



REQUEST REPLY BY: 8/8/05

COMNJD-05-0006

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 22, 2005

Approval, subject  
to the attached  
comment.

MEMORANDUM TO: ✓ Commissioner Merrifield  
Commissioner Jaczko  
Commissioner Lyons

FROM:

Nils J. Diaz

SUBJECT:

MULTINATIONAL DESIGN APPROVAL PROGRAM (MDAP), STAGE 1

  
8/12/05

### Introduction

I believe that the maturity of the nuclear power technical and regulatory bodies today provides us with an opportunity to enhance safety and security by integrating the expertise of the NRC and other regulatory authorities into a multinational reactor design approval program. I previously described such a program in the white paper of May 24, 2005, entitled "Multinational Design Approval for New Nuclear Power Plants". This memorandum requests your consideration and support to initiate implementation of Stage 1 (previously Phase 1) of this program.

Stage 1 of the MDAP would increase and formalize the level of multinational cooperation in NRC's upcoming Design Certification reviews, including the reviews of the EPR, the Advanced CANDU Reactor 700/1200, and the GE, Economic Simplified Boiling Water Reactor (ESBWR). This activity would be an expansion and formalization of the type of bilateral cooperation that the staff has undertaken in earlier reviews, including the ABWR, AP-600 reviews and the ACR 700 pre-application reviews. In those cases, the staff held discussions and shared research information with other regulators. Those activities were productive and should be expanded under a more formal and comprehensive framework.

### MDAP Objectives

The primary objective of the MDAP is to enhance the protection of public health and safety and the environment for the beneficial civilian use of nuclear energy. A multinational safety-focused design approval program would ensure the effectiveness and efficiency of nuclear power design reviews and associated programs, and would provide a practical forum for multinational cooperation and ultimate convergence on safety standards and their implementation.

Other important safety <sup>attributes(?)</sup> would be directly or indirectly achieved by this a program. Among these would be improved clarity and transparency of nuclear safety regulation across international borders, better communication, more standardization in reactor designs and in regulatory programs, better safety, security, and preparedness coordination among user countries, and improved public confidence. In addition, the program could contribute to energy security and economical benefits.

Commissioner Merrifield's Comments on COMNJD-05-0006

I approve moving forward with Stage 1 of the Multinational Design Approval Process to explore the merits of international cooperation in approving new power reactor designs. I agree that there may be certain efficiencies gained by incorporating the expertise of the regulator from the country-of-origin to expedite and improve the staff review of reactor design certification applications submitted by foreign vendors. Use of this expertise could potentially result in improved staff access to technical documentation and test data during the technical review. In addition, allowing other regulators to see firsthand how the NRC design review process works could be beneficial to them if they contemplate reviewing new plant designs in their own countries. Therefore, I believe that an investment of 2 FTE in FY 2006 is not unreasonable to explore a concept that could save many FTE during future reactor design reviews.

That being said, I must admit to some concerns about this program. The paper notes that foreign personnel could be used during design review as expert consultants in the same manner that NRC uses contractors. The NRC has a legal relationship with its contractors, however, that allows the staff to oversee the direction of their work. If the staff has concerns regarding the sufficiency of work being done by one of its contractors, the NRC has the luxury of disregarding the work product or cancelling the contract. Based on this, I believe there are common sense limitations to the way in which we can utilize members of foreign regulatory bodies to accomplish NRC responsibilities. Diplomacy requires us to review all foreign work products in an identical fashion, and the degree to which we rely on such work products, should remain confidential to the extent possible. I would expect the staff to address this concern in the proposed working arrangements it presents to the Commission.

I am also concerned that this proposed process has not been fully vetted with our external stakeholders, including public interest groups, the industry, and reactor vendors. Further, given the significant involvement that would be required with our federal family partners at the Department of State and the Department of Energy, formal comment on this proposal by these departments is needed to fully understand its scope. I think stakeholder input would be beneficial in identifying other pros and cons of this proposal. Also, it is important to communicate to the public that although foreign regulators may be used as consultants on reactor design reviews, the NRC would not relinquish any regulatory decision making to those individuals or allow them to formulate the Agency's position on the final technical review of a design. These decisions rest solely with the NRC, and as I mentioned previously, I expect the NRC staff to conduct a detailed analysis of any foreign work product prior to using the information in its design review.

In summary, I understand that all of the details have not yet been worked out for Stage 1, let alone Stages 2 and 3 of this groundbreaking program, but I do applaud the Chairman for taking the first step towards what could eventually be an international design approval program. I would advise caution, however, in moving too fast without soliciting input from both our domestic and international stakeholders. Therefore, my approval of Stage 1 is conditioned on four recommendations: (1) the staff should formally engage stakeholders and inform the Commission of the results of that engagement, (2) the staff should provide a more detailed description of how foreign regulatory personnel will be used in the review of the ACR-700 and the EPR, (3) the staff should provide the Commission with a detailed schedule for implementing Stage 1, once the staff has formalized the detailed working arrangements with the vendors and foreign regulators that have expressed an interest in the program, and (4) that a more detailed

plan for Stage 2 be formulated by the staff prior to presenting it to the Commission for approval of a recommended approach and requisite resources.

In sum, although I support this effort, I recognize that it has the potential to encounter a number of complications. Therefore, I believe the issues I have outlined above need to be addressed prior to making any further commitments on this initiative.



8/12/05

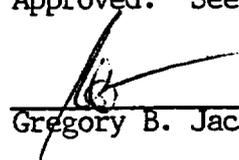


UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
 WASHINGTON, D.C. 20555-0001

July 22, 2005

Approved. See attached comments.

MEMORANDUM TO: Commissioner Merrifield  
~~Commissioner Jaczko~~  
 Commissioner Lyons

  
 Gregory B. Jaczko

8/18/05  
 Date

FROM: Nils J. Diaz 

SUBJECT: MULTINATIONAL DESIGN APPROVAL PROGRAM (MDAP), STAGE 1

### Introduction

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Other important safety would be directly or indirectly achieved by this a program. Among these would be improved clarity and transparency of nuclear safety regulation across international borders, better communication, more standardization in reactor designs and in regulatory programs, better safety, security, and preparedness coordination among user countries, and improved public confidence. In addition, the program could contribute to energy security and economical benefits.

**Commissioner Gregory B. Jaczko's Comments on COMNJD-05- 0006  
Multinational Design Approval Program, Stage 1**

I approve of moving forward with Stage 1 of the Multinational Design Approval Process as a trial effort to increase international cooperation in approving new power reactor designs. My approval is conditioned on any cooperation that takes place being executed under the authority of the NRC's existing international agreements.

I agree with the Chairman that international cooperation can enhance public health and safety by allowing for the exchange of expertise between regulatory agencies. I do share, however, Commissioner Merrifield's concerns about the implementation of this program including questions about the feasibility of entering into relationships with foreign colleagues that are similar to our domestic contracts, the need to involve stakeholders in the review of this proposed process, and the desire to seek input from and engaging other federal agencies. This is the first step in what would be a complicated and far-reaching program that will need to be carefully examined and addressed by the Commission.

  
Gregory B. Jaczko      8/18/05  
Date

REQUEST REPLY BY: 8/18/05

UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
 WASHINGTON, D.C. 20555-0001

July 22, 2005

*Approved*  
*P. Jaczko*  
 7/27/05

MEMORANDUM TO: Commissioner Merrifield  
 Commissioner Jaczko  
 Commissioner Lyons

FROM: Nils J. Diaz *N. Diaz*

SUBJECT: MULTINATIONAL DESIGN APPROVAL PROGRAM (MDAP), STAGE 1

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