

Submission by J.A.L. Robertson on

“Moving Forward Together: Designing the Process for Selecting a Site”

In the report “Moving Forward Together: Designing the Process for Selecting a Site” the NWMO invites Canadians to express their thoughts on the siting process. The report is well structured, consisting largely of six questions covering most of the points to be settled before proceeding to site selection.

These questions are to be discussed in Dialogue Sessions, one of which is to be held in Ottawa on 2008 October 1st. This submission comprises my answers to the questions, prepared in advance of my participation in that session.

Some of the material here is repeated from the section on Siting in my Submission of 2004 October on the NWMO’s “Understanding the Choices”. That, in turn, drew on an unpublished document “Low-Level Radioactive Waste Management Task Force: An Attempt to Learn Useful Lessons from Deep River’s Experience” of 1995 January, appended.

Q.1 *Is framework sound?*

- A paramount Characteristic should be respect for all relevant laws and regulations.
- Limited funding of communities to assemble a proposal would be justified but intervention funding should not be extended to special interest groups to duplicate the protection provided by publicly funded agencies.
- There is a fundamental difference between Aboriginal rights and treaties, that must be respected, and claims, that may or may not be justified.
- To invoke the Precautionary Principle without defining it is meaningless since it means all things to all people. In a Submission I criticized an NWMO Background Paper on this subject but the disagreements were never resolved.
- Under Ethics, it is illogical to be “fair to everyone, *particularly one specific group*”. On the previous page, “Fairness” should not appear as the prime Objective over Health and Safety.

Q.2 *Is selection process fair?*

- The discussion here is disappointingly brief given the importance and urgency of this question. It is one that is difficult to address without some prior discussion of the processes being considered. The NWMO has stated that siting will be a voluntary process but there is an urgent need to define this in more detail. There is a danger that discussion of other questions will implicitly involve the NWMO’s understanding of what constitutes a voluntary process. For one version, termed voluntarism, when the NWMO has defined siting criteria and has an information package on what would be involved in a site (see below) it should invite

interested communities to engage in discussions. Those still interested would be invited to submit bids indicating the compensation they would require to accept the facility. The NWMO would assess the sites and the bids to select a site.

- The NWMO still seems to be regarding too narrowly who has benefited from nuclear energy. All Ontarians on the grid have benefited from nuclear electricity: all Ontarians have benefited from the effects of nuclear energy on the provincial economy.

Q.3 What models are useful?

- Models to be examined should include those that show not only what should be done but also what should be avoided, e.g., the 1977 Madoc fiasco and the history of the Siting Process and the Siting Task Forces (TF) in Deep River for low-level radioactive wastes from 1986 to 1994 discussed in earlier Submissions.
- Defining the affected community constituted an unresolved problem for the TFs, Should it include those who believe themselves to be affected? How is the cutoff between affected and unaffected to be defined?
- Those only on a possible access route should have their concerns heard but they should not be included in the affected community. Any shipment satisfying all relevant laws and regulations must be allowed free passage otherwise any group could paralyse transportation of all commodities.
- For measuring community acceptance, the TFs demonstrated how not to conduct a referendum.
- Inherent in the voluntarism approach is community acceptance: without acceptance the community would not bid for the facility.
- The NWMO will have to be careful not to usurp the authority of the jurisdiction in which the facility is to be located. An elected body may wish to gauge acceptance but it does not have to before entering into an agreement.
- Since access to required information is necessary for demonstrating fairness, the TFs experience is relevant. There is a need for a process to supply responses to the community's questions and concerns expeditiously. Deep River's Community Liaison Group (CLG) experienced frustrations in obtaining such responses from the TFs' Head Office. In general, the TFs supplied plenty of detailed technical documentation that was of little interest to the public, but little on the social aspects that were of concern, and this only late in the process. The process should include means of ensuring that any comments or criticisms receive a response.
- The means of balancing social acceptability with other factors is inherent in the voluntarism approach and, importantly, the balance is decided by the community itself not some remote bureaucracy.

Q.4 Who should be involved?

