

May 7, 2002

MEMORANDUM TO: Christopher I. Grimes, Program Director
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: Joseph L. Birmingham, Project Manager */RA/*
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF April 24, 2002 PUBLIC MEETING WITH THE NUCLEAR
ENERGY INSTITUTE (NEI) TO DISCUSS THE PUBLIC RADIATION
SAFETY CORNERSTONE

On April 24, 2002, Nuclear Regulatory Commission (NRC) staff met with a representative of NEI at NRC headquarters in Rockville Maryland. Also, representatives from industry and the NRC regions participated via teleconference. A list of meeting participants is provided as Attachment 1. The meeting was held to continue discussions concerning changes to the Radioactive Material Control portion of the public radiation safety cornerstone and to discuss industry examples/scenarios involving radioactive material control at nuclear power plants. Material presented by NEI containing the hypothetical examples and an approach to defining a "Minor" inspection item for the Radioactive Material Control portion of the Public Radiation Safety Significance Determination Process (SDP) is provided in Attachment 2.

The meeting began with a discussion by Stephen Klementowicz, of NRC, on the importance of the public confidence factor for this cornerstone. Recent events at two power plants showed that public interest, even in minor issues, is significant. Therefore, NRC management believes that it is appropriate to document, in Inspection Reports, such events including an assessment of the risk, however minimal it may be.

The group discussed variations of events that could be minor issues such as contaminated items found outside the radiological controlled area (RCA) but still in the owner controlled area (OCA). The staff indicated that these items would need to be evaluated to determine the level of risk. For example, multiple items found in the OCA should be considered a higher risk than a single item.

A question was asked about the effect of hypothetical and unknown risk from contaminated items that are discovered in the OCA. Ralph Andersen, of NEI, said we need to focus on the known risk but need to further discuss the need to assess the hypothetical risk. For example, if a contaminated cable was carried by a worker, that is a known risk, but consideration should also be given to the hypothetical risk of public exposure if the item somehow got offsite.

The group discussed NEI's draft document, "Approach to Defining 'Minor Issue' for the Radioactive Material (RAM) Control Section of the Public Radiation Safety SDP." This document was intended to provide a starting point for discussion to determine when a noncompliance would be considered a minor issue. The group essentially agreed on items 1

and 2 of the draft approach. Item 1 discussed RAM found offsite and item 2 discussed RAM found anywhere. These items addressed situations where there was a noncompliance and a potential for exposure to the public. Regarding a suggested exposure value of >100 mrem, the staff said further consideration was needed for the proposed amount to be the standard for potential overexposure.

Item 3 indicated that RAM found inside the protected area or in a RCA as a result of a noncompliance would be a minor issue. Steve Klementowicz stated there may be a need for a threshold exposure such as 2 mrem/hr and Ralph Andersen agreed that might be appropriate. There was discussion that item 3 had the possibility of occupational exposure also. Ralph Andersen pointed out that the Part 20 definition of a "member of the public" is those who are not occupational workers. Item 4 provided a series of criteria to evaluate licensed RAM found onsite but outside the protected area or RCA as a result of a noncompliance. The group discussed using a value such as multiples of Regulatory Guide (RG) 1.86 values for surface contamination and multiples of Appendix B for volumetric. The group agreed that the values chosen should be easy for the licensee and for the inspector to use. RG 1.86 was considered a common reference and a defensible value. Steve Klementowicz discussed reasons for not using NUREG 5512 or the new ANSI standard.

The group then discussed the hypothetical examples that NEI had provided (Attachment 2). There was general agreement that the examples were a good basis for discussion and for improving the SDP. There were suggestions to develop more examples for situations where RAM was transferred to a landfill, from licensee to licensee, and for sewage.

The next meeting will be May 16, 2002, at 9:00 am. Stephen Klementowicz asked if the bridge line had been useful and most agreed that it had. A bridge line will be set up for the next meeting.

Having completed discussion of the agenda items, the meeting was adjourned.

