

Sunny Ways (?) with Current Conditions of Heavily Overcast Skies

With the election of a Liberal majority government in October 2015 newly elected Prime Minister Justin Trudeau forecast “sunny ways” with respect to the way government will function. This “sunny way” was meant to shed new light on ministries such as the Ministries of Environment and Climate Change, Natural Resources Canada, and Fisheries and Oceans such that the storm clouds of the Canadian Environmental Assessment Act of 2012 (CEAA) would soon dissipate. However, this CEAA storm system is moving out slowly, if not stalled, and the skies remain heavily overcast with regard to environmental concerns in general and the uranium mining and nuclear industry in particular.

In last year's report at the Annual General Meeting I noted the following: “This means that ICUCEC must reorient its energies and practices. For over thirty years ICUCEC has primarily prepared and submitted materials and participated in hearings with federal and provincial panels and the CNSC (and its predecessor bodies) with regard to the environmental assessment of uranium mining and processing projects. From this research and these submissions we also prepared various educational materials for public use. The CEAA 2012 with its directive of 'do not resuscitate' with respect to the environment and environmental assessment means that preparing for hearings and other such work will be at minimum.”

With the election of a new government and with the Prime Minister's mandate to the Minister of Environment and Climate Change and the Minister of Natural Resources Canada, I am firmly convinced that if ICUCEC is to continue to be a viable voice within the environmental movement it must reorient its strategy with respect to its focus on the uranium mining and nuclear industry. This means, first of all, that it must be the vigilant one to watch and monitor the various mining operations in Saskatchewan. Its findings, then, must go public. The CNSC is no longer our primary concern with respect to hearings on licensing and so forth; this is now a secondary concern. In fact, we need to monitor the monitors and regulators because they are not watchdog agencies, but lapdog agencies of the industry and the provincial and federal governments' pro-industry policies. This was made evident when in October of 2014 at a presentation at the University of Calgary Michael Binder, Chair of CNSC, stated, “... lack of social/political acceptability trumps science-based conclusions. CNSC cannot be expected to reject a safe project due to lack of social acceptability.” Yet Mr. Binder ignores his own mandate when he writes a letter to the Environment Minister of Quebec telling him how the BAPE recommendation to continue the moratorium on uranium exploration and mining in the province is a social and economic mistake as well as scientifically ill-informed and offers the services of CNSC to rectify the situation.

Here are some excerpts from the Binder letter: “The recently published Bureau d'audiences publiques sur l'environnement (BAPE) report compels me to write to you. It is very troubling to have the BAPE present your government with conclusions and recommendations that lack scientific basis and rigour. Furthermore, to suggest that uranium mining is unsafe is to imply that the Canadian Nuclear Safety Commission (CNSC) and the Government of Saskatchewan have been irresponsible in their approval and oversight of the uranium mines of Canada for the last 30 years.

The CNSC welcomed the Government of Quebec's decision to hold hearings to study the impacts of uranium exploration and mining in the province. Our experts fully participated in the BAPE's public process to inform and educate the BAPE on how we regulate the industry and ensure that the public, workers and the environment are protected. The BAPE's decision to continue to question the long-standing science and proven safe track record of modern uranium mining is misleading Quebecers and all Canadians.

We are also fully transparent in our regulatory oversight of uranium mines and mills, with a public hearing –based licensing process and annual reporting of operational safety and environmental performance. This represents a level of transparency and oversight practiced by no other industry in Canada.

We have carried out and validated several peer-reviewed studies over the past several decades. These studies have repeatedly provided sound evidence that workers and residents near these facilities are as healthy as the rest of the general population. The same is true of people who live near nuclear power plants.

It is clear that the BAPE's recommendation not to proceed is based on the perceived lack of social acceptance and not on proven science. Minister, I understand that you will be reviewing the BAPE report's conclusions through an interdepartmental committee. I would like to offer CNSC experts once again to assist in that process, as the BAPE did not accurately synthesize and fully consider the information previously provided. As your government moves forward on this important matter, it must not ignore years of evidence-based scientific research on this industry. It is one of the most understood types of mining in Canada and has been safely undertaken in Saskatchewan for over 30 years.”

