Lawrence Livermore National Laboratory

NUCLEAR SYSTEMS SAFETY PROGRAM
RARE 85-115

February 4, 1985

Ms. Sarah M. Davis
Reliability and Risk Assessment Branch
Division of Safety Technology
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Monthly Management Letter #8
Month of December 1984
NRC FIN-A0801
Review of the Seabrook Probabilistic Risk Assessment

Dear Ms. Davis:

1. Project Description and Objective

The Office of Nuclear Reactor Regulation is conducting a probabilistic risk assessment (PRA) review program in which PRAs performed and submitted to the NRC by license applicants and licensees receive comprehensive review and evaluation. The program is the responsibility of the Reliability and Risk Assessment Branch (RRAB).

A PRA of the Seabrook Nuclear Power Plant (Seabrook PRA) has been submitted to the NRC by Public Service Company of New Hampshire, an operating license (OL) applicant. The review of this document, whose title is "Seabrook Station Probabilistic Safety Assessment," is being performed as one project in the larger NRC program.

The objective of this project is to perform an expeditious and cost effective review of those aspects of the Seabrook PRA leading to the estimates of the frequencies of each plant damage state and the associated uncertainty spread to determine the accuracy of these estimates. The review will cover methodology, assumptions, data, information sources, models, plant understanding, completeness of the analysis and other areas where inconsistencies may arise which could affect the quantitative or qualitative results.

2. Progress for Period

a. Work continued during the month at a much higher pace than previously. The draft report was completed and delivered to NRC for comment on December 20th.

3. Work to be Accomplished Next Month

a. Work on the review will be reduced to a relatively low level until we receive NRC comments on the draft report.

b. We will also be considering and discussing with NRC the various options available for finalizing the report of our review, in view of the concerns that we have reported in many earlier monthly program reports.

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4. List of Subcontractors and Consultants

a. Subcontractors

(1) Applied Risk Technology Corporation (ARTECH); P. J. Amico

(2) Jack R. Benjamin and Associates, Inc. (JBA); J. W. Reed, M. W. McCann, Jr.

b. Consultants

(1) P. R. Davis

5. Concerns

The process of completing the draft report in December on the accelerated schedule requested by NRC, prior to receipt of the final increment of contract funding, has resulted in an urgent requirement for an additional increment of funding, in the amount of $40K.

The total expenditures noted in Attachment A, including liens, are approximately $158K. This amount consists of (approximately) $95K in direct labor costs and $63K in subcontractor liens.

Attachment A also shows that the total amount of in-house funds available to cover these expenditures is the FY84 carryover of $121.9K, since we have not received the $140K final increment of contract funding from NRC.

We therefore request an immediate increment of funding in the amount of $40K.

6. Other

Not Applicable

Abel A. Garcia
Principal Investigator

Garth E. Cummings
Program Leader
Nuclear Systems Safety Program

sr

Enclosures (2)

Distribution:

NRC

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G. E. Cummings
J. M. Johnson
C. A. Meier

ATTACHMENT A

ESTIMATED PROJECT FINANCIAL STATUS:* Dec-84
(Figures given in thousands.)

FIN A0801 Summary

	Cost Analysis:*	Dec-84	Year to Date
I	Direct Staff Effort (FTE's)	3.2	2.7 **
II	Direct Labor Costs	12.3	33.8
	Material & Services	0.0	0.1
	ADP Support	0.0	0.0
	Subcontracts	5.9	13.5
	Travel Expenses	2.3	2.7
	Indirect Labor Costs	12.5	34.3
	Other (Recharge)	1.2	2.7
	Other (FY84 Unbilled Costs)	0.0	0.0
	General & Administrative	3.8	7.9
	Total Costs	38.0	95.0
	Liens	63.2	63.2
	Total Costs & Liens	101.2	158.2
	Percentage of Available Funds		130.0%

III Funding Status

Prior Year Carryover	FY 1985 Projected Funding Level	FY 1985 Funds Rec'd to Date	FY 1985 Funding Bal. Needed
121.9	261.9	0.0	140.0

* Note: These figures are for cost analysis only, and may differ slightly from final billing figures.

** FTE average.

ATTACHMENT B

FEE RECOVERY COST STATUS

FIN: A0801

TITLE: Review of the Probabilistic Risk Assessment for the Seabrook Nuclear Power Plant

PERIOD: December 1984

Facility Name	Docket Number	Costs	
		Period	Cumulative
Seabrook	50-443	$38.0K	$158K
Common Costs	50-900	$ 0.0	0
Total Expenses		$38.0K	$158K

MEMORANDUM

PSNH

NH YANKEE DIV.

To S. Davis Date February 9, 1985

From R. E. Sweeney (656-6100) Group # SBB-85-118

Subject Seabrook Station - PRA I.M.S.#

Attached please find the Seabrook Project's "Draft" responses to your questions on the Probabilistic Safety Assessment (PRA). The attached letter was sent to your contractor Mr. A. Garcia who is with Lawrence Livermore.

Should you have any questions regarding the attached, please contact Vic Nerses the Project Manager and he will gladly refer you to the appropriate project personnel.

Thank you.

Robert E. Sweeney
Bethesda Office Manager
Seabrook Project

cc: V. Nerses (NRC/DL)
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