

April 25, 2014

MEMORANDUM TO: Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Richard P. Corriea, Director */RA/*
Division of Risk Analysis
Office of Nuclear Regulatory Research

SUBJECT: TRANSMITTAL OF DRAFT REPORTS ON HRA METHODS
DEVELOPED BY THE STAFF IN RESPONSE TO SRM- 061020
“HRA MODEL DIFFERENCES”

The SRM-M061020 directed the Advisory Committee on Reactor Safeguards (ACRS) to, “work with the staff and external stakeholders to evaluate the different human reliability models in an effort to propose a single model for the agency to use or guidance on which model(s) should be used in specific circumstances.” Over the past several years, the staff has met with the ACRS Subcommittee on Reliability and Probabilistic Risk Assessment to discuss the staff’s effort in developing an integrated Human Reliability Analysis (HRA) method. The staff last met the ACRS Subcommittee on January 16, 2014. The ACRS will have a full-committee meeting on May 8, 2014, to review the status of the work. To support the meeting, I am forwarding the enclosure that provides names and ADAMS ML numbers of the sizeable documents prepared by the staff for the meeting.

The staff has developed two major products for the agency to use in HRA applications. The first product, draft report NUREG-2114, “Building a psychological foundation for human reliability analysis,” serves as the scientific basis for HRA method development; the second product, an Integrated Decision-tree Human Event Analysis System (IDHEAS) for internal, at-power events, was developed by the NRC staff and EPRI with the intention of reducing HRA variability when analyzing internal, procedural events. In addition to these two draft reports, the staff is also developing a third product, a generic HRA methodology for nuclear applications that is a generic methodology based on the psychological foundation and is intended to be tailored for any HRA application within the NRC’s regulatory programs. We are not providing the draft report for this product due to its incomplete status.

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E. Hackett

- 2 -

The staff plans to discuss the status of the project and the two draft reports mentioned above on May 8, 2014. The staff requests that the enclosed documents in the ADAMS package be shared with the ACRS in advance of the meeting.

Enclosure:
As stated

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Enclosure:
As stated

ADAMS Accession Number: Pkg: ML14104A080

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