ICUCEC also wrote to the Quebec Minister critiquing Binder's letter and the CNSC. Much to our surprise, the Ministry responded to us and arranged for a day of meetings with people in their Department. The key points of our position are as follows:

“As the Chairperson of the Inter-Church Uranium Committee Educational Cooperative (ICUCEC) I would like to provide some historical instances of how the supposed nuclear monitoring and regulatory agencies (currently the Canadian Nuclear Safety Commission – CNSC) which profess

to hold to the safety of the mining enterprise, do not do so. We at the Inter-Church Uranium Committee Educational Co-operative continue to emphasize seven areas of concern.”

- ◆ The release of radionuclides, heavy metals, and other chemical contaminants from the tailings and waste rock into the groundwater, surface water, and air.
- ◆ The lack of adequate decommissioning plans.
- ◆ The lack of contingency plans when action must be taken to reduce environmental contamination in the future.
- ◆ Cumulative regional environmental impacts of uranium operations in northern Saskatchewan.
- ◆ Equitable and just transfer mechanisms in terms of profits, technologies, and organizations for the peoples of the region.
- ◆ An end to the colonialist, exploitative practices on the people, resources, and environment of northern Saskatchewan, and a termination of the exemption from ownership regulations presently enjoyed by the uranium mining companies.
- ◆ More effective and stringent control of our uranium exports because “current Canadian limitations on end uses of uranium provide no reassurance to the public that Canadian uranium is used solely for non-military applications by purchasers.” (Uranium Mining Developments in Northern Saskatchewan: Dominique-Janine Extension, McClean Lake Project, and Midwest Joint Venture, Report of the Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan, October 1993, p.26.) [Subsequently referred to as “Report”] This is exemplified in the sale of uranium to India which is not a signatory to the Nuclear Non-Proliferation Treaty.

However, in order to do this monitoring ICUCEC must obtain funds to get people to carry out the research, to go to conferences to gather information and to present our findings, and to present this information and material to the public.

Secondly, this reorientation means that we must be even more intentional in working with other organizations with a similar, congruent, but not identical purpose. The Coalition for a Clean Green Saskatchewan, Committee for Future Generations, Churches for Environmental Action, KAIROS, Saskatchewan Environmental Society, Northwatch, Concerned Citizens for Nuclear Responsibility, Western Mining Action Network, RCEN and SEN, and the Environmental Planning and Assessment Caucus, [as well as some international groups, e.g., in Australia, South Africa, the U.S.] are groups and organizations with whom we are in cooperation and certainly not competition.

The third and final element in our reorientation is that we must link our stance on uranium mining with the impetus toward renewable energy alternatives. We can no longer be only a

circle of people centered on banning uranium mining and all things nuclear. In reorienting ourselves we need to stretch ourselves from a circle into an ellipse, a configuration which has two foci. Indeed, we are as adamant as ever that when asked 'What should we do with uranium?', we unequivocally respond, 'Keep it in the ground!' At the same time we must indicate that there are more viable, cost effective, and ecologically sound alternatives to our energy needs and uses.

This past week Dr. Mark Z. Jacobson, director of Stanford University's Atmosphere and Energy Program, as well as a professor of civil and environmental engineering, also a senior fellow of the Woods Institute for the Environment and of the Precourt Institute for Energy, has been in a Twitter exchange with Premier Brad Wall over fossil fuels and the transition to alternative energies. However, he has also reported on the inappropriate move to nuclear generation as a proper means of alternative energy generation. Here is an excerpt from an interview at Bard College, New York City on the topic of Sustainability, January 30, 2015.

Bard: Another form of power that is touted as clean energy is nuclear power. You just came out with a study, however, that states nuclear power results in 25 times more carbon emissions than wind. Can you explain these findings for us?

Jacobson: Sure, it's rather straightforward. A life-cycle analysis of a wind turbine shows most of its carbon outputs during its construction, practically zero when it's in operation, and then, if you use today's methods, during decommission a turbine outputs some carbon.

When you do the calculation, however, you find that wind power emissions are between 5 to 10 grams of carbon per kWh of electricity generated over the lifetime of the turbine. Using that as a baseline, you see over the lifetime of nuclear power, the carbon output is 70 grams per carbon per kWh.

