



Pacific Northwest Laboratories P.O. Box 199 Sichland, Washington U.S. N. 24132 Telephone (509)

Telex 15-2874

June 8, 1984

Dr. M. S. Dunenfeld, Program Manager Core Performance Branch Division of Systems Integration Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, DC 20555

Dear Dr. Dunenfeld:

Attached is the May 1984 Monthly Activities Report for the Core Performance Branch programs at PNL relating to fuel performance.

Sincerely,

M. D. Freshley, Manager

Nuclear Fuels and Materials Section

MDF:jz

Attachments

cc: HE Ransom (DOE-RL)

Director, Division of Systems Integration,

ATTN: SM Boyd CH Berlinger (NRC) Bl. Greater (NRC)

R Lobel (NRC)

LS Rubenstein (NRC) JC Voglewede (NRC)

> 8604080416 860320 PDR FOIA GUIGG-86-78 PDR

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BATTELLE, PACIFIC NORTHWEST LABORATORY

MAY 1984 MONTHLY ACTIVITIES REPORT FOR NRC CORE PERFORMANCE BRANCH PROGRAMS

EXECUTIVE SUMMARY

REVIEW OF HIGH BURNUP LICENSING TOPICAL REPORTS (82533)

A summary of PNL's evaluation of Exxon's new creep collapse criteria was sent to CPB.

Babcock and Wilcox responses to NRC questions were reviewed and discussed with CPB and B&W.

FUEL OPERATING EXPERIENCE EVALUATION PROGRAM-V (B2539)

Compiling and collating of domestic LWR fuel operating data for calendar year 1983 is continuing. A total of 95 Licensee Event Reports have been ordered, of which 73 have been received.

FSAR (SECTION 4.2, FUEL) REVIEWS (B2544)

Questions related to the fuel portion of the FSAR for Vogtle (Milestone 1 of Task 8) were transmitted to the NRC one month ahead of schedule.

PROJECT TITLE: REVIEW OF HIGH BURNUP LICENSING TOPICAL REPORTS

OBJECTIVE:

The objective of this program is to perform the balance of the review and prepare the TER for each of the five vendor topical reports on extended-burnup effects. The reviews are to be conducted with full awareness of Sections 4.2, 4.3, 4.4, and Chapter 15 of the Standard Review Plan to ensure that the effects of high-burnup operation are accommodated for all of the regulatory requirements addressed by these parts of the SRP.

FIN NO. B2533

PRINCIPAL INVESTIGATOR: C. E. Beyer

PERIOD OF PERFORMANCE: November 7, 1983 to July 31, 1984

REPORTING PERIOD: May 1984

PROJECT STATUS

1. Work Completed During Period

A written summary of PNL's evaluation of Exxon's new creep collapse criteria was sent to CPB via telecopy. A more detailed summary of PNL's evaluation of this criteria has been drafted and will be sent via a letter of transmittal to CPB along with the earlier summary.

Babcock & Wilcox (B&W) responses to NRC questions were reviewed in detail. In order to clarify some of these responses, a telephone conference call was initiated between PNL, B&W and CPB.

2. Problems or Delays

None.

3. Summary of Progress to Date

Draft questions for the General Electric (NEDE-22148-P), Combustion Engineering (CENPD-269-P), Exxon (XN-NF-82-06(P), Revision 1), Westinghouse (WCAP-10125), and Babcock & Wilcox (BAW-10513P) High Burnup Topical Reports were sent to NRC.

4. Plans for Next Reporting Period

Wait for responses from fuel vendors on questions.

FINANCIAL STATUS

1.	Total Projected	Funds Obligated	By Fiscal Year, \$	
	Project Cost, \$	To Date, \$	FY-1984	FY-1985
	125K	125K	0.0K	

2. Total Costs During the Current Time Period and Cumulative to Date

		Period, \$	Cumulative, \$
a.	Direct Salaries	3.1K	26.0K
b.	Materials and Services	0.0	0.0
c.	ADP Support	0.1	0.3
d.	Subcontracts	0.0	0.0
e.	Travel	0.0	1.5
f.	Indirect Labor Costs	0.9	7.5
g.	Other (specify)	1.0	10.2
h.	General and Administrative	2.2	18.6
	Total	7.3K	64.1K (51%)

 Total Costs During the Current Time Period and Cumulative to Date for Each Task

Task 1: 3.5K 18.4K Task 2: 0.0 7.6 Task 3: 0.0 6.7 Task 4: 1.9 8.7 Task 5: 0.0 6.0 Common Costs to all Tasks 1.9 16.7K		Period \$	Cumulative, \$
Task 3: 0.0 6.7 Task 4: 1.9 8.7 Task 5: 0.0 6.0	Task 1:	3.5K	18.4K
Task 4: 1.9 8.7 Task 5: 0.0 6.0	Task 2:	0.0	7.6
Task 5: 0.0 6.0	Task 3:	0.0	6.7
	Task 4:	1.9	8.7
Common Costs to all Tasks 1.9 16.7K	Task 5:	0.0	6.0
	Common Costs to all Tasks	1.9	16.7K