January 12, 1999

MEMORANDUM TO: Charles L. Miller, Chief
Emergency Preparedness and
Radiation Protection Branch
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

FROM: Stephen P. Klementowicz, Health Physicist Original signed by:
Emergency Preparedness and
Environmental Health Physics Section
Emergency Preparedness and
Radiation Protection Branch
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF WORKSHOP WITH THE NUCLEAR ENERGY INSTITUTE (NEI) REGARDING PERFORMANCE INDICATORS FOR ASSESSING RADIATION PROTECTION PROGRAMS

On November 13, 1998, representatives of the Nuclear Energy Institute (NEI) met with representatives of the Nuclear Regulatory Commission (NRC) at the NRC's offices in Rockville, Maryland. Attachment 1 provides a list of workshop attendees.

The purpose of the workshop was to continue discussion and development of performance indicators (PI) to be used by the NRC to help assess radiation protection programs at power reactors.

There was a general discussion about the appropriate threshold values for PIs to be used in the assessment process. More data from inspection reports and from licensee issued reports needs to be reviewed to develop a meaningful threshold for the PIs. Additionally, a clear distinction needs to be made about Pis and their relationship to violations of NRC requirements and the level of NRC inspection that is needed.

NEI presented some draft data (see Attachment 2) from their working group member plants to attempt to verify and validate draft PIs against historical events, plant operating experience, and regulatory violations. The data in the occupational area presents the number of licensee reported events in relation to the NRC's Systematic Assessment of Licensee Performance (SALP) score. The data in the public area presents the number of licensee reported events, including abnormal releases and radiation monitors that were out of service. Additional data will be obtained so that this effort can continue to be refined further in future meetings.

The meeting closed with plans to meet and continue PI development at the NRC office on November 17, 1998.

Attachments: As stated

cc w/att: See next page

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DOCUMENT NAME:G:\MTGSUM13

OFFICE	PERB SPK	SC:PERB	BC:PERB	
NAME	Klementowicz	BZalcman	CMiller	
DATE	1/8/99	1/11/99	1/12/99	

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PDR REVGP ERGNUMRC
PDR

DF03

1/1

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NAME	Klementowicz	BZalcman	CMiller	
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 12, 1999

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Division of Reactor Program Management
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cc w/att: See next page

cc: Mr. Ralph Beedle
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
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Mr. Steven Driscol
Radiation Protection
INPO
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Attachment 1

Radiation Protection Performance Indicator Meeting
11/13/98

List of Attendees

Name	Organization
Steve Klementowicz	USNRC
George Kuzo	USNRC
Niodh Shah	USNRC
Roger Pedersen	USNRC
James Wigginton	USNRC
Ralph Anderson	NEI
Paul Genoa	NEI

Public Radiation Safety -
Effluents (All Sites)

Sheet1

Draft

	A	B	C	D	E	F	G	H	I
1		LER98	LER97	LER96	LERTOT		97 A/R	97 MON	
2	M	2	12	8	22		0	9	
3	M	1	2	4	7		0	12	
4	M	4	3	0	7				
5	M	0	0	3	3		0	0	
6	S	0	1	2	3		0	0	
7	S	0	1	2	3				
8	M	1	1	1	3				
9	M	1	0	2	3		0	0	
10	M	2	1	0	3		0	12	
11	M	0	1	1	2				
12	M	0	1	1	2				
13	M	1	1	0	2				
14	S	0	2	0	2		0	0	
15	S	0	1	1	2				
16	S	0	1	1	2		0	1	
17	S	1	0	1	2		0	0	
18	M	1	0	0	1		0	0	
19	M	0	1	0	1				
20	M	1	0	0	1		0	0	
21	S	0	1	0	1		2	4	
22	S	1	0	0	1		0	3	
23	M	1	0	0	1				
24	M	0	1	0	1				
25	S	0	1	0	1				
26	S	0	0	1	1				
27	M	0	0	0	0		0	0	
28	M	0	0	0	0				
29	M	0	0	0	0		1	0	
30	S	0	0	0	0				
31	M	0	0	0	0				
32	S	0	0	0	0		0	2	
33	M	0	0	0	0				
34	S	0	0	0	0		0	0	
35	S	0	0	0	0				
36	M	0	0	0	0				
37	S	0	0	0	0				
38	M	0	0	0	0		0	0	
39	S	0	0	0	0		0	0	
40	S	0	0	0	0				
41	S	0	0	0	0				
42	S	0	0	0	0		4	0	
43	S	0	0	0	0				
44	S	0	0	0	0		0	1	
45	S	0	0	0	0		0	2	
46	M	0	0	0	0		1	2	
47	M	0	0	0	0		1	1	
48	S	0	0	0	0		0	0	
49	M	0	0	0	0		0	1	
50	M	0	0	0	0		0	1	

