Cumulative Impacts of proposed Deep Geologic Repository Project on The Social Fabric of Communities Immediate, Adjacent and Surrounding Great Lakes Basin

Submitted by Michael J. Keegan
Coalition for a Nuclear Free Great Lakes

Based on review of Ontario Power Generation’s (OPG) Environmental Impact Statement (EIS, March 2011), as well as the Joint Review Panel’s (JRP) Information Requests (IRs) thus far (2011 to present), and OPG’s responses thereto (2011 to present), and recent public reporting the Coalition for a Nuclear Free Great Lakes raise these concerns.

The following questions and area of concerns are being raised after a sociological literature review concerning the siting of nuclear waste. The literature review indicates that there is universal mistrust and distrust characterized by a ‘crisis of legitimacy’ when governments attempt to site nuclear waste. Recent media reporting has provided precise examples of the concerns known and raised in the social sciences.

The concept of legitimacy is most often challenged when transparency is lacking in the process. Transparency provides the daylight which allows for factually based social and scientific inquiry, which will ultimately leads toward decision making. Without transparency the trust in the process is tainted, resulting in distrust.

Currently there is mistrust and distrust of the existing Bruce nuclear complex after decades of real life experiences. This mistrust is cumulative and the mere announcement of a proposed Deep Geologic Repository put forth by Ontario Power Generation compounds this mistrust. All discourse and processes going forward have potential of cumulative mistrust.

The divisive impact potential on all communities at all levels has not been fleshed out. The literature review suggests that the DGR proposal has the potential of ripping communities apart family by family, and doing so for generations.

If fact currently in the U.S. both Michigan and Ohio municipalities have passed resolutions in opposition to the Deep Geologic Repository. These communities have not been consulted or briefed about the proposed project, they have not consented. These communities will be directly impacted operation of and by failure of the proposed Deep Geologic Repository.

“Millions of Michigan citizens who live downstream from the proposed radioactive waste site get their drinking water from Lake Huron and Lake St. Clair,” said state Rep. Sarah
Roberts, D-St. Clair Shores, who introduced a resolution urging Congress to oppose the underground dump.  

Doug Martz reports that the Water Quality Board and Macomb County Board of Commissioners, which passed a resolution opposing the construction of the nuclear waste dump. Six years later they passed it again.

A resolution similar to Rep. Roberts' was introduced by Sen. Hoon-Yung Hopgood, D-Taylor, and unanimously passed by the Michigan Senate.

As reported on Michigan Radio: Cheryl Grace, a member of the Ontario citizens’ group Save Our Saugeen Shores, said money is complicating the issue. By agreeing to be the host community for the deep geologic repository (DGR), Kincardine and nearby towns receive payments every year, including Grace’s community of Saugeen Shores.

“We now get about $280,000 a year,” Grace said, in a report by Michigan Radio. “Kincardine gets over $650,000 a year to be the host of this facility.”

For a town of 6,500 that is dirt poor, it’s like winning the bid to host the Olympics.

The ramifications of skewed economic distribution must be examined as related to access of housing, education, health, sustenance, worship and political access.

What impact will DGR proposal have on freedom of affiliations voluntary and at the workplace.

The potential for this proposed DGR leading to bifurcation of the immediate community and exacerbate inequitable resource distribution resulting in diminished quality of life for particular individuals and neighborhoods.

Answering these concerns adequately will help to lay to rest the general perception among the environmental community that this entire process is a charade with a predisposed outcome.

The following excerpts from “The Politics of Citing of Nuclear Waste Repository” by Gerald Jacob, (ISBN 0-8229-3640-2) provide this overview:

“In the early years of nuclear power, optimism overshadowed any concern that the disposal of radioactive waste would present a serious problem. Scientists, technicians, and administrators were given a free hand to speed the commercialization of nuclear reactors. By the late 1970s, however, uncertainties about the disposition of spent reactor fuel, combined with questions about the safety of nuclear reactors, threatened the future of nuclear power and its
promoters. State and local attempts to regulate nuclear facilities kindled conflicts over local authority to halt construction of new nuclear power plants. Stories in the mass media about reactor accidents, nuclear waste mismanagement, cost overruns, and the alleged federal cover-up of radiological disasters created public distrust which threatened the continued promotion of nuclear power by the federal government. The boundary between commercial and military nuclear programs was never clear, but proposals to recover plutonium from commercial wastes to use in production of nuclear weapons only further obscured it. Demands for greater public access to bureaucratic decision making and government document were transformed into demands for closer oversight of nuclear programs.

