboriginal world view is one of a harmonious community, or of cooperation within the society. Each person takes only what is needed to sustain life, being careful to give something back. Wealth is measured in terms of the number and strength of family and friends.

In contrast, the Euro-centric world view can best be described in terms of an agricultural society, where the land is something to be owned for production of food and personal wealth. This view, which dates back to the time of Aristotle, and even before that to the biblical times of Abraham, is one of ego-centrism or competition. Each person is wholly unto himself. The person with the most land or other material goods has the most power and control of his life and the best chance of future survival. Wealth in this world view is measured in terms of possessions. Cooperation becomes a negotiation process among competing users of resources.

The Aboriginal person wants you to come and sit down face to face for discussion on all aspects of any particular problem or project, before making a mutually acceptable decision. Aboriginal society has traditionally depended upon oral communication rather than the written word. The Euro-centric person, on the other hand, states his/her point of view, supported by documentation as needed, and then asks for response to the tentative decisions. This is **not** consensus decision-making. It is rather negotiating for positions of advantage once initial decisions have been made, often in isolation from the people who inhabit the project lands in question.

The Canadian environmental assessment process does not encourage, and indeed may not allow, continuous input from the Aboriginal residents of project lands (3). We read: "the responsible authority may decide to provide the public with an opportunity to contribute information during a comprehensive study." Usually, however, the public has no input until the EIS is complete and under review: "The public must have an opportunity to review and comment on comprehensive study reports before any decisions are made on the project." The Aboriginal citizen groups usually want input into the comprehensive study itself, rather than being forced to wait to review the comprehensive reports which, they believe, signal that decisions have already been made. The Aboriginal point of view is that you would not write up a formal report on a subject unless your decision was virtually made.

As a result of these clashes of world views, the average Aboriginal person considers corporate studies, including environmental assessments, with much skepticism. The Aboriginal person wants her/his voice heard right from the outset, and on the basis of face to face discussion, not on the basis of impersonal letter, memos, data files and telephone conversations. The existing Environmental Assessment Process could accommodate this more personal approach to socio-economic assessment, but is seldom used in a consensus-building way.

The end result is that the faceless mining companies from the south are viewed with suspicion and misunderstanding.

rather than trust. It would be far more acceptable, and less time-consuming in the long run, for representatives of the companies concerned to begin a continuing dialogue right in the affected communities or regions, as soon as a project is contemplated, thus encouraging favourable consensus as much as possible. Also, as we shall see in Section 2.3, the Environmental Impact Assessment (EIA) process may be required in the future to include the input of Traditional Environmental Knowledge, before any agreement on project viability can be reached at the community level.

2.2 Community-Based Development

The trends toward community consultation, beginning at the concept stage or preliminary design stage, are becoming widespread in all sectors of social and industrial development, not just in the nuclear and uranium mining industries. For example, the trends in Canada toward community wellness and regional health boards, and toward community needs-based economic development, are almost certainly with us to stay. A mind-set has been created that no projects should proceed unless their benefits out-weigh their costs, and unless they meet the identified needs of the region and its communities.

At the same time, scientists and philosophers alike are discussing the ethics of technology and its impacts on nature (4) and the recent pervasiveness of the concept of *community*, and the connection between community and nature, in Western thought (5). Of course, Aboriginal people have understood this connection within their own cultures for millennia.

The World Commission on Environment and Development gave community participation in decision-making a boost in 1987 in what has become known as "The Brundtland Report" (6) where it is stated:

> *"The law alone cannot enforce the common interest. It principally needs community knowledge and support, which entails greater public participation in the decisions that affect the environment. This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizens' initiatives, empowering people's organizations, and strengthening local democracy."*

Since then, Frideres et al have said "It is our contention that public involvement begins when the first conception of a project reaches a community and when they become aware that there are plans that will have an impact in their local area" (7). And still more recently, the Hon. Jack Anawak, Parliamentary Secretary to the Minister of Indian Affairs and Northern Development, stated in an address in November, 1994: "We must be involved in research, even at the planning stages. Northern communities need to be consulted, not only *during* a research project, but *before* the research begins" (8). For similar reasons, the licenses required by all researchers doing studies in the Northwest Territories are not granted unless the individual researchers can demonstrate that they have discussed their plans with members of the affected communities and have been given approval to proceed by those communities. It is apparent that, if uranium mining companies are only concerned with the letter of the law and the present regulations surrounding public review, they are going against the now commonly-accepted practice of community consultation.