A/R = Abnormal Releases
MON = Monitor Out of Service

Draft

	A	B	C	D	E	F	G	H	I
51	S	0	0	0	0		1	1	
52	M	0	0	0	0				
53	M	0	0	0	0				
54	M	0	0	0	0		3	0	
55	S	0	0	0	0		0	0	
56	M	0	0	0	0		2	1	
57	M	0	0	0	0				
58	M	0	0	0	0				
59	S	0	0	0	0				
60	M	0	0	0	0				
61	S	0	0	0	0		0	0	
62	M	0	0	0	0				
63	M	0	0	0	0		3	0	
64	S	0	0	0	0		2	8	
65	S	0	0	0	0		3	1	
66	S	0	0	0	0				
67									
68		17	32	28	77		23	41	

A/R = Abnormal Releases
MON = Monitor Out of Service

Occupational Radiation
Safety (36 Sites)
1996, 1997, 3 Qtrs 1998

Sheet1

Draft

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		96L	96V	96D	97L	97V	97D	98L	98V	98D		TOT		SALP1	SALP2
2	M	5	0	0	1	0	0	0	0	0		6		2	2
3	M	0	0	0	2	1	1	0	0	1		5		1	3
4	M	3	0	0	0	0	0	1	0	0		4		2	2
5	M	1	0	0	2	0	0	0	0	0		3		1	1
6	S	3	0	0	0	0	0	0	0	0		3		2	1
7	M	0	0	0	3	0	0	0	0	0		3		2	2
8	M	2	0	0	0	0	0	0	1	0		3		1	1
9	M	0	1	0	0	0	1	0	0	0		2		2	2
10	M	2	0	0	0	0	0	0	0	0		2		3	2
11	M	0	0	0	1	0	0	1	0	0		2		1	2
12	S	1	0	0	1	0	0	0	0	0		2		2	2
13	S	0	0	0	1	0	0	1	0	0		2		2	2
14	M	0	0	0	1	0	0	0	0	0		1		1	1
15	S	0	0	0	1	0	0	0	0	0		1		1	1
16	S	0	0	0	1	0	0	0	0	0		1		2	2
17	S	0	0	0	0	0	0	1	0	0		1		1	1
18	M	0	0	0	1	0	0	0	0	0		1		1	1
19	S	0	0	0	1	0	0	0	0	0		1		1	1
20	S	0	0	0	0	0	0	1	0	0		1		1	1
21	S	1	0	0	0	0	0	0	0	0		1		2	2
22	S	0	0	0	0	0	0	1	0	0		1		1	2
23	M	0	0	0	0	0	0	1	0	0		1		1	1
24	M	0	0	0	1	0	0	0	0	0		1		1	1
25	M	0	0	0	0	0	0	0	1	0		1		2	1
26	S	1	0	0	0	0	0	0	0	0		1		1	1
27	M	0	0	0	0	0	0	0	0	0		0		1	2
28	M	0	0	0	0	0	0	0	0	0		0		2	1
29	M	0	0	0	0	0	0	0	0	0		0		1	1
30	M	0	0	0	0	0	0	0	0	0		0		2	2
31	S	0	0	0	0	0	0	0	0	0		0		1	1
32	M	0	0	0	0	0	0	0	0	0		0		1	1
33	M	0	0	0	0	0	0	0	0	0		0		1	1
34	S	0	0	0	0	0	0	0	0	0		0		2	1
35	M	0	0	0	0	0	0	0	0	0		0		1	1
36	M	0	0	0	0	0	0	0	0	0		0		1	1
37	M	0	0	0	0	0	0	0	0	0		0		1	1
38															
39		19	1	0	17	1	2	7	2	1		50			
40															
41	AN			20			20			11					

