Forschungszentrum Karlsruhe Technik und Umwelt

Institut für Nukleare Entsorgungstechnik

Director: Prof. Dr. J.I. Kim

email:

Forschungszentrum Karlsruhe GmbH, P.O.Box 3640, D-76021 Karlsruhe

Dr. Robert J. Lemire **AECL Research** Whiteshell Laboratories

Pinawa, Minitoba R0E 1L0 Canada

Date: 15.10.99

Persons in charge: Dr. Thomas Fanghänel

Dr. Volker Neck

Phone: +49 7247 82 5485 / 2592 +49 7247 82 4308 Fax:

> thomas@ine.fzk.de neck@ine.fzk.de

NEA TDB review: Chemical Thermodynamics of Neptunium and Plutonium (draft of **September 16, 1999)**

Dear Dr. Lemire,

as members of the review team in the NEA-TDBII project we recently got access to the draft of the Np/Pu volume. First we were impressed by the tremendous work the reviewers have carried out to assess the thermodynamic data of Np and Pu. However, when we took a closer look we were shocked about the obvious and impertinent attempt of one of the reviewers (we have strong indications that this reviewer is P. Vitorge) to discredit our work on aqueous chemistry and thermodynamics of Np(V). Besides substantially erroneous conclusions, these parts of the review represent inadequate review work including numerous mistakes. Further, they contain misquotations, incorrect abstruse statements, and even untruths, which suggest to the reader that all data and publications which were carried out in Prof. Kim's laboratories in Munich and Karlsruhe (the reviewer refers to "Kim's group") during the last decade are useless for the scientific community and of very low scientific quality. Some striking examples are documented in the attached comments. Working out more in detail numerous other examples would require more time. As we know about the planned time schedule for the publication of this volume, we have decided to inform you immediately about this attempt to abuse the NEA-TDB project.

A major revision of these parts, by another expert, appears to be urgently necessary in order to prevent the whole review team involved in this book or even the whole NEA-TDB project

from being brought into discredit. Of course we know that this will cause a further delay of the publication, but it is not at all convenient to do all the necessary revisions in the NEA-TDBII project.

So far the NEA-TDB has a high reputation in the scientific community. It is accepted as the most important and most reliable database on thermodynamics of actinides. Therefore an enormous responsibility is burdened on the shoulders of the review team for a high quality thermodynamic database on Np and Pu. We are convinced that you together with your review team, the management board of the NEA-TDB project and the NEA team will take action to keep the standards of NEA-TDB and to prevent the misuse of the NEA TDB as a platform for personal animosities.

A soon answer in this matter is highly appreciated.

Sincerely

Volker Neck

Thomas Fanghänel

Enclosure

cc Mehdi Askarieh (Chairman of the Management Board of the OECD/NEA TDB Project)

Kastriot Spahiu, Cynthia Palmer, Jordi Bruno, Hans Wanner (Members of the Executive Group of the OECD/NEA TDB Project)

Eric Östhols (OECD/NEA TDB Project Coordinator)

Jean Fuger, Heino Nitsche, Paul Potter, Malcom Rand, Jan Rydberg, James Sullivan, William Ullman, Pierre Vitorge (Members of the review team)

Ingmar Grenthe, Robert Guillaumont