



Department of Energy
National Nuclear Security Administration
Washington, DC 20585



APR 28, 2009

Mr. Timothy J. Dwyer
Technical Director
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W., Suite 700
Washington, D.C. 20004-2901

Dear Mr. Dwyer:

Attached for your information is the Certification Plan for the Chemistry and Metallurgy Research Replacement Project that was approved by the Administrator on April 14, 2009.

If you have any questions, please contact me or have your staff contact Patrick Rhoads at (202) 586-7859.

Sincerely,

Gerald L. Talbot, Jr.
Assistant Deputy Administrator for
Nuclear Safety and Operations

Enclosure

cc (w/enclosure):
Mark Whitaker, Jr., HS-I.I
D. Nichols, NA-2.1
J. McConnell, NA-171 M.
Thompson, NA-172 H.
LeDoux, LASO



CHEMISTRY AND METALLURGY RESEARCH REPLACEMENT (CMRR) PROJECT CONGRESSIONAL CERTIFICATION PLAN

INTRODUCTION

Title XXXI, Subtitle B, Section 3112 of the *Duncan Hunter National Defense Authorization Act for FY2009* states that “Of the amounts appropriated ... for fiscal year 2009 for [the CMRR facility project], not more than \$50,200,000 may be made available until:

1. the Administrator for Nuclear Security and the Defense Nuclear Facilities Safety Board have each submitted a certification to the congressional defense committees stating that the concerns raised by the Defense Nuclear Facilities Safety Board regarding the design of CMRR safety class systems (including ventilation systems) and seismic issues have been resolved; and
2. a period of 15 days has elapsed after both certifications under paragraph (1) have been submitted.”

PURPOSES and BACKGROUND

This plan establishes the framework by which the National Nuclear Security Administration (NNSA) intends to support certification of the resolution of the Defense Nuclear Facilities Safety Board (DNFSB or Board) concerns. The Board and the NNSA need to coordinate closely to assure their parallel processes ultimately converge. Representatives from the Board and the NNSA have met and discussed the individual processes to be used by each agency to provide the above certifications. Interactions between the organizations will be convened regularly to assure that the two certification processes, though distinct and independent, are synchronized. It is expected that neither the NNSA nor DNFSB would submit its certification without assurance that the other party is prepared to do so as well.

NNSA CERTIFICATION PROCESS OVERVIEW

NNSA intends to draw heavily upon the processes it had planned before the certification requirement was levied by Congress as means to achieve the requirement. The processes that NNSA had planned before the Congressional language was published include: contractor development of a Preliminary Documented Safety Analysis (PDSA); NNSA review of the PDSA to ensure adequate conformance to 10CFR830 Subpart B requirements and DOE-STD-1189, *Integration of Safety Into the Design Process*; issuance of a Preliminary Safety Validation Report (PSVR) in accordance with Department of Energy (DOE) STD 1104, *Review and Approval of Nuclear Facility Safety Basis Documents*, to document the NNSA review and to approve the PSVR to support Final Design Authorization; interacting with stakeholders, such as the Board and its

staff, to assure that their comments and interests are considered in the design; and performance and close-out of a Technical Independent Project Review (TIPR).

NNSA is committed to providing the Board with the project-related safety basis and technical design information the Board deems necessary to conduct its certification evaluation. The Board has agreed to provide NNSA with specific, detailed Findings based on this information and the Board staff's reviews. Board Findings are specific issues that the Board believes need to be resolved prior to Board certification. NNSA is committed to resolving the Board's Findings in an expeditious and mutually acceptable manner.

