



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 4, 2000

MEMORANDUM TO: Susan F. Shankman, Deputy Director
Licensing and Inspection Directorate
Spent Fuel Project Office, NMSS

FROM: Chester Poslusny, Jr., Sr. Project Manager *CP*
Transportation and Storage Safety
and Inspection Section
Licensing and Inspection Directorate
Spent Fuel Project Office, NMSS

SUBJECT: SUMMARY OF PUBLIC MEETING WITH THE NUCLEAR
ENERGY INSTITUTE

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The NEI staff discussed its efforts to support generic issues including ISG-1, Damaged Fuel; ISG-4, Cask Closure Weld Inspection; ISG-8, Burnup Credit; ISG-5, Confinement Evaluation; the submittal of a draft format for standard technical specifications; and coordination of the development of guidance and workshops to facilitate the implementation of the revision to 10 CFR 72.48. NEI expressed an interest in the cask certificate renewal process and in developing guidelines for dry storage license renewals.

It was agreed that many of the above items would be addressed in the December 17 workshop and that there was a critical need for NRC and NEI to continue to work together to improve the regulatory approval process for key technical storage and transportation issues.

No proprietary information was disseminated or presented at this meeting. No regulatory decisions were requested or made.

Please contact me if you wish to further discuss these issues.

Attachments: 1. Attendance List
2. NRC Handout
3. NEI Handout

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NRC File Center
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*see previous concurrence

SFPO r/f

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OFC:	SFPO	E	SFPO	E	SFPO	E					
NAME:	CPoslusny:dd*		VTharpe*		PEng*						
DATE:	1/27/2000		1/14/2000		2/4/2000						

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NAME:	CPoslusny:dd		VTharpe*		PEng					
DATE:	1/17/2000		1/14/2000		2/4/2000					

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JA

Attachment 1
Attendance List

**NRC/NEI MEETING
PRIORITIZATION PROCESS
December 14, 1999**

Name	Organization	Phone Number
Chet Poslusny	NMSS/SFPO	301-415-1341
Earl Easton	NMSS/SFPO	301-415-8520
Eric Leeds	NMSS/SFPO	301-415-8540
E. William Brach	NMSS/SFPO	301-415-8500
M. Wayne Hodges	NMSS/SFPO	301-415-2398
Alan Nelson	NEI	202-739-8110
Lynnette Hendricks	NEI	202-739-8109
Geoff Quinn	Bechtel	301-228-6352
Steve Love	BNFL Inc.	703-218-4476
Maureen Conley	Washington Nuclear Corp.	301-652-9500
Steve Schulin	The Ibex Group	301-762-6714

Attachment 2
NRC Handout

SFPO
PRIORITIZATION
PROCESS

Prioritization of SFPO activities is necessary to assure that scarce resources are used for the most important work. The prioritization scheme described below captures, in a simple manner, the major factors which need to be used (safety significance, regulatory significance, resource impact - people and dollars - and success likelihood).

Some activities are exempt from prioritization. These activities must be done; resources will be allocated to these activities first. After resources are assigned to the "must" activities, the remaining resources should be allocated according to an agreed upon priority system. These "must" activities are undertaken as a result of: (1) a major operational event which requires mandatory SFPO response with qualified personnel to assess the event, evaluate its significance, and determine any actions that must be accomplished; (2) an immediate need to comply with Statutory requirements; international agreements; a directive from the Commission, the EDO, or Congress; or to respond to allegations, Freedom of Information Act (FOIA) requests, or inquiries from oversight groups or the public; or (3) Case work.

Case work has its own prioritization order. Maintenance of core off-load capability for operating plants takes precedence over issues for decommissioning plants..

For the remaining SFPO activities, the major factors to be considered in prioritization are safety significance, regulatory significance, and resources. Likelihood of success is also an important factor because of the need to conserve valuable resources. There are many schemes for prioritization but all require judgement in assessing significance and resources and each has its own bias and weaknesses. The scheme proposed for SFPO is:

$$P_A = (V^S \times SL^S) + (V^R \times SL^R),$$

where

- P_A = The prioritization score for the activity,
- V^S = The safety or risk significance factor,
- V^R = The regulatory policy value,
- SL^S = The success likelihood score for safety or risk significance,
- SL^R = The success likelihood score for regulatory policy

and safety/risk or regulatory factors are obtained from the cost-benefit decision matrix which weighs the cost of the activity against the safety/risk and regulatory benefits..