This is from one, building of the nuclear power plant and then two, refining uranium, which is very energy-intensive. There is also timing involved: It takes on average in the U.S. 10 to 19 years for a nuclear power plant to get up and running, while a wind farm can be built on average in two to five years.

If we compare nuclear and wind from now, in two to five years you'll have a wind farm up and start creating energy that's clean, while with nuclear you have to wait 10 to 19 years to get that energy. If you add in these extra emissions, called opportunity cost emissions, you end up getting nine to 25 times more carbon in air pollution per kWh from nuclear than wind.

That is still better than coal or natural gas (60 to 120 times more), but other problems with nuclear power is of course 1.5 percent of plants have melted down, and the problems related to weapons proliferation with nuclear, radioactive waste, mining damage, etc. Not even

mentioning the cost, which is very high and currently subsidized in the U.S. It's not a viable option; it's really the nuclear industry trying to push it to get more business."

I would submit that we at ICUCEC need to reorient ourselves to this double focus as Jacobson did to the nuclear question.

A vigilant monitoring and critical appraisal of the uranium mining industry, an even more intentional cooperation with other like-minded groups and organizations, and focusing on both the banning of uranium mining and renewable energy alternatives are what I think are the vital elements in a strategic reorientation of ICUCEC. What must accompany this reorientation is getting our material to the public: presentations, articles, press releases, and a more active and effective use of the social network. To do this ICUCEC will need money and people willing to do the hard (and often tedious) work of research and inquiry.

Here are the areas ICUCEC has been working on in the past year and will continue in its on-going work.

- ◆ Gunnar Mines Decommissioning Project: Following a public hearing held on November 6, 2014 in Ottawa, the Canadian Nuclear Safety Commission (CNSC) announced on January 15, 2015 its decision on the Environmental Assessment Report (EA Report) for the Saskatchewan Research Council's (SRC) proposed Gunnar Remediation Project. The Commission concluded that the proposed project is not likely to cause significant adverse environmental effects, taking into account mitigation measures identified in the EA Report. The CNSC therefore issued a 10-year Waste Nuclear Substance Licence to the SRC, valid from January 14, 2015 to November 30, 2024. We will need to monitor SRC, its reports to CNSC, and the CNSC response.

Following a public hearing held on September 30, 2015, the Canadian Nuclear Safety Commission (CNSC) announced on November 27, 2015 its decision to remove the Gunnar Remediation Project Phase 2 hold point as it pertains to the remediation of the tailings area at the Gunnar Legacy Uranium Mine Site. The hold point for the remediation of other site components, including waste rock, the open pit and the mine shaft, remains in place and will be considered by the Commission at a later date. ICUCEC along with the Saskatchewan Environmental Society, the Prince Albert Grand Council, the Fond du Lac Denesuline First Nation, and the Athabasca Chipewyan First Nation have radiological, toxicological, and hydrological concerns about this Tailings Remediation Plan.

- ◆ DIS-13-01, Proposals to Amend the Radiation Protection Regulations describes the CNSC's proposals to amend the RPR. These amendments would harmonize them with updated ICRP and IAEA guidance, where appropriate. The amendments would also

clarify requirements and address gaps that were identified post-Fukushima, as well as through lessons learned over time.

Section 4: Radiation Protection Program

Stakeholders supported simplifying the text by removing the reference to radon progeny while preserving the section's intent. There was also general support of CNSC's position that introducing a requirement for dose constraints is unnecessary at this time, with many respondents making reference to robust ALARA programs that are in place in the nuclear industry. [Comment: the CNSC and the industry still refuse to take radon and alpha particle emissions seriously. Also they still refuse to operate according to the precautionary principle with respect to radiation and hold to ALARA—As Low As Reasonably Achievable.]

Section 7: Provision of Information to All Workers

The vast majority of stakeholders were concerned with the proposal to expand section 7 such that licensees would be required to provide information to all workers, with claims of significant financial and administrative burden, with little apparent benefit from a risk perspective.

Given the very strong opposition to the proposal, amendments to the regulations will not be undertaken. However, the CNSC considers that providing risk information to all workers is important and plans to document regulatory expectations for this area in a future regulatory document.