NNSA Technical Independent Project Review:

NNSA conducted a TIPR of the CMRR Project in accordance with NNSA Policy Letter BOP-50.003 to determine the CMRR Project technical readiness to start final design. The TIPR charge memorandum specifically included all documented Board CMRR concerns as identified in the Board's quarterly report to Congress. The TIPR was conducted in January/February 2009. It was an in-depth technical evaluation of the design basis for the current CMRR Nuclear Facility (NF) preliminary design. The TIPR included reviews of the project's ability to meet project performance criteria and the project's conformance with DOE-STD-1189, among other things. The results of this TIPR provide the technical justification required to document that this project is prepared to start final design. Upon receiving the TIPR final report, the CMRR project team will prepare a Corrective Action Plan (CAP) that identifies the corrective actions required to resolve the issues and concerns identified in the TIPR report. Both the TIPR report and the CAP will be provided as an input for the DNFSB's review.

PDSA and PSVR:

The project has completed version G2 of the PDSA and both NNSA and the Board have provided comments on this version. The CMRR Project team has developed and documented its intended response to each comment. In addition, the CMRR project team has identified an approach/time frame to address each comment. The PDSA NNSA review has resulted in three actions :

- 1.resolve some issues in version G3 of the PDSA to be submitted by April 15, 2009;
- 2.specify in the NNSA PSVR that resolution of the issue by some date certain is a condition of approval (COA) of version G3 of the PDSA (see below), or,
- 3.resolve the issue through the normal project action tracking process (only for comments that are not germane to the certification process).

Version G3 of the PDSA will be placed under change control. All subsequent changes/revisions to the PDSA (e.g., to resolve COAs or DNFSB findings) will be approved by NNSA in an updated PSVR.

NNSA will issue a PSVR (with all necessary COAs) approving version G3 of the PDSA by April 15, 2009. NNSA will approve all subsequent revisions of the PDSA with an updated PSVR.

The comment resolution for version G2 of the PDSA, version G3 of the PDSA, and the PSVR will all be provided to the Board as a basis for the Board's review. NNSA anticipates that any additional Board Findings regarding the PDSA or the PSVR will be captured in a DNFSB Finding Report (see below).

Coordination with the Board:

Frequent and detailed dialogues with the Board's staff are required. The process that the Board and NNSA staffs have agreed to is that the Board's staff would identify its Findings in writing to an NNSA senior program official (Assistant Deputy Administrator for Nuclear Safety and Operations, NA-17). NNSA will work to close these issues as part of the certification effort in a formal manner through the Federal Project Director (FPD). The Board's staff has developed a system to formally monitor these issues and their resolution. NNSA has adopted the Board's system. The Board's staff will also provide a number of other comments and observations that are offered for NNSA action and counsel, but these items would not be required to be resolved prior to certification by the Board or NNSA.

Depending on the outstanding issues or concerns present at the time that DNSFB and the NNSA are finalizing their certification documents, the Board and the NNSA Administrator may want to have a technical interchange to ensure that the certifications being provided by the agencies are fully coordinated.

Closure within NNSA:

The FPD will work with the NNSA senior program official to provide formal responses to each of the Board's Findings. Based upon the issuance of a favorable PSVR, addressing actions that resulted from the TIPR, and the close out of Findings from the Board's staff, the FPD for the CMRR shall make a determination that the project has provided information to resolve the Board's Findings related to certification. The FPD shall notify the Los Alamos Site Office Manager of this determination. If the Site Manager agrees, the Site Manager will issue a letter to NA-17 stating that the CMRR Project is ready to be certified by the Administrator.

NNSA Headquarters Certification Actions

Upon receipt of the determination that the CMRR is ready for certification, NA-17 will prepare a letter from the NNSA Administrator to the Congressional Defense Committees

Chairmen certifying that the issues and concerns identified by the Board have been resolved and provide a basis for this assertion. The basis will include (at a minimum) a copy of each DNFSB Finding Report, the NNSA resolution of the Finding Report, and documentation that the resolution has been accepted by the Board. NA-17 is responsible for obtaining concurrence from the various NNSA Headquarters elements and program offices that have safety and oversight responsibilities associated with the construction and operation of the CMRR Nuclear Facility. NA-17 is also responsible for ensuring that the Administrator and Board coordinate their respective certification reports as needed.