There are other reasons for close community consultation. For example, contaminants in northern fresh-water fish are often blamed on the mine some distance upstream, whereas the real culprits may be airborne contaminants from industrial complexes thousands of miles away. Close dialogue between the uranium industry and the impacted communities can clear up a considerable amount of misunderstanding and misinformation.

2.3 The Role of Traditional Ecological Knowledge and Management Systems (TEKMS)

There is considerable emphasis now on the integration of what is known as "traditional ecological knowledge and management" with the EIA process. Anawak went on to say in his address: "We have much to contribute, in terms of the traditional knowledge we have gathered over the centuries" (8). In particular, the traditional knowledge of Aboriginal people can have considerable input to social impacts of a project, and the environmental impacts on land, water, flora and fauna. The conventional view of scientists and engineers tends to ignore such knowledge as hearsay and not "exact" enough.

There has been considerable dispute on the subject of "the validity of people's own knowledge versus that of scientists" (9). At the core of such dispute is the disparity between Western science and the Aboriginal world view:

> *"Where Western science and Dene traditional knowledge diverge most notably is in their explanations of ecological processes and concepts of environmental management. For the traditional Dene, ideology is a fundamental element of subsistence, as important as practical empirical knowledge and appropriate technology. Traditional Dene ideology consists of a spiritually based moral code or ethic that governs the interaction between the human, natural, and spiritual worlds. It encompasses a number of general principles and specific rules that regulate human behaviour toward nature"* (10).

Most recently, I was present when a recommendation was put from the floor at the March, 1996 NWT Treaty #8 Denendeh Environment Gathering in Yellowknife, NWT that would make it mandatory for Traditional Environmental Knowledge to be applied in the EIA process for all future project developments on Dene lands.

2.4 Relationships with Land and Nature

The Aboriginal view is that each presence within the cosmos, i.e., each person, animal, plant and rock, is a spirit that exists in an interdependent relationship with each and every other universal presence. Together they "maintain an intricate balance to ensure the continued survival for all life" (10). Moreover, human beings are not considered to have any more power or authority than other life-forms.

Respect for the land and its resources are often at the root of some definite points of view. Personal opinions of Elders are likely to be similar to that of Leon Iron (11): "The land we once used is the best land for making a living. Now they are using it to make a killing." During the La Ronge EIS review activities, the importance of impacts on Aboriginal land were shown by the response of a First Nations Elder: "Remote areas have been occupied for thousands of years by Aboriginals and have been highly respected. --- Our Aboriginal lands will never be raped again (in the future) to the extent that it has (been in the past). The traditional Elders have spoken" (1).

Another land-and-nature-related factor of contention arises in the transportation of nuclear materials over the northern roadways and frozen waterways. There are strong opinions (68% of respondents in the La Ronge EIS review) that the road systems in the north are not adequate and safe for continuous heavy traffic.

2.5 Social and Health Issues

Aboriginal people generally recognize the importance of northern jobs in uranium mining projects. They too have come to comprehend the direct links between health and wealth. However, at the community level, social services and health issues often dwarf other economic development and job-creation considerations.

With the devolution of responsibility for Aboriginal health care from the federal jurisdiction to the Band level comes worries about health effects of radiation exposure. This becomes all the more important to an Aboriginal society which is seeking to rediscover and reestablish itself. The health and wellness goals of Aboriginal people follow along the lines of the Congress of Aboriginal Peoples Integrated Research Plan 29: "Mental well-being, spiritual fortitude and physical health are keys to reestablishing the social, political, and economic integrity of Aboriginal societies in the future."

One of the chief factors is that there is often considerable misunderstanding within Aboriginal communities as to the comparative safety of uranium mining activities as far as radiation exposure is concerned. Also, there is the belief that their Band health systems are already stretched to the limit, so that no new projects with perceived additional health hazards can be seriously contemplated. Therefore, it is vitally important that project proponents begin at the project concept stage to develop trust and to inform the residents of the safety of their proposed operations, and to provide accurate information on the nature of radiation safety in occupational health.

3. CONCLUDING REMARKS

It is concluded that the uranium mining industry will ignore or down-play the consensus-building and community-consultation processes in its relationship with Aboriginal people to its own peril. Future projects are unlikely to be allowed to proceed unless sanctioned by the communities near the project site. It would be relatively easy, and certainly less costly in the long run, for mining companies to maintain a presence in Aboriginal communities right from the time the project is first conceived. Only through continuous dialogue can trust be built between the nuclear industry and the Aboriginal people who inhabit project lands.

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