Section 7: Re: Provision of Dose Information

Stakeholders requested clarification of the acceptable methods for informing workers of their dose information. The CNSC intends on clarifying the required timeframe for reporting dose levels to workers in regulations, and may incorporate supporting details into regulatory documents. [Comment: "This represents a level of transparency and oversight practiced by no other industry in Canada." Binder wrote to the Quebec Minister. Apparently transparency for the health and safety of workers is clouded by "financial and administrative burdens." so we'll keep our workers in the dark. Moreover, a recent (July 2015) landmark study by an international consortium under the umbrella of the International Agency for Research on Cancer / Lyon, France where a long-term study for low radiation impact was conducted on 300,000 nuclear-industry workers concluded, beyond a doubt, there is "no threshold dose below which radiation is harmless." Any amount is harmful, period.]

- ◆ CNSC publishes REGDOC-3.2.2, Aboriginal Engagement, February 12, 2016. REGDOC-3.2.2, Aboriginal Engagement sets out requirements and guidance for licensees whose proposed projects may raise the Crown's duty to consult. While the CNSC cannot delegate its obligation, it can delegate aspects of the consultation process to licensees. The information collected and measures proposed by licensees to avoid, mitigate or offset adverse impacts may be used by the CNSC in meeting its consultation obligations.

The implementation of REGDOC-3.2.2 is expected to lead to more effective and efficient Aboriginal engagement practices, strengthen relationships with Aboriginal communities, assist the CNSC in meeting its duty to consult obligations, and reduce the risk of delays in the regulatory review processes.

The benefits of early engagement with Aboriginal groups include: enhancing relationships, promoting trust, improving Aboriginal groups' understanding of the proposed project and its objectives, and helping the proponent to understand the interests and concerns of those living in the affected area. With this understanding and information, the proponent can begin to discuss practical strategies for maximizing the project's potential positive impacts, while eliminating or mitigating its possible negative consequences. [Comment: In his Mandate Letter to Minister McKenna Prime Minister Trudeau stated, "No relationship is more important to me and to Canada than the one with Indigenous Peoples. It is time for a renewed, nation-to-nation relationship with Indigenous Peoples, based on recognition of rights, respect, co-operation, and partnership." The CNSC's document is a far cry from the goal of this mandate. Here is where ICUCEC and others must convince government that CNSC has a minor role in Environmental Assessment and that strategic, sustainable assessments involve four principal stakeholders—proponents, government (federal, provincial, local), public, and First Nations.)

- ◆ ICUCEC has joined with 13 other organizations in Canada calling on the Prime Minister to "initiate a public review and modernization of the Nuclear Safety and Control Act.

Excerpts from the March 3, 2016 letter: "Since then, the impartiality of the regulator has been publicly questioned and concerns have been raised about transparency and reduced public participation in decision-making. Some reasons for this perception of partiality include:

CNSC President Michael Binder publicly criticized Quebec's independent environmental assessment board le Bureau d'audiences publiques sur l'environnement (BAPE) when it acted within its jurisdiction and recommended that Quebec not proceed with uranium mining because it is socially unacceptable to Quebecers.

An Environics poll of federal scientists found CNSC scientists were one of the most likely among federal departments to be asked to alter studies for non-scientific reasons. CNSC staff were

second most likely (57%) to be aware of cases where the health and safety of Canadians had been compromised due to political interference.

Statements and actions by the CNSC indicating it favours nuclear energy production and its expansion instead of acting as a neutral objective safety regulator.

Based on our dealings with the CNSC, the following are some topics that should be addressed as part of a legislative review to ensure an independent regulator and public safety:

- ✓ strengthening the independence of the Commission;
- ✓ improving transparency and opportunities for meaningful public participation;
- ✓ requiring a sustainable development approach to environmental assessments;
- ✓ affirming the necessity for Aboriginal engagement in CNSC decision-making processes;
- ✓ clarifying federal roles and responsibilities for nuclear emergency management;
- ✓ legislating term limits for licences in order to ensure informed periodic public input; and
- ✓ shifting the oversight of the CNSC's to a Ministry without a mandate to promote nuclear power.