Chauncey Starr articulates that: “Public fears and opposition to nuclear waste disposal plans can be seen as a “crisis of confidence,” a profound breakdown of trust in the scientific, governmental, and industrial managers of nuclear technologies.” And that “Social psychological studies (Rothbart and Park, 1986) have validated “folk wisdom” by demonstrating that trust is a quality that is quickly lost and slowly regained. A single act of embezzlement is enough to convince us that our accountant is untrustworthy.”

Gerald Jacob writes: “while vast resources have been expended on developing complex and sophisticated technologies, the equally and sophisticated political processes and institutions required to develop a credible and legitimate strategy for nuclear waste management have not been developed” (1990:164).

The potential for asymmetrical exercised privileged influence on policy outcomes by project proponents generates the dilemma of how to weigh the specialized expertise against the views of citizens who could be directly impacted in the event of technological failure.

“The issue of how to solve the nuclear waste problem through democratic process draws the dilemma into sharp focus. Indispensable, on the one hand, is specialized knowledge to perform rigorous risk assessments and to inform technological choices. Yet because, in the words of (U.S.) Justice Louis Brandeis, ‘the highest office in the land is the citizen,’ it is citizens who must ultimately judge the acceptability of risks and proposed solutions, especially citizens most clearly affected by them.

But citizens must rely on technical expertise in order to make informed choices. That reliance further magnifies the dilemma because the lion’s share of expertise is held by agencies of the national state.” (Dietz and Rycroft, 1987)

The JRP should find that the current state of OPG’s EIS for the so-called “Low and Intermediate Level Radioactive Waste (L&ILRW) Deep Geologic Repository (DGR), targeted at the Bruce Nuclear Complex in Kincardine, Ontario, Canada, including JRP’s own IRs and OPG’s responses to them, renders this proceeding insufficiently advanced for entering into the hearing stage. The cumulative impact of mistrust and distrust, and how it manifests throughout the immediate and surrounding communities has not been
explored. The scale of this proposed Deep Geologic Repository Project impacts the entire Great Lakes basin. Conflict over access to water and tolerance of contamination of it will be questions that could inevitably come to the forefront as they have in the western United States.

OPG’s EIS, the JRP’s IRs, and OPG’s responses thereto, do not yet comprehensively document cumulative impacts of distrust and mistrust of the communities which are immediately impacted by this proposed project. The multitude of communities impacted directly and indirectly throughout the Great Lakes basin share these commons and those concerns have not been addressed.

Finally, Coalition for a Nuclear Free Great Lakes makes notation of the JRP’s refusal, despite the Saugeen Ojibwe Nations’ repeated requests, to include the proposed high-level radioactive waste deep geologic repository proposal in the vicinity of Bruce Nuclear Complex, as a reasonably foreseeable project. This unwillingness to acknowledge consideration or deny consideration of that potential worsens cumulative impacts of mistrust and compounds the ‘crisis of legitimacy’ absolutely unnecessarily. Until these unanswered questions are addressed the OPG proposed Deep Geologic Repository Project should not move to hearing stage.

**Sociological Literature Review Includes:**

- Site unseen: The politics of siting a nuclear waste repository, Gerald Jacob – 1990
- Public opposition to the siting of the high-level nuclear waste repository: The importance of trust, KD Pijawka, AH Mushkatel – 1991
- Politics and scientific expertise: scientists, risk perception, and nuclear waste policy, RP Barke, HC Jenkins-Smith – 1993
- The role of compensation in siting hazardous facilities, H Kunreuther, D Easterling – 1996
- Political change and the crisis of legitimacy in Hong Kong, I Scott – 1989
- Toward renewed legitimacy? Nuclear power, global warming, and security, P Stoett - 2003
- Policy regimes and policy change, CA Wison - 2000
- Risk and decision-making: A theoretical approach to public participation in technoscientific conflict situations, MD Mehta – 1998
- Nuclear waste repository siting: an alternative approach, BD Solomon, DM Cameron - 1985
Burying globally, acting locally: control and co-option in nuclear waste management, D Durant - 2007
Power relations: the politics of risk and procedure in nuclear waste governance J Chilvers, J Burgess - 2008
Science, technology and democracy, JJ Salomon – Minerva – 2000
Science & Technology, M Callon – 1999
Nuclear Futures: Assessing public attitudes to new nuclear power, R Grove-White, M Kearnes - 2006
Nuclear waste facilities on Tribal Land: The Yami’s struggles for environmental justice, MF Fan - 2006
Public involvement designed to circumvent public concern? The “Participatory Turn” in European nuclear activities, G Sundqvist, M Elam - 2010
Socio-Technical Challenges to Implementing Geological Disposal: a Synthesis of Findings from 14 Countries, Catharina Landström (UEA) & Anne Bergmans (UA) – 2012

Submitted by

Michael J. Keegan
Coalition for a Nuclear Free Great Lakes
P.O. Box 463
Monroe, MI 48161
mkeeganj@comcast.net
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