

August 10, 2005

U.S. Nuclear Regulatory Commission
ATTN: Mr. Thomas Essig, Chief
Materials Safety and Inspection Branch (MS T8F3)
11545 Rockville Pike
Rockville, MD 20852

**Re: Request for Recognized Status for the American Board of
Radiology (ABR) in Diagnostic Radiology**

Dear Mr. Essig:

We are writing on behalf of the American Board of Radiology (ABR) to apply for NRC recognition of our diplomates under the board recognition provisions in the revised Training and Experience (T&E) requirements of 10CFR Part 35. We are applying for recognition of our Diagnostic Radiology diplomates under the requirements of sections 35.290 and 35.392 (oral administration of I-131 in quantities $\leq 33\text{mCi}$). The ABR instructions to Program Directors can be found under the Diagnostic Radiology heading on the ABR website (www.theabr.org).

The ABR examines approximately 1000 candidates each year in Diagnostic Radiology. Diagnostic Radiology candidates will complete the 700 hours of required T&E by having four 4-week clinical rotations on Nuclear Medicine in ACGME-approved Diagnostic Radiology residency programs. Candidates also will receive didactic instruction in the topics cited in 35.290 and 35.392. Some of the didactic instruction may occur while the candidates are on the clinical rotations in nuclear medicine, and some may occur at other times within the overall 4-year training program in Diagnostic Radiology. Candidates will complete procedure logs related to their participation in I-131 therapy (35.392) and the compliance of their overall training with NRC requirements will be attested to by training program directors prior to their admission to the ABR examination.

The candidates' mastery of the relevant areas of training will be assessed first by a nationally standardized written examination developed annually and administered regionally by the ABR. One part of the written exam consists of approximately 130 multiple choice questions on physics, radiation science and safety that candidates must complete within four hours. Questions relative to radionuclide science and safety typically constitute approximately 11% of this physics/radiation science/safety written examination. Questions on other types of radiation science

and related safety issues bring the total proportion of such questions in this examination to approximately 20%. The second portion of the written exam contains 220-230 single answer multiple choice questions that are clinical in nature for which the candidates also are allowed a 4-hour completion time. If candidates pass both parts of the written examination, they become eligible to take an oral examination that must be passed to achieve ABR certification.

The 10-section oral examination is taken at the end of the 4-year training period. One section of this examination is devoted to applications of radionuclides to clinical diagnostics, i.e., nuclear medicine. The other sections focus on various other subsets of Diagnostic Radiology (e.g., chest radiology, neuroradiology, etc). The oral examination in nuclear medicine emphasizes safe and effective applications of various radionuclide clinical studies and tests the candidates' knowledge by presenting unknown cases and situations that the candidates must discuss. Like the written examination cited in the previous paragraph, this examination is developed annually. It is administered by the ABR in a single midwestern locale, and is standardized and psychometrically validated annually. Quality control and safety issues are incorporated into the nuclear medicine cases that are presented. Typically, two of the 8-10 cases that a candidate might be presented will focus on safety and quality issues, but these issues may be raised in the questioning or discussion of any case. The nuclear medicine section and all other sections of the oral examination must be passed for the candidate to become a diplomate of the ABR.

There is no cross-over between this Diagnostic Radiology examination and the examinations that are given by the ABR for radiation oncologists or physicists. The NRC approval for these other examinations will be addressed in separate letters from the ABR. We hope that the NRC will consider and approve each of these ABR areas independently for inclusion on the NRC website.

The ABR has certified candidates in areas related to nuclear medicine since nuclear medicine became relevant clinically in the 1950s – 60s (the ABR was formed in 1935). ABR diplomates have an excellent safety record over the years in the administration and control of radionuclides used for medical purposes. Accordingly, we hope that the ABR will continue to be designated as an approved Board by the NRC. We hope to hear back promptly any comments or concerns that the NRC might have.

Sincerely,



Philip O. Alderson, MD
President-Elect



Robert R. Hattery, MD
Executive Director