- Initially, all Canadian communities should be involved in that they should be made aware of the possibility for their further involvement.
- Before making any public announcement the NWMO should develop and publish *technical* siting criteria so that communities could judge their eligibility. Some criteria would exclude sites absolutely, e.g., existing urban areas, sacred areas,

- and these criteria should be identified. For other criteria, e.g., amount of permeability in the rock, distance from a waterway, the assessment will be a matter of degree. It should be made clear that perfection is not required in these criteria: there is adequate defence-in-depth in the process.
- At a later stage, the NWMO must be adequately prepared before it makes *any* identification of a specific site for *any* purpose, including academic research. In past instances a combination of fear of anything nuclear, NIMBY (Not In My BackYard) and opposition by special interest groups opposed to nuclear energy has resulted in people's opinions being formed before they had adequate knowledge of the proposal. An essential component of the preparation would be a generic information package that would include:
 - A description of the proposed facility
 - An explanation of the siting process
 - A summary of the risk analysis
 - A proposed program for monitoring risks
 - A balance sheet for the costs and benefits for the host community
 - An explanation of "mitigation" and "compensation" and illustrative examples of each
 - A generic, "boiler plate" or illustrative, agreement between the community and the NWMO.
 - The NWMO should ensure that the package is sent to council members, media and other opinion-makers in any potentially affected community. Beyond that it should be readily available within the community.
 - When there is a short list of potential communities the NWMO should establish a presence in each community, possibly by a walk-in store-front office but with the capacity for outreach to surrounding communities.
 - An essential component of this presence is a champion for the project, whole- or part-time. In the past, e.g., the TFs, opponents to the proposal were active but there was nobody responsible for advocating and defending the proposal. The CLG was responsible for representing the TFs to the community and *vice versa* but was required to remain neutral. Now the NWMO is the proponent and must act accordingly including actively championing the proposal.
 - A willingness to respond to questions expeditiously and in a manner that is suited to the questioner would help to develop trust. The NWMO might consider providing space in the store-front office for critics of the project to display their literature.
 - If there is any intention to convene CLGs, as for the TFs, very careful thought should be given to their mandate, which community they represent and whether they are elected, appointed or invited.
 - An issue that has been avoided so far could affect how the community regards the proposal: the long-term future of the proposed site. It is possible, not guaranteed, that if it were decided to recycle nuclear fuel the site could become the centre for this activity involving chemical processing and fuel fabrication. This could reduce any fear of the site becoming a ghost town.
 - The extended time-scale for the project is potentially a major benefit for the community. A schedule should be drawn up of when various professions, trades

and other workers will be required and provisions made for people within the community and its surroundings to be trained in time to fill these positions.

Q.5 What would facilitate participation?

- The experience of the TFs in Deep River shows how the various risks, benefits and other impacts can be balanced *by the community itself* in a Community Agreement-in-Principle (CAP). As the result of negotiations the CAP was agreed between the Deep River Council and the TF Chair, appointed by the federal minister of Natural Resources. However, the minister failed to endorse and implement the agreement within the period stated in the CAP. One lesson is that before negotiations start the parties must ensure that they have a mandate to implement any agreement.
- For ensuring the integrity of the process, and hence promoting trust in it, the Ontario Nuclear Safety Review, Chair the late F. Kenneth Hare, can serve as a model. Before the review was initiated the proposed process was examined by an independent committee appointed by the Royal Society of Canada at Hare's request. A draft of the final report was reviewed by an independent committee of international experts, again at Hare's request.
- Making information available and accessible is important but at least as important is ensuring that the information is reliable. In the first phase of NWMO activities it published on its website, thereby implicitly endorsing, many Background Papers. However, much in these papers was challenged in subsequent Submissions published on the website without the NWMO making any apparent attempt to resolve the differences. As part of obtaining trust in what the NWMO says it should provide some means of ensuring that such differences are resolved and that it stands behind anything it publishes or, at least, shows clearly where there is disagreement.

