DATE OF PROPOSAL U.S. NUCLEAR REQULATORY COMMISSION NRC FORM 186 1/22/86 (3-81) PROJECT AND BUDGET PROPOSAL FOR NRC WORK X NEW REVISION NO. PIN NUMBER PROJECT TITLE A-0760 Team Inspection for Operational Readiness - Palo Verde, Unit 3 HRC BAR NUMBER NRC Region V - Walnut Creek, California 95-19-30-02-01 CONTRACTOR ACCOUNT University of California - Lawrence Livermore National Laboratory DOE SAR NUMBER Livermore, California RICOOFFERFORMANCE FTS PHONE NUMBER ORGANIZATION COGNIZANT PERSONNEL STARTING DATE NAC PROJECT MANAGER FTS-463-3853 02/15/86 NRC/RV Tolbert Young COMPLETION DATE OTHER NAC TECHNICAL STAFF 09/30/86 DOE PROJECT MANAGER DOE/SAN FTS-536-7916 W. Gallagher CONTRACTOR-PROJECT MANAGER FTS-532-4949 LLNL Garth Cummings PRINCIPAL INVESTIGATOR(S) FTS-575-2411 LLNL/NV Robert L. White FTS-532-4948 J. M. Johnson (Resource Manager) LLNL FY FY STAFF YEARS OF EFFORT (Round to nearest tenth of a year) FY 86 Direct Scientific/Technical .3 FTE Other Direct (Graded) -0-3 TOTAL DIRECT STAFF YEARS \$K COST PROPOSAL Direct Salaries 24 Material and Services (Excluding ADP) -0-ADP Support -0-Subcontracts Foreign Travel Expenses 8 Domestic Indirect Labor Costs 23 Other (Specify) Recharge 1 General and Administrative (15 %) 9 8602250316 860221 PDR ADOCK 05000530 65 TOTAL OPERATING COST CAPITAL EQUIPMENT N/A Q 0 FIN CHARGED: \$65K TOTAL PROJECT COST MARCH NOVEMBER DECEMBER JANUARY FEBRUARY OCTOBER 86 EY MONTHLY FORECAST SEPTEMBER MAY JUNE JULY AUGUST APRIL EXPENSE 35 30

NAC	0	RM	189
13.81			

U.S. NUCLEAR REGULATORY COMMISSION

FIN NUMBER

A-0760

PROJECT AND BUDGET PROPOSAL FOR NRC WORK

1/22/86

PROJECT TITLE

Team Inspection of Operational	Readiness	- Palo	Verde,	Unit	3
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OR PROPOSING ORGANIZATION

Valuerates of California - Lawrence Livermore National Laboratory

PROVIDE EST	LESTONE CHAR	FY	-			TFY				FY				FY			FY		
TASK		1 st	2nd	3-0	4th	1 st	2nd	3rd	4th	1 st	2nd	3rd 4	ith	1 81	2nd	3rd 4th	1 et	2nd	3rd 4
Review and Inspect	SCHEDULE			Δ-	_,												-		
Operational Readiness - Palo Verde, Unit 3	COST	\$65K											_			-	_		
	SCHEDULE																-		
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	SCHEDULE																1		
	COST									1				1			1		
TOTAL ESTIMATED PROJECT COST			\$6	5K															

PROJECT DESCRIPTION. (Provide narrative descriptions of the following topics in the order list not applicable, so state.)

- 1. OBJECTIVE OF PROPOSED WORK
- 2. SUMMARY OF PRIOR EFFORTS
- 3. WORK TO BE PERFORMED AND EXPECTED RESULTS
- 4. DESCRIPTION OF ANY FOLLOW ON EFFORTS
- 5. RELATIONSHIP TO OTHER PROJECTS
- 6. REPORTING SCHEDULE
- 7. SUBCONTRACTOR INFORMATION
- 8. LIST NEW CAPITAL EQUIPMENT REQUIRED
- 9. DESCRIBE SPECIAL FACILITIES REQUIRED
- 10. CONFLICT OF INTEREST INFORMATION

- 11. Meetings and Travel
- 12. NRC Furnished Material
- 13. Proprietary Data
- 14. Patent Status
- 15. Task 'X' On Call Assistance
- 16. Summarize Deliverables
- 17. Resumes

SEE NRC MANUAL CHAPTER 1102 FOR ADDITIONAL INFORMATION

APPROVAL AUTHORITY-SIGNATURE

DATE

Statement of Work

Project Title: Team Inspection for Operational	FIN	No.	-A-0760
Readiness - Palo Verde Unit 3		No.	95-19-30-02-01

NRC Project Manager: Tolbert Young
Estimated Level of Effort: .3 Staff Year

September 20, 198

Projected Completion Date: September 30, 1986

BACKGROUND

Team inspections at commercial nuclear power reactors involve the examination of modifications and in depth examination of the design, performance and condition of existing systems. Assistance is needed to review and inspect specialized aspects of reactor systems in the areas of electrical equipment, instrumentation, nondestructive testing and mechanical equipment installation areas.

1. OBJECTIVE

The objective of this project is to provide technical assistance in the review and inspection of plant systems, during the inspections required to determine the readiness for operation of Palo Verde Unit 3 in 1986.

2. SUMMARY OF PRIOR EFFORTS

LLNL has been participating in inspection projects at San Onofre, Unit 1, and at Diablo Canyon, Units 1 and 2. The prior work at San Onofre was completed on FIN A-0754 while the work at Diablo Canyon was completed on FIN B-8552. LLNL has established a background and familiarity with Region V inspection procedures and methods.

3. WORK TO BE PERFORMED AND EXPECTED RESULTS

Provide the services of four individuals in the field of electrical engineering and instrumentation engineering mechanical piping supports and nondestructive testing who will serve as team members during an annual team inspection at the Palo Verde Unit 3 Power Plant. Their services are required for the period of the site inspections (two weeks) plus necessary preparation, travel and documentation time.

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Readiness - Palo Verde Unit 3	B&R		95-19-30-02-01

3. WORK TO BE PERFORMED AND EXPECTED RESULTS (cont'd)

Inspection effort will involve the examination of plant components in the field, associated records such as radiographs, and the determination of whether plant systems are ready to be operated in accordance with NRC requirements, licensee procedures and commitments and accepted industrial practices as defined by codes and standards. The inspection effort will involve examination of the performance of similar components at Palo Verde Unit 1 and 2 and the determination of whether appropriate changes have been made to systems and procedures at Palo Verde Unit 3 on basis of experience at the other units (1 and 2).

The inspection work will be performed under the direction of an NRC team leader, in accordance with an NRC prepared inspection plan and coordinated with efforts of other team members. Any deviations from requirements which are found during the inspection will be reexamined by the NRC prior to documentation and disposition.

Level and Effort and Period of Performance

The level of effort is estimated at .3 staff years over a 4 month period ending September 1986.

- 4. DESCRIPTION OF ANY FOLLOW-ON EFFORTS N/A
- 5. RELATIONSHIP TO OTHER PROJECTS N/A
- 6. REPORTING SCHEDULE
 - A. Monthly Business Letter Report A business letter report is to be submitted by the 15th working day of each month to the Region V Project Manager, with copies to Tolbert Young, Chief, Engineering