Cost-Benefit Decision Matrix

V ^S or V ^R	Resource Impact			
		High	Medium	Low
Safety/Risk or Reg. Policy	Low	1	2	3
	Medium	4	5	6
	High	7	8	9

The component terms of the algorithm are defined as:

V^S - Safety or Risk Significance Value

The extent to which the activity should contribute to the improvement or enhancement of safety, the solution of a safety problem, or a better definition of the nature and extent of a potential problem. This criterion includes such concepts as significant release, dose, defense in depth, mitigation of risk to the public, and safety margin.

V^R - Regulatory Policy Value

The extent to which the activity should improve the agency's regulatory effectiveness and efficiency by improving the clarity, coherence, and consistence of risk-informed, performance-based regulation, and by ensuring that regulatory burdens are consistent with the risk. This criterion includes: (a) improvements to the regulatory framework (including regulations, regulatory guides, inspection plans, codes and standards); and (b) support for generic issue resolution.

SL^S and SL^R - Success Likelihood Weighting Factors

The likelihood that the activity will achieve its safety, risk, or regulatory objective. The two weighting factors are not necessarily the same for a given activity. These weighting factors include outcomes and products that are: (a) technically sound; (b) good public policy (i.e., they are likely to meet the principles of good regulation); (c) practical; (d) feasible to implement; and (e) timely. Use of values between 0 and 10 results in integer prioritization scores.

Resource Impact

The annual amount of NRC resources required to undertake or complete the activity. For NRC staff resources, 1 staff month or less of effort is considered to be "low"; Between 1 staff month and 1 FTE is considered to be "medium" effort; and more than 1 FTE is considered to be "high". For activities conducted by NRC contractors, an annual cost of \$100K or less is considered to be "low", between \$100K and \$500K is "medium", and more than \$500K is "high".

The following example is intended to illustrate the process:

Issue	V ^S	SL ^S	V ^R	SL ^R	P _A
High Burn up Fuel Integrity	4	7	8	8	92

A safety significance factor of 4 was used because the issue was thought to be of moderate or medium safety significance but required considerable resources to resolve. If the safety significance was thought to be high, the factor would be 7. A safety likelihood of success value of 7 was chosen because the data are difficult to obtain and are very costly. A regulatory significance factor of 8 was used because the regulatory significance was thought to also be high but the resources required to implement are less than for the technical resolution and probably fall in the medium range. A regulatory likelihood of success of 8 was chosen because implementation relies heavily on technical resolution and, although alternative paths may be available, implementation is not certain. Once the preceding values are selected from the cost-benefit decision matrix, the activity or issue prioritization score is calculated by

$$P_A = (V^S \times SL^S) + (V^R \times SL^R).$$

Attachment 3
NEI Handout

**Dry Storage Priority Issues
December 13, 1999**

1. **Bring to closure efforts underway**
 - ISG - 1 Damaged Fuel, "Industry Fuel Classification Protocol" resubmit based on NRC comments, October 4, 1999
 - ISG - 4 Cask Closure Weld Inspection, industry study outlines industry approaches
 - Standard Technical Specification, Industry submittal October 5, 1999, Industry - NRC coordination
 - 10 CFR 72.48, Industry - NRC coordination, NEI 96-07 Rev 1, Appendix, 72.48 examples, workshop

2. **High Burnup - Storage and Transportation**
 - ISG - 8 Burnup Credit in the Criticality Safety Analysis of PWR Spent Fuel in Transport and Storage Casks
 - Thermal and criticality issues
 - ISG - 5 Confinement Evaluation
 - Confinement issues
 - Revision based on NEI comments, October 25, 1999

3. **License Renewal**
 - Evaluate Part 72, address related technical issues and policy issues
 - Develop methodology for dry storage license renewal

4. **Guidelines for Fabrication, Examination, Testing, and Oversight of Spent Nuclear Fuel Dry Storage Systems - Industry submittal December 1999**

5. **Seismic Issues**
 - Accident considerations
 - Cask tip over (west coast)



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