

August 29, 2003

Mr. Vincent Langman
AECL Technologies, Inc.
481 North Frederick Ave. Suite 405
Gaithersburg, MD 20878

Dear Mr. Langman:

The U.S. NRC is embarking on a number of activities to support the pre-application and anticipated Design Certification of the Advanced CANDU Reactor (ACR-700). Among the first of these is a process called Phenomena Identification and Ranking Technique (PIRT), which forms the basis for subsequent review activities. It is used to provide guidance to assess the adequacy of the experimental data base, code modeling requirements and code validation and assessment.

The PIRT is developed using a panel of experts. The objective is to identify potentially important safety issues, and technical basis for resolution of such issues as they apply to the ACR-700 design, and to ensure a sufficient experimental data base and applicable, validated, assessed analysis tools. The Office of Research will develop data, tools, and methods to allow the staff to independently assess advanced reactor safety margins, and to evaluate reactor safety analyses submitted by Atomic Energy of Canada Limited. This includes thermal hydraulic, nuclear, and severe accident and source term analysis.

To assist this effort, we would like to involve experts from AECL to share their expertise on CANDU reactors and ACR-700 in particular. Please identify experts who can make presentations in the area of interest. We expect to hold several meetings (~4) over the next nine months, and will provide details to the designated experts.

Sincerely,

/RA/

Farouk Eltawila, Director
Division of Systems Analysis and Regulatory Effectiveness
Office of Nuclear Regulatory Research

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