Q. 6 What else?

- As already argued, publishing siting criteria should be a priority, not left to "Do Next".
- The NWMO report and these comments implicitly assume the existence of a "community". However in the general area of some potential sites there may be no identifiable community. How would the NWMO deal with this situation?
- In approaching any potentially affected community the NWMO should undertake to conduct base-line monitoring of health and environment to provide reassurance that any future changes are not due to the NWMO's activities.
- There should be discussion of whether the NWMO should remain a small organization managing contracts or develop into a self-sufficient operating organization.

Appendix

LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT TASK FORCE

AN ATTEMPT TO LEARN USEFUL LESSONS FROM DEEP RIVER'S EXPERIENCE

The process to find a site for the low-level radioactive waste from the Port Hope area is in serious trouble. From the original 26 potential volunteer communities only one, Deep River, remained in 1994. In October of that year, only the Mayor's casting vote prevented its council from withdrawing too. All 12 members of the local community liaison group (CLG), as well as the local staff member of the siting task force (STF), had resigned en bloc, citing problems with the process, just before the vote. Several neighbouring communities voted 80% against receiving the wastes in Deep River in referenda associated with the 1994 municipal elections.

Despite this setback, the process still remains the most promising approach to overcoming the NIMBY syndrome in the disposal of hazardous wastes. This document is therefore an attempt, first, to learn lessons from this experience and, second, to suggest how to improve the process in future applications, in particular the proposed disposal of nuclear fuel wastes as described in Atomic Energy of Canada Limited's (AECL) Environmental Impact Statement (Report AECL-IO721 of 1994).

1 CAUSES INHERENT IN THE PROCESS

1.1 The praiseworthy objective of having the process directed by an impartial and independent body inevitably resulted in a relatively inexperienced and weak management. A few individuals drawn from their regular positions in the federal government were made responsible for the day-to-day management. This resulted in the process being highly dependent on contractors with their own priorities. Policy oversight was provided by a board consisting of part-time members. The STF as a whole, board and staff, was not part of a large organization that would provide the experience, organization, commitment, accountability and corporate memory necessary for success. Over the nearly a decade of the process there has been inevitable turn-over of personnel, resulting in loss of invested experience.

1.2 The process provides for no proponent or champion for disposal in the volunteer community to balance the opponents that come out for any such proposal. The Government of Canada is the body seeking a solution to the problem but neither it nor its two agencies concerned in the process championed any proposal. The STF stated that it could not act as a proponent: its terms of reference consist of six actions but do not include the objective of securing a disposal site. The mandate of the CLG is to be a neutral, two-way conduit for information between its public in the community and the STF. AECL, with a mandate to develop and demonstrate the safe disposal of nuclear wastes, maintained an aloof stance with respect to the process for whatever reason. Deep River's Economic Development Committee and Officer, with a declared objective of attracting industry, were invisible.

1.3 While the holding of a referendum, by inviting public participation, is a positive aspect of the process. In our political system a referendum within the process is not binding on the local government and one local council cannot commit its successor. Furthermore, there is no assurance in the process that the federal government, which would have to provide the funds for any agreement with the community, would be bound by the outcome of a referendum or of a council decision; or would honour any agreement reached in negotiating mitigation, compensation and benefits. In a process lasting

nearly a decade, two federal lifetimes and three municipal ones, this lack of political commitment is serious.

1.4 The process assigns decision-making and veto-power to only the municipality within which the disposal site might be located, regarding that as the "volunteer community". In Deep River potential sites were much closer to neighbouring jurisdictions than to Deep River's own population, giving rise to objections from those jurisdictions. At the instigation of the CLG and Deep River Council, not the STF that was responsible for administering the process, representation on the CLG and the roll of those eligible to vote in the referendum was expanded to include those immediately adjacent to the potential sites. However this did not satisfy neighbouring jurisdictions within a radius of approximately 50 km, that considered themselves to be potentially affected. Also, the interests of communities along the transportation route were not addressed.

