



PROJECT AND BUDGET PROPOSAL FOR NRC WORK

Date of Proposal

August 1983

☒ New☐ Revision No.

Project Title

RESIDENT SCIENTIST AT KfK, KARLSRUHE, FRG

FIN: A6352

NRC Office Office of Nuclear Regulatory Research (RES), Division of
Accident Evaluation (DAE)

NRC B&R Number

60 19 02 01

DOE Contractor
EG&G Idaho, Inc.Contractor Account
Number I-711

Site

IDAHO NATIONAL ENGINEERING LABORATORY (INEL)

DOE B&R Number

40 10 01 060

COGNIZANT PERSONNEL	ORGANIZATION	FTS PHONE NUMBER	PERIOD OF PERFORMANCE
NRC Project Manager G. P. Marino	NRC/RES	427-4266	Starting Date 10/01/83
Other NRC Technical Staff H. H. Scott	NRC/RES	427-4266	Completion Date 09/30/84
DOE Project Manager D. L. Rose	DOE-ID	583-1982	
Contractor Project Manager W. A. Spencer	EG&G Idaho	583-9712	
Principal Investigator(s) P. E. MacDonald	EG&G Idaho	583-9634	

STAFF YEARS OF EFFORT (Round to nearest tenth of a year)	FY -1983	FY -1984	FY -1985	FY -1986	FY -1987
Direct Scientific/Technical	2.0	1.3	1.0		
Other Direct (Graded)	0.0	0.0	0.0		
TOTAL DIRECT STAFF YEARS	2.0	1.3	1.0	1.0	1.0

COST PROPOSAL (\$000)						
Direct Salaries		74	56	53		
Material and Services (Excluding ADP)		10	61	48		
ADP Support		0	0	0		
Subcontracts		0	0	0		
Travel Expenses	Foreign	41	0	0		
	Domestic	0	0	0		
Indirect Labor Costs	Direct Labor Overhead	30	22	21		
	Common Support	0	0	0		
Other (Specify) FY-1982 = \$34K	(carryover)	(34)	0	0		
Other (Specify)		0	0	0		
General and Administrative (14.0%)		22	21	18		
TOTAL OPERATING COST		143	160	140	160	150

Capital Equipment		0	0	0	0	0
TOTAL PROJECT COST		143	160	140	160	150

FY 19 <u>84</u>	MONTHLY FORECAST EXPENSE	October	November	December	January	February	March
		18	13	26	14	10	11
		April	May	June	July	August	September
Total Forecast Expense \$ <u>160K</u>		12	11	11	11	12	11

APPROVAL AUTHORITY-SIGNATURE

Date

8/12/83

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RESIDENT SCIENTIST AT KFK, KARLSRUHE, FRG

DOE Proposing Organization

IDAHO OPERATIONS OFFICE (ID)

FORECAST MILESTONE CHART: Scheduled to Start - \triangle - Completed (Shown in Quarter Year)
PROVIDE ESTIMATED DOLLAR COST FOR EACH TASK FOR EACH FISCAL YEAR

TASK		FY-1983				FY-1984				FY-1985				FY-1986				FY-1987			
		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
NRC Representative to KFK	Schedule \triangle																				
	Cost		177K			160K				140K				160K				150K			
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SUBTOTAL			177K			160K				140K				160K				150K			
CARRYOVER FY-1982 = \$34K			(34K)			0K				0K				0K				0K			
TOTAL ESTIMATED PROJECT COST			143K			160K				140K				160K				150K			

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DOE Proposing Organization

IDAHO OPERATIONS OFFICE (ID)

PROJECT DESCRIPTION: (Provide narrative descriptions of the required topics in numerical order. If an item is not applicable, list title and so state.)

(1) Objective of Proposed Work

The Nuclear Regulatory Commission (NRC) Karlsruhe Representatives represent the interests of the NRC and the Department of Energy (DOE) at Kernforschungszentrum, Karlsruhe (KfK). The primary duties include: (a) reviewing, summarizing, and reporting any Light Water Reactor (LWR) safety research of interest to the NRC being conducted at KfK; (b) performing technical functions in support of the KfK staff, including analysis and reporting of selected experimental results; and (c) reporting developments in LWR safety research being performed in Western Europe pertinent to the NRC and DOE Nuclear Research Programs. In addition, the representatives will report to the Germans on the status of the Three Mile Island (TMI) recovery and fuel examination work being performed by the EG&G TMI Technical Integration Office.

(2) Summary of Prior Efforts

FY-1983:

Research at KfK was reported bi-monthly to the NRC. The areas of research covered were: (a) core melt research, (b) zircaloy-uranium-oxygen high temperature interaction studies, (c) severe fuel damage experiments and analyses, and (d) fission product release research.

(3) Work to be Performed and Expected Results

FY-1984:

A new representative will be sent to KfK to replace the current staff and will continue the same activities as are presently on-going.

FY-1985:

The representative sent in FY-1984 will continue working at KfK, Karlsruhe.

(4) Description of Any Follow-On Effort

FY-1986, FY-1987, and Beyond:

A scientist will continue to represent the interests of NRC and DOE at Kernforschungszentrum, Karlsruhe (KfK) reporting on light water reactor (LWR) safety research activities.

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PROJECT DESCRIPTION: (Provide narrative descriptions of the required topics in numerical order. If an item is not applicable, list title and so state.)

(5) Relationship to Other Projects

This activity is related to all other projects associated with the behavior of LWR fuel rods under normal and accident conditions. One major area of this activity (Severe Fuel Damage) is directly related to a project at the Sandia and Idaho National Engineering Laboratories.

(6) Reporting Schedule

FY-1983:

S. Peck and D. Kerwin, NRC Bi-monthly report.

FY-1984:

S. Peck and D. Kerwin, NRC Bi-monthly report.

(7) Description of Major Non-Labor Costs

The foreign travel costs associated with this 189 will cover all expenses to be incurred by the representative(s) in relocating to and from KfK and while on assignment there, with the exception of actual labor costs. Such costs include air fare, housing, business travel, shipping, storage of personal items in the U.S., transportation, educational allowance for dependents, and tax consulting services.

	(\$000)	
	<u>FY-1984</u>	<u>FY-1985</u>
<u>Material and Services</u>		
Air fare	\$12	\$ 9
Living cost allowance	16	13
Housing	8	9
Travel Status	5	0
Business travel	4	5
Educational allowance	8	8
Miscellaneous	8	4
Total	<u>\$61</u>	<u>\$48</u>