

conduct their work in an environment that is conducive to the scientific method, i.e. one in which they can expect the greatest reward for showing the problems and weaknesses in any proposed disposal concept or plan.⁽⁴⁹⁾

The Committee considers there is something to be said for this suggestion. However, as L.W. Shemilt, Chairman of the Technical Advisory Committee (TAC) on the Canadian Nuclear Fuel Waste Management Program (CNFWMP) stated clearly, AECL may be the leading force in the Program, but outside participation is very important. The Geological Survey of Canada, the Canadian Centre for Mineral and Energy Technology (CANMET), Environment Canada, Ontario Hydro, *Hydro-Québec*, the private industrial sector and more than a dozen universities are also carrying out independent research connected with the research program.⁽⁵⁰⁾ Like TAC, the Committee does not question the good faith of the people in charge of the CNFWMP. Furthermore, since the Program will very shortly be the subject of an evaluation by an environmental assessment panel and by the AECB, the Committee considers that it would be more appropriate to concentrate on ensuring that the membership and functioning of those two bodies are well-suited to making informed decisions on the management of high-level radioactive waste.

B. The Technical Advisory Committee on the Canadian Nuclear Fuel Waste Management Program

The Technical Advisory Committee on the CNFWMP, which is responsible for advising AECL, was set up in 1979 following recommendations of government reports and suggestions from certain sectors of the scientific community. Its members are chosen from a list of candidates submitted by the main scientific and technical societies and associations in Canada. Currently it has 13 members representing a range of disciplines.

TAC's purpose is to serve as an independent review committee advising AECL on the scope and quality of the CNFWMP. Its responsibility, therefore, is to review the content of the proposed research projects and their scientific methodology, ensure that the best available technology is being applied to the program, review program results and ensure that the conclusions drawn are valid within the limits claimed, and make recommendations on any specific areas of work for which research should be undertaken, either by existing staff or through research contracts. TAC's annual reports, and its work generally, are oriented along four major research axes:

- engineering of the multiple barriers;
- geoscience research;
- environmental research; and
- environmental and safety assessment.

In its annual report of 1986, TAC presents an assessment of the work currently underway at the Underground Research Laboratory. In summary, it concludes that the experimental construction phase was well designed and flawlessly carried out. On the other hand, it recognizes that the choice of a means of estimating the possible effects of a leak of radionuclides, the establishment of an acceptable criterion for judging those effects, and the whole question of risk, pose problems that will be particularly difficult to solve. It recommends that the general public be helped and encouraged to participate in the concept

⁽⁴⁹⁾ *Ibid.*, p. 8.

⁽⁵⁰⁾ L.W. Shemilt, Technical Advisory Committee on the Canadian Nuclear Fuel Waste Management Program, Issue No. 6, February 2, 1987, p. 34.