1.5 The process fails to recognize that most people form their opinions on public issues at an early stage before enough information is available for what experts would regard as an informed decision. These early opinions are largely derived from existing mindsets and messages conveyed by the media. Once opinions are formed it is very difficult to change them: new information is either used to reinforce them, or is rejected. As a result of this and the lack of balance in available information (2.4 below) many people had decided at a relatively early stage to vote against the proposal, and so were unreceptive to new information available through the CLG.

2. AVOIDABLE CAUSES IN APPLICATION OF THE PROCESS

2.1 In Deep River there is a widespread perception of a waste of public funds, both in needlessly transporting near-harmless soil hundreds of kilometres and in the process itself. The STF eventually put out a report purporting to show that "a Deep River solution . . . could be less expensive than some alternatives in the source communities" but by then most minds were made up (1.5), and the report received little attention. The repugnance to wasting public funds is exacerbated by the fact that the whole process stemmed from an election promise by Brian Mulroney to the riding that includes Port Hope that the wastes would be moved out of their area. seen as buying votes with our own money

2.2 There is a lack of confidence that the various jurisdictions involved would respect the outcome of the proposed referendum. This is partly due to the inherent lack of political commitment (1.3) but also to the fact that an earlier opinion poll, at the end of Phase 3, was bungled. Because of inadequacies in the process (7% voted to continue the process, 13% voted against and 80% did not vote for one reason or another) the Deep River Council decided to ignore the result and to proceed to Phase 4. Fears are being expressed that a "No" vote might be overruled, even for a rigorously conducted referendum. This is one example of a more general problem - a lack of trust in the various bodies involved.

2.3 There is general antagonism in neighbouring communities to Deep River receiving the wastes, as evidenced by referenda held in conjunction with municipal elections in 1994 and in the proceedings of the Renfrew County Council. Many Deep River residents are reluctant to sacrifice good neighbourly relations for the sake of only marginal perceived benefits.

2.4 Underlying the previous cause (2.3), for both Deep River and the neighbouring jurisdictions, is a perception that the proposal involves all risk and no benefit. It is a simple fact that traffic, by rail and/or road, would be increased so that the associated risk would be increased by a finite amount. Recent traffic accidents along Highway 17, and on VIA Rail, have been well publicized. It is also a fact that there is a finite possibility of radioactive and non-radioactive pollutants from the wastes being released to the environment. To some people any amount of radiation, however small, is absolutely unacceptable. The opposition to the proposal, because of the increased risks from traffic and pollutants, however small, is particularly and understandably strong among mothers of young children. (It is ironic that pro- and anti-nuclear factions are united in opposing the disposal of the wastes in Deep River, the former because the wastes pose such a small

risk that their long-distance transport is unjustified (2.1) and the latter because they pose such a large and dreaded risk that their presence is unacceptable under any conditions.) There is recognition that the proposal would result in some jobs, but these would be mainly short-term and therefore disruptive to the community. The root cause of this lack of balance between perceived risk and benefit is that relevant information to the CLG, and hence to the public, has been too little and too late. At the end of 1994 the proposed traffic route was still unknown; the preferred site and engineering design were still unknown, hence the predicted health effects were still unknown; the proposed mitigation measures were still unknown; and the proposed benefits package was still unknown. Under these circumstances, and considering the lack of trust in the bodies involved (2.2), it is surprising that anyone favours the proposal.

2.5 In contrast to the innovative feature of voluntarism claimed for the process, the actual process has increasingly reverted to the old and discredited decide-announce-convince formula. The STF concentrated its attentions and resources on technical factors, e.g. geology, engineering and pathways analysis, at the expense of social factors, e.g., public communications, mitigation, remediation, compliance, monitoring and compensation.

2.6 Because of the absence of a proponent (1.2) and the presence of opponents (2.4) the CLG has been put in the position of appearing to favour the proposal when it is simply presenting neutral facts. The STF has been virtually invisible in the community but, to the extent that it is considered at all, it is regarded as part of a remote government bureaucracy that is the source of the problem in the first place. The public is largely unaware of the extent to which the CLG has tried on its behalf to obtain from the STF the information needed in a timely manner. All this has contributed to the lack of trust in the bodies concerned (2.2).