Project No. 689
Attachment: As stated
cc w/atts: See list

**List of Attendees for April 24, 2002 Meeting
Public Radiation Safety Cornerstone**

NAME	ORGANIZATION
Ralph Andersen	NEI
Steve Klementowicz	NRC/NRR/IEHB
Joseph Birmingham	NRC/NRR/RPRP
Mike Shannon	NRC R-IV
Ron Nimitz	NRC R-I
Gooch Cheatham	CP&L
Willy Harris	Exelon
Danny Wilder	TXU
Mike Lantz	APS
Mike Russell	SCE
Russ Gray	PG&E
Wayne Carr	Southern Nuclear
Deann Raleigh	LIS SCIENTECH
Lee Thomason	Dominion
Audrey Hayes	NRC/NRR/IEHB

**For Discussion Purposes - Approach to Defining A Minor Issue@ for the
Radioactive Material (RAM) Control Section of the Public Radiation Safety SDP**

1. Licensed radioactive material (RAM) found offsite as a result of non-compliance with NRC requirements or failure to follow the licensee program or procedures will not be a minor issue -i.e., it will be considered a finding and will be evaluated using the SDP.

2. Licensed RAM found anywhere under circumstances that constitute a "substantial potential for overexposure (> 100 mrem) of a member of the public as a result of non-compliance with NRC requirements or failure to follow the licensee program or procedures will not be a minor issue -i.e., it will be considered a finding and will be evaluated using the SDP.

3. Except as noted in Item 2, licensed RAM found in the protected area or in a radiological controlled area (RCA), including RCAs inside or outside the protected area, as a result of non-compliance with NRC requirements or failure to follow the licensee program or procedures, will be considered a minor issue.

4. Licensed RAM found onsite, but outside the protected area or an RCA, as a result in non-compliance with NRC requirements or failure to follow the licensee program or procedures, will be evaluated as follows:
 - _ If fixed or removable contamination is less than or equal to the Regulatory Guide 1.86 criteria, it will be treated as a minor issue.
 - _ If fixed or removable contamination is greater than the Regulatory Guide 1.86 criteria, then the estimated actual dose to a member of the public should be determined -if it is less than 1 mrem, it will be treated as a minor issue.
 - _ If the contamination is volumetric, rather than surface contamination, then the estimated actual dose to a member of the public should be determined -if it is less than 1 mrem, it will be treated as a minor issue.
 - _ Otherwise, if the estimated actual dose to a member of the public is determined to be equal to or greater than 1 mrem, it will be a finding evaluated using the SDP.

Hypothetical Examples Developed for the Purpose of Evaluating An Improved Significance Determination Process (SDP) for Radioactive Material Control

Item	Location	Activity (Instrument)¹	Comments
Particle on floor	Hallway inside reactor building	1400 cpm (F)	Found during routine survey
Particle on floor	Turbine deck at PWR	300 cpm (F)	Found during routine survey
M&TE instrument (magenta-painted)	"Clean" tool and parts shop in Auxiliary Bldg (inside RCA)	<100 cpm (F) 300 cpm (SAM)	Fixed contamination
Particle on worker's shoe	RCA exit point	n/a (PCM) 1100 cpm (F)	Found during exit monitoring
Flashlight	RCA exit point	700 cpm (SAM)	Fixed contamination found during exit monitoring
Particle on floor	RCA exit point	700 cpm (F)	Found during routine survey
Used PC bootie	Maintenance shop break room (outside RCA - inside PA)	<100 cpm (F)	Item placed in DAW
Crescent wrench (yellow painted)	Locker/change room in (outside RCA - inside PA)	900 cpm (SAM)	Found in locker -fixed contamination on "yellow-painted" item
Screwdriver (yellow painted)	"Clean" tool room in Service Bldg (outside RCA - inside PA)	<100 cpm (F)	Found during inventory - item returned to RCA tool room
Scaffolding parts	"Clean" scaffold storage area (outside RCA - inside PA)	100 to 1,000 cpm (F)	Fixed and removable contamination – found during sitewide surveys in follow-up to corrective action report

¹ Activity measured by: Frisker (F), Small Article Monitor (SAM), Survey Instrument (SI), Personnel Contamination Monitor (PCM), Portal Monitor (PM), or Other (O)

