

June 18, 2004

Dr. Mario V. Bonaca, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: GOOD PRACTICES FOR IMPLEMENTING HUMAN RELIABILITY ANALYSIS

Dear Dr. Bonaca:

Thank you for your letter of May 13, 2004, on the April 6, 2004, draft letter report "Good Practices for Implementing Human Reliability Analysis (HRA)," and the opportunity to discuss this project with the Advisory Committee on Reactor Safeguards (ACRS). The staff is currently revising this document to incorporate comments provided by the ACRS and internal stakeholders. As recommended by the ACRS, the staff plans to issue the draft letter report for public review and comment in July 2004.

The ACRS also recommended that the draft letter report be peer-reviewed by domestic and international experts. The staff agrees with ACRS that developing a set of good practices for assessing human reliability during accidents is particularly challenging, and that the report will benefit from a review by both domestic and international experts. The staff will solicit comments from recognized HRA experts through various interactions, including the industry's HRA Users Group. The staff will hold a public meeting in July 2004 with the objective of discussing the draft letter report early in the public review and comment period. The staff will also request comments on the draft letter report from members of domestic and foreign research organizations that are performing HRA work and are contributing to HRA state-of-the-art. For example, the staff plans to contact national laboratories, the Electric Power Research Institute, Electricite de France (EDF), the Paul Scherrer Institute, EuroControl, and the University of Linköping, Sweden. The staff will also discuss the good practices as opportunities present themselves in domestic and international conferences and working group meetings. The staff hopes that through these interactions it will obtain the input it needs on the draft letter report from domestic and international HRA experts.

The ACRS expressed a concern that organizational issues were not addressed in the draft letter report. The staff agrees with ACRS that organizational issues are potentially significant performance shaping factors (PSFs). To a certain extent, the potential effects of these issues are reflected in a probabilistic risk assessment/HRA through component unavailability measures, the modeling of pre-initiator human failure events, and the incorporation of various PSFs (e.g., training quality) in the estimation of human failure event probabilities. The staff continues to monitor activities related to organizational issues in the U.S. and abroad, and will keep the Commission informed of any significant developments.

M. Bonaca

2

The staff plans to brief the ACRS on HRA good practices in fall 2004, before the final report is issued. If you have any questions on this subject, please contact Dr. Erasmia Lois at (301) 415-6560.

Sincerely,

/RA/

Luis A. Reyes
Executive Director
for Operations

cc: Commissioner McGaffigan
Commissioner Merrifield
SECY

OAR in ADAMS? (Y or N) Y ADAMS ACCESSION NO.: _____ TEMPLATE NO. RES- EDO-002
Publicly Available? (Y or N) Y DATE OF RELEASE TO PUBLIC _____ SENSITIVE? N

G:\DRAA\ELois\ML041660260.wpd

DISTRIBUTION: DRAA Chron, Lois, Lois r/f, Cunningham, Ader, Paperiello/Craig, Clark, Reyes, Norry Virgilio, Kane, Collins, Dean, Burns/Cyr, Dyer/NRR, Lee/IP, Weaver/OEDO, Strosnider, ACRS file RES# 2004204 EDO# 20040338

*See previous concurrence

OFFICE	DRAA/PRAB	DRAA/PRAB	DRAA/PRAB	TechEd	DRAA
NAME	*ELois	*AKugler	*DLew	*PKleene (by email)	*CAder
DATE	06/08/04	6/8 /04	06/08/04	06/08/04	06/08/04
OFFICE	RES:DD	RES:D	DEDMRS	DEDR	EDO
NAME	*JCraig	*CPaperiello	MVirgilio	EMerschhoff	LReyes
DATE	6 / 14 /04	6/ 14 /04	6/18/04	6/18/04	6/18/04