L = LOCKED HI RAD AREA
V = VERY HI RAD AREA
D = UNINTENDED DOSE

Partial Data

Occ Rad Safety

Includes HRA Posting Errors

Sheet1

Draft

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		96H	96L	96V	96D	97H	97L	97V	97D	98H	98L	98V	98D	TOT		S1	S2
2	M	1	0	0	0	1	2	1	1	1	0	0	1	8		1	3
3	M	1	3	0	0	1	0	0	0	0	1	0	0	6		2	2
4	M	0	5	0	0	0	1	0	0	0	0	0	0	6		2	2
5	M	0	2	0	0	0	0	0	0	1	0	1	0	4		1	1
6	S	0	1	0	0	1	1	0	0	1	0	0	0	4		2	2
7	S	1	0	0	0	0	1	0	0	1	1	0	0	4		2	2
8	M	0	1	0	0	0	2	0	0	0	0	0	0	3		1	1
9	S	0	3	0	0	0	0	0	0	0	0	0	0	3		2	1
10	M	1	2	0	0	0	0	0	0	0	0	0	0	3		3	2
11	M	0	0	0	0	0	3	0	0	0	0	0	0	3		2	2
12	S	0	0	0	0	0	1	0	0	1	0	0	0	2		1	1
13	S	0	0	0	0	0	0	0	0	1	1	0	0	2		1	2
14	M	0	0	1	0	0	0	0	1	0	0	0	0	2		2	2
15	M	0	0	0	0	0	1	0	0	0	1	0	0	2		1	2
16	M	0	0	0	0	0	1	0	0	0	0	0	0	1		1	1
17	S	0	0	0	0	0	1	0	0	0	0	0	0	1		1	1
18	M	1	0	0	0	0	0	0	0	0	0	0	0	1		1	1
19	S	0	0	0	0	0	1	0	0	0	0	0	0	1		2	2
20	S	0	0	0	0	0	0	0	0	0	1	0	0	1		1	1
21	M	0	0	0	0	0	1	0	0	0	0	0	0	1		1	1
22	S	0	0	0	0	0	0	0	0	0	1	0	0	1		1	1
23	S	0	1	0	0	0	0	0	0	0	0	0	0	1		2	2
24	M	0	0	0	0	0	0	0	0	0	1	0	0	1		1	1
25	M	0	0	0	0	0	1	0	0	0	0	0	0	1		1	1
26	S	0	1	0	0	0	0	0	0	0	0	0	0	1		1	1
29	M	1	0	0	0	0	0	0	0	0	0	0	0	1		1	1
30	M	0	0	0	0	0	0	0	0	0	0	1	0	1		2	1
31	M	0	0	0	0	0	0	0	0	0	0	0	0	0		1	2
32	M	0	0	0	0	0	0	0	0	0	0	0	0	0		2	1
33	M	0	0	0	0	0	0	0	0	0	0	0	0	0		2	2
34	S	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
35	M	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
36	S	0	0	0	0	0	0	0	0	0	0	0	0	0		2	1
37	M	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
38	M	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
39		6	19	1	0	5	17	1	2	1	7	2	1	62			

H = HRA Posting
L = Locked HRA
V = Very HRA
D = Unintended Dose