Item	Location	Activity	Comments
Rags	Dumpster (outside RCA – inside PA)	9,000 cpm (SAM)	Found during routine inspection of dumpster prior to removal
PC glove liner	Compressed gas cylinder storage area (outside RCA – inside PA)	100 cpm (F)	Found by Security Officer during routine rounds
Welding machine	Truck loading area (outside RCA – inside PA)	200 cpm (F)	Fixed contamination – During prep for shipment, worker noticed absence of HP clearance tag
PC glove liners	In tool box on truck at PA egress point	100 cpm (F)	Items noticed by Security Officer inspecting vehicle
Particle on floor	At PA egress point (prior to PM)	6,000 cpm (F)	Found during routine area survey
Particle on worker's shoe	At PA egress point	n/a (PM) 7,000 cpm (F)	Found during exit monitoring in PM
Lanyard	On floor at PA egress point (prior to PM)	900 cpm (SAM)	Item noticed by worker exiting the PA
Welder's cap	Worn by worker at PA egress point	n/a (PM) 400 cpm (SAM)	Contamination inside of cap
Particle on floor	At PA egress point (after PM)	6,000 cpm (F)	Found during routine area survey
Particle on worker's shoe	At PA access point (at PM)	n/a (PM) 7,000 cpm (F)	Found when worker passed through PM on way in to work
Particle on worker's shoe	At PA access point (at PM)	n/a (PM) 7,000 cpm (F)	Found when worker passed through PM on way in to work for the first time

Item	Location	Activity	Comments
Used rigging sling	PA access point (at PM)	n/a (PM) 500 cpm (SAM)	Sling being brought by worker from warehouse outside PA
Glasses	WBC facility (outside PA)	n/a (WBC) 300 cpm (F)	Fixed contamination on glasses -found during exit whole body count
Carpet	WBC facility	n/a (SI) 300 cpm (F)	Buildup in carpet pile of contamination
Particle on floor	Onsite Administration Bldg (outside PA)	2,000 cpm (F)	Found during routine area survey
Survey instrument	Onsite Training Bldg (outside PA)	500 cpm (F)	Fixed contamination – found after training staff noticed instrument not marked as "Training Instrument"
Lifting cables	Onsite warehouse (outside PA)	200 to 2,000 cpm (F)	Fixed contamination – found during routine area survey
Lifting cables	Onsite warehouse (outside PA)	200 to 2,000 cpm (F)	Fixed contamination – found during sitewide surveys in follow-up to corrective action report
Ruler (magenta-painted)	Onsite Administration Bldg (outside PA)	<100 cpm (F)	No detectable contamination – noticed by worker
Box-cutter (magenta-painted)	Onsite Administration Bldg (outside PA)	100 cpm (F)	Noticed by worker
Ventilation supply fan cooler	Offsite equipment repair vendor facility	100 to 200 cpm (F)	Fixed and removable contamination – found during cooler disassembly by vendor survey
Yellow trash bags	Offsite landfill disposal site	400 to 1700 cpm (SI)	Yellow bags noticed by landfill workers

Nuclear Energy Institute

Project No. 689

cc: Via email

Mr. Ralph Andersen, Sr. Proj. Mgr
Operations
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708
rla@nei.org

Mr. Jim Davis, Director
Operations
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708
jwd@nei.org

The next meeting will be May 16, 2002, at 9:00 am. Stephen Klementowicz asked if the bridge line had been useful and most agreed that it had. A bridge line will be set up for the next meeting.

Having completed discussion of the agenda items, the meeting was adjourned.

Project No. 689
Attachment: As stated
cc w/atts: See list

Memo Accession#
Atta. Accession#NRC-001

Distribution: Mtg. Notice w/NEI re Public Radiation Protection SDP Dated 5/24/02
ADAMS/PUBLIC OGC ACRS

Email

SCollins/JJohnson
BSheron
WBorchardt
BBoger
DMatthews/FGillespie
CGrimes
SWest
SKlementowicz
AHayes
JHyslop
MShannon, R-IV
RNimitz, R-I
KGibson
SMorris, EDO
MFields
AHsia, RES

DOCUMENT: G:\RPRP\JBirmingham\Msum-new\NEI MSUM 4-24-2002 RP SDP.WPD

OFFICE	RPRP	IEHB	RPRP
NAME	JBirmingham:kig*	KGibson*	SWest*
DATE	05/ 03 /2002	05/ 03 /2002	05/07/2002

OFFICIAL RECORD COPY