

MEMORANDUM TO: Jennifer Uhle, Director
Division of Systems Analysis
Office of Nuclear Regulatory Research

FROM: Stuart D. Rubin, Senior Technical Advisor
Division of Systems Analysis
Office of Nuclear Regulatory Research

SUBJECT: INTERNATIONAL TRIP REPORT – SIXTH RESEARCH
COORDINATION MEETING OF THE INTERNATIONAL
ATOMIC ENERGY AGENCY COORDINATED
RESEARCH PROJECT ON ADVANCES IN HTGR FUEL
TECHNOLOGY, VIENNA, AUSTRIA

This memorandum transmits the traveler's international trip report for the Sixth Research Coordination Meeting (RCM) of the International Atomic Energy Agency (IAEA) Coordinated Research Project 6 (CRP-6), "Conservation and Application of High Temperature Gas Cooled Reactor (HTGR) Technology: Advances in HTGR Fuel Technology." The meeting was held at International Atomic Energy Agency (IAEA) Vienna International Center, Vienna, Austria, during May 3 to 7, 2010.

The continuing objectives of CRP-6 are to document the results of international research and development related to HTGR fuel fabrication; fuel characterization and advanced quality control techniques; operational fuel performance monitoring techniques: planned and completed fuel irradiation testing; fuel accident condition testing; results and insights of code-to-code and code-to-data operational benchmark analyses and accident condition benchmark analyses; spent fuel management and; national regulator safety perspectives related to HTGR fuel technology research and development activities.

The emphasis of the RCM was to discuss the final contributions and results of the research and development (R&D) tasks that had been implemented by the member states and organizations that had participated in the CRP; present and discuss key findings and conclusions that could be drawn from the completed R&D and to conduct a detailed chapter-by-chapter review the draft TECDOC that had been written based on the results of the R&D that had been conducted by the CRP participants. The Idaho National Laboratory (INL) participated in the CRP, including the benchmarks. INL used the PARFUME code in these benchmarks which under the terms of an NRC-DOE Memorandum of Understanding, DOE will provide to the NRC for NGNP fuel performance analysis audits and evaluating fuel performance safety issues.

Participants in the 6th RCM consisted of representatives from the US, China, France, Germany, Ukraine, Turkey and IAEA. The traveler participated in the RCMs as a contributing investigator to provide regulatory and safety perspectives.

This trip report summarizes the purpose and objectives of the meeting and the main points of

42

J. Uhle

- 2 -

the discussions and interactions.

The content of this report are not likely to be of interest to the Commission.

Enclosure:
International Trip Report

DISTRIBUTION:
RES International Distribution
DSA r/f