



NEUTRON TECHNOLOGY CORPORATION

877 Main Street, #600
Boise, ID 83702
Tel: (208) 336-8466
Fax: (208) 336-8669

DOCKETED
USNRC

75 14th Street #4010
Atlanta, GA 30309
Tel: (404) 870-6464
Fax: (404) 870-6465

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

DOCKET NUMBER
PROD. & UTIL. FAC. 50-160-REN

January 24, 1995

Dr. Charles Bechhoefer
Chairman, Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
ASLBP T3-E15
Washington, DC 20555

Dear Dr. Bechhoefer:

The purpose of this letter is to (1) request in writing the opportunity to speak during the pre-hearing conference concerning re-licensing of the Georgia Tech Research Reactor scheduled for January 31-February 2 and (2) to outline in writing my interest in the facility.

On the latter point, my company, Neutron Technology Corporation, has been working with Georgia Tech for three years in an effort to utilize the Georgia Tech Research Reactor for a particular cancer treatment called Boron Neutron Capture Therapy (BNCT). BNCT is a two-part treatment involving (1) the selective delivery of a non-toxic, non-radioactive boron compound to the tumor site, followed by (2) the delivery of neutrons to the boron-loaded tumor. The resulting "boron-neutron capture event" produces a very powerful and precise radioactive dose generated from within the tumor cell with little, if any, damage to surrounding healthy tissues.

The initial BNCT target is a particularly aggressive type of brain tumor called *glioblastoma multiforme* (GBM). GBM's were chosen because there is no other effective treatment available, and because we already have a technology to selectively deliver boron to these tumors. (Boron delivery techniques are in development for other solid tumor types.) Not only are these tumors routinely fatal, but they grow very rapidly. The average survival rate upon diagnosis of a GBM is around 11 months. The best available conventional therapies--including surgery, radiation, chemotherapy, or any combination thereof--do very little to improve that prognosis and may, in fact, reduce the quality of life for the patient during the little time they have left. If you have ever had any experience with a GBM through a friend or family member, then you know that this is a devastating diagnosis that comes on suddenly and acts very quickly.

The major obstacle to implementing a BNCT treatment for brain cancer is securing access to an adequate neutron source. With existing technology, the only available source of neutrons is from a nuclear reactor. However, only a handful of reactors around the world are suitable for BNCT. One of the very best--in terms of neutron energy, flux, and minimization of contaminants--is the Georgia Tech Research Reactor (GTRR) which was originally designed and built with nuclear medicine as an objective. The GTRR facility actually has a built-in treatment room adjacent to the reactor shell.

9502090058 950124
PDR ADDCK 05000160
G PDR

D503

Our company conducted a worldwide search for a neutron source and determined that the GTRR facility is **uniquely suited** for this application. Nowhere else is there an adequate, accessible, and economically practical neutron source convenient to state-of-the-art healthcare facilities and an international transportation network.

Dr. Bechhoefer, I am not a nuclear engineer. I am an entrepreneur and a businessman trying to address a pressing medical need. So, while I am not qualified to make any detailed comment on technical aspects of the reactor (although others in my company are so qualified), I can assure you that there is just cause to continue to make this reactor available. I have read the materials that precipitated this pre-hearing, and I take issue with the assertion that "there is absolutely no reason whatsoever to keep the reactor open/going." As I have just described to you, that statement is inaccurate, to say the least. The GTRR is a one-of-a-kind in the world facility that holds great promise as a research and treatment center for otherwise terminal cancers including glioblastoma multiforme and potentially for other cancers as well. As anyone who has lost a loved one to this insidious disease will agree, there is every reason in the world to re-license this facility.

I look forward to seeing you on the 31st.

Sincerely,

A handwritten signature in dark ink, appearing to read "M. Pearce Gilbert", written in a cursive style.

M. Pearce Gilbert
Director, Georgia BNCT Project

cc: Docketing and Service Branch, Secretary of USNRC ✓