◆ **Implications for remediation efforts at current uranium mining and processing sites given that AREVA has gone bankrupt. (\=Euros)**

Mycale Schneider, an independent international analyst on Energy and Nuclear Policy, based in Paris, France and convening lead author and publisher of The World Nuclear Industry Status Report, writes: "In the meantime, the self-proclaimed "global leader in nuclear energy," the French state-controlled AREVA, went bankrupt. After a cumulative loss of \10 billion (US \$11.4 billion) over the past five years, significantly exceeding its peak annual turnover, and a debt load of \6 billion (US \$6.8 billion), the company will be taken apart. AREVA is already deep in "junk" territory, when it comes to its credit-rating. Its share value has eroded by 95 percent over the past eight years—a plunge exceeding TEPCO's fall after the Fukushima crisis hit the company and prior to its de-facto nationalization—hitting a new historic low on February 19, 2016. The government's rescue strategy—injecting \5 billion and forcing EDF to absorb AREVA's reactor business—is in-turn increasing the risk for EDF. Uncertainty remains whether the European Commission will not consider illegal state aid the generous subsidy under EU competition rules. Another significant barrier for the conclusion of the rescue deal remains the multibillion-euro liability of the Hinkley Point predecessor projects in Olkiluoto, Finland, and Flamanville, France. The EPR construction in Finland started over ten years ago. The plant was to begin generating carbon-free electricity by 2009 and was part of the country's greenhouse

gas abatement strategy under the Kyoto Protocol. Now, the plant is scheduled to produce power in “late 2018.””

◆ **Cameco's \$2.1 billion tax dodging scheme.**

[Comment: Why is Premier Wall silent? Why does he cloud over this issue?]

◆ **Participating in formulating a new Canadian Environmental Assessment Act**

There are ten priority issues on which ICUCEC is currently working with other environmental groups, the Ministry of Environment and Climate Change, and the Parliamentary Committee on the Environment in developing a new Environmental Assessment Act (EA).

Restoring meaningful public participation in federal EA processes
Redefining the federal role in EA where proposed development may impact areas of federal jurisdiction
Climate change impacts on and resulting from project proposals
Sustainability assessment
Strategic EA and regional assessment
Alternatives and trade-offs in project purpose and design
Follow-up and monitoring
Substitution and harmonization of federal and non-federal EA processes
Implementing the UN Declaration on the Rights of Indigenous Peoples in a federal EA regime that is consistent with the principles of Free, Prior, Informed Consent for indigenous peoples that actively facilitates the exercise of those rights

Finally, in full sunlight, I wish to acknowledge those associated with ICUCEC who provide life and vitality to this organization. Furthermore, I want to express my appreciation and gratitude to the other members of the Executive Board of ICUCEC. Linda Murphy, who serves as our secretary and treasurer and keeps us running smoothly in the day to day transactions. Jim Penna, for his tireless communication and publication efforts. Neil Sinclair, who reminds us of the links between the educational, environmental, and political. Graham Simpson, whose microcosmic attention to detail and macrocosmic scope of the issues keeps us moving forward and whose hospitality welcomes us to hold our monthly meetings at his home. Debbie Mihalicz, who is all too familiar with the impact of the uranium mining industry on First Nations and Metis people, keeps us grounded on how this industry effects the daily way of life of our northern neighbours. Unfortunately and to our great disappointment, Debbie will not seek re-election to the Board. In her own words, “I've made a difficult decision today, and that is, I just don't feel I presently have the time required to do justice to being an effective member of ICUC.” Let me express our gratitude and appreciation for Debbie's work on ICUCEC, and our hope that once other tasks and projects reach completion, she will be back with us.

I also want to highlight the work of Karen Weingeist and Candyce Paul, who, while not board members, although they attend most of our meetings, are as involved in the workings of ICUCEC as any board member. Karen and Candyce keep us in contact with so many of the other

groups and people concerned about these issues. Many, many thanks for your hard work and dedication to the activities of ICUCEC. I admire the tenacity of all the members who constitute and support this activist acronym known as ICUCEC. Your fortitude, energy, hope, and humour are truly what sustain an eco-community who values the integrity of life for all creation, justice, and peace. I thank you all for your participation in the organization and look forward to the future and to working with all of you.

Respectfully submitted,

Michael Poellet, Chairperson