[DOE LETTERHEAD]

May 7, 1997

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW
Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

This letter is in response to your April 2, 1997, letter to former Under Secretary Grumbly which transmitted comments on the February 1997 draft, revision 1, "Radiation Protection Qualification Standard" for Defense Nuclear Facilities Technical Personnel.

As indicated in the Department's initial response of April 17, 1997, the comments provided were reviewed with your staff and would be incorporated as appropriate. The Department's response to the Board's comments is enclosed.

Upon concurrence by the Technical Personnel Program Coordinator, the revised "Radiation Protection Qualification Standard" will be issued formally by the Technical Excellence Executive Committee.

Sincerely,

Tara O'Toole, M.D., M.P.H.
Assistant Secretary
Environment, Safety and Health

Enclosure

cc: J. Fitzgerald, Jr., EH-5
M. Whitaker, S-3.1
T. Evans, HR-1.5

Enclosure

Comments from the Defense Nuclear Facilities Safety Board (Board) on
"Radiation Protection Qualification Standard for Defense Nuclear
Facilities Technical Personnel," Revision 1,
with Department of Energy Responses

Board Comment

"The February 1997 version of the draft qualification standard is an improvement over the December 1995 version. The competencies that have been identified, coupled with their supporting knowledge and skills, provide a better basis for training of DOE Federal Radiation Protection staff than was previously available. The Board staff believes that some portions of the draft standard deserve further attention before final approval by DOE, and the following suggestions are provided:"

Response: Comment noted on the improvement over the 1995 version.

Board General Comments

- "The basis on which competency is to be determined is not clearly specified, since supporting knowledge and/or skills statements are not requirements. There is no baseline standard for DOE Headquarters and Field elements to use in establishing a program and process that ensures all applicable personnel meet the desired level of competency. Therefore, this standard is subjective and may not support effective and consistent implementation. DOE Order 360.1, which serves as the driver for implementing this qualification standard, provides no guidance beyond stating that Headquarters and Field elements must establish a program and process to ensure personnel meet competency requirements. Some provision for implementing guidance would be appropriate."

  Response: The competency determination is properly the responsibility of Department of Energy management. The guidance provided in Department of Energy Order 360.1, "Training." is broad to allow line management to incorporate the Technical Qualification Program within their existing framework for training. To assist management in this determination, the following actions have been taken:
  - The Technical Personnel Program Coordinator provided guidance in two memorandums to the Technical Personnel Coordinating Committee on November 20, 1995, and December 12, 1995, on the granting of equivalencies.
  - The background and experience section of the radiation protection qualification-standard now contains guidance that the American Board of Health Physics certification examination, part 1, and the National Registry of Radiation Protection Technologists certification may serve as the basis for equivalency for competencies 1.1 through 1.5 in the general technical section of the standard.
- "There are no practical factors or performance demonstrations using radiation protection processes and equipment that must be accomplished under this Qualification Standard. DOE radiation protection personnel should have adequate hands-on experience with available technology and related processes (e.g.,survey and monitoring, contamination control, application of principles of ALARA for work planning and personnel protection). This qualification is particularly necessary if individuals at DOE field elements are to perform effectively their responsibilities and functions related to "apprais[ing] facilities, procedures, and operations to determine their adequacy to protect the workers and members of the general public from the effects of ionizing radiation." If a program is to be effective in raising the technical competence and experience level of radiation protection personnel, it must include (at some point) demonstrations of such practical experience."

Response: Practical factors or performance demonstrations using radiation protection processes and equipment are essential elements of an effective qualification program and are necessary for individuals to conduct appraisals. However, it is our approach that except for those "demonstrate the ability" competencies in functional area qualification standards with Department-wide applicability, practical factors and performance demonstrations are predominantly addressed in the office/facility-specific qualification standards. Wording to this effect has been incorporated into the radiation protection qualification standard. Other functional area qualification standards will also be changed as part of a Department-wide change to the Technical Qualification Program.

Board Specific Comments

- "There are no references to nuclear explosive or nuclear weapons operations related to safety management. The following change would address this omission:

  Paragraph 2.5: Add DOE Order 452.1, *Nuclear Explosive and Weapon Surety Program*, and DOE Order 452.2, *Safety of Nuclear Explosive Operations*,"

  Response: Department of Energy Order 452.1A (dated January 17, 1997) does not reference radiation protection, and Department of Energy Order 452.2A (dated January 17, 1997) references Title 10, Code of Federal Regulations, Part 835 in Section 4.h., "Occupational Safety and Health Program." Title 10, Code of Federal Regulations, part 835 has been appropriately covered in competency 2.1 of the standard.

  However, nuclear explosive operations have been added to the list in competency 1.9. Any more detailed facility-specific topics related to radiation protection and nuclear weapons are better addressed in the respective office/facility-specific qualification standards.

- "The need for radiation protection personnel to demonstrate a level of knowledge of industry standards associated with radiation-generating devices, included in the December 1995 version (Section 2.3), also was not carried over in this version. An appropriate place for this criterion would be in Section 2.1 on the radiation protection system, since a 10 Code of Federal Regulation (CFR) 835 Implementation Guide exists on radiation-generating devices (see 10 CFR 835/C3)."

  Response: Radiation-generating device control program requirements as discussed in Implementation Guide title 10, Code of Federal Regulations, part 835/C3, which references codes of Federal regulations and industry standards, has been added as new competency 2.12.