

OFFICE OF NUCLEAR REACTOR REGULATION
REQUEST FOR ADDITIONAL INFORMATION
REGARDING FINANCIAL QUALIFICATIONS FOR THE RENEWED LICENSE FOR
THE DOW CHEMICAL COMPANY TRIGA RESEARCH REACTOR
LICENSE NO. R-108; DOCKET NO. 50-264

The Request for Additional Information (RAI) provided is in response to the Dow Chemical Company's (Dow) Application for License Renewal dated April 1, 2009, and supplements to the application dated December 7, 2010, and April 4, 2011.

RAI 1: Contents of applications:

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.33, certain information is required by the applicant, as applicable. Within its application and supplements to its application, Dow provided the names, addresses and citizenship of Dow's directors and principal officers, but did not provide a diagram of its organizational structure.

- a) Please provide a diagram of the organizational structure of Dow, including its subsidiaries. Also, state if any of the directors and principal officers of Dow's subsidiaries are not citizens of the United States and, if so, provide their names, addresses, and citizenship.

RAI 2: Foreign ownership, control, or domination:

Sections 103d and 104d of the Act provide, in relevant part, that:

No license may be issued to any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation or a foreign government. In any event, no license may be issued to any person within the United States if, in the opinion of the Commission, the issue of a license to such person would be inimical to the common defense and security or to the health and safety of the public.

Section 50.38 of 10 CFR implements this statutory prohibition.

a) []

[] Please provide information explaining how the Chairman and CEO, a non-U.S. citizen, will be excluded from having decision-making authority over the Dow Chemical TRIGA Research Reactor (DTRR) and special nuclear materials.

- b) By letter dated December 7, 2010, supplement to the application, it was stated that "Physical access to the reactor and [SNM] is restricted to [United States] citizens." Physical Security is discussed, planned and approved with individuals on the Reactor Operations Committee. The Reactor Operations Committee is restricted to [United States] citizens. Please identify to whom the Reactor Operations Committee, which is comprised of citizens of the U.S., reports within the Organizational Chart included in the April 4, 2011, submittal. If the individual(s) are not included within the Organizational Chart, please provide the names, addresses, and citizenship of those who have managerial, financial, or staffing authority over the Reactor Operations Committee.

RAI 3: Financial Assurance:

Under 10 CFR 50.75(e)(1)(iii)(1): [T]he surety or insurance must . . . provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture.

In your application, you state "[i]t is currently providing the funds necessary for the operation and for the eventual decommissioning of the DTRR in the form of a Surety Bond." However, financial assurance is used for only radiological decommissioning and not for the operation of the DTRR.

- a) Within its December 7, 2010, supplement to the application, Dow stated that the current value of the surety bond is \$5,472,560. However, within its April 4, 2011, supplement to the application, Dow stated that the decommissioning cost estimate for the DTRR is \$5,516,000 (2011 dollars). Please state the current value of the surety bond, if different than the value stated within the December 7, 2011, supplement to the application, and Dow's plans to adjust the value of the surety bond to reflect its updated 2011 decommissioning cost estimate of \$5,516,000 for the DTRR.

RAI 4: Decommissioning cost estimate:

Under 10 CFR 50.75(d)(1), “[e]ach non-power reactor applicant for or holder of an operating license for a production or utilization facility shall submit a decommissioning report as required by §50.33 of this part.”

- a) Within the April 4, 2011, letter, the decommissioning cost estimate appears to be derived from reactors that were decommissioned four to ten years ago. Please provide comparison of decommissioning cost estimate for the DTRR to the more recent decommissioning estimates of research reactors of similar size to the DTRR.