3. SUGGESTED REMEDIES

The items in this section are indexed to the causes identified in previous sections that they are intended to answer.

1.1 On the assumption that the current FEARO Panel endorses AECL's proposed concept for the disposal of nuclear fuel wastes, the federal government should designate an implementing organization (IO) with a mission to dispose of the wastes. An essential preliminary is that the federal government, not the IO, reach agreement with the owners of the wastes on terms of reference and funding arrangements for the IO. There are strong arguments for the IO being a distinct operating company, comparable to AECL CANDU, under the AECL corporate umbrella. However, this would be secondary to the IO being a strong organization, committed to the public-participation aspects of the siting process, able to draw on multidisciplinary R&D support, and accountable for delivering a solution. See also 2.5.

1.2 Remedy 1.1 would address the need for a champion.

1.3 To improve public confidence in the process, the IO should clarify the legal position at the onset; each relevant level of government should provide such undertakings as are legally possible; and all involved should shorten the process as much as possible.

1.4 The question of what constitutes the affected community is a difficult one that deserves serious discussion. As an opening bid, a radius of 25 km might be proposed, but this could vary between Central and Northern Ontario, and could vary for different purposes.

1.5 To help prevent conclusions being drawn precipitately, the IO should prepare a generic proposal for the consideration of a potential host community, including reasonably typical estimates of the risks and benefits, possible forms of mitigation and a compensation package likely to appeal to potential host communities. This should be available before any approach is made to specific communities and, ideally, before the siting process is announced publicly. While such a generic proposal would not be perfectly suited to any community, it would be better than the alternative, a vacuum.

2.1 The generic proposal (1.5) should include cost estimates for several broad geographic locations, and should indicate what, if any, benefits would accrue from the higher cost locations.

2.2 Apart from the measures to increase public confidence in governments proposed in 1.3, any referendum must be very carefully planned and managed.

2.3 To avoid causing intercommunity antagonisms the negotiation for benefits and the compensation package should ensure that these are attractive beyond the host community on a narrowly legal definition. Ideally, the attractiveness should extend to all communities that perceive themselves to be subject to the risks. The possibility of having zones of different radius for different purposes has been raised in 1.4. The need for surrounding communities to learn the positive as well as negative aspects from the start should be recognized in preparing the generic proposal (1.4 & 2.1).

2.4 A generic proposal that sets out both positive and negative aspects (2.3) would help to counter opposition within the potential host community as well as in surrounding communities.

2.5 The IO must be, and remain, committed to the voluntarism principle. This involves the IO maintaining control over its scientific and engineering staff that may, by reason of their training and culture, favour a more technocratic approach. (Some professional codes of ethics require the practitioners to do what is best for their clients, which can be interpreted as requiring them to ignore public perceptions where these differ from their own assessments.) This measure is just one aspect of the first requirement (1.1), that the IO have strong, competent management.

2.6 The replacement of an STF by an IO with a clear mandate to act as proponent for the proposal would avoid some past confusion in the public's mind. However, there would still be a need for local CLGs and their role deserves further discussion. The objective should be to have the affected communities (see 1.4) feel that their CLGs truly represent them. Direct election, to replace nomination by elected councils, is a possibility. Constitution of a CLG as a committee of council would encourage the council to take a greater interest in the process but would exclude surrounding communities. Having councilors from all affected communities on the CLG might be an acceptable compromise but would impose an additional burden on busy councilors.

4 BROAD CONCLUSIONS

In applying the siting process to nuclear fuel wastes, many of the difficulties experienced in the low-level radioactive-wastes program could be avoided by adopting two major measures:

1. A strong and competent Implementing Organization with a mission to dispose of the wastes safely and responsibly should be established
2. The Implementing Organization should prepare a generic proposal before approaching the public.

Further discussion is desirable on the definition of affected communities (1.4) and the role of CLGs (2.6), preferably while recent experience is still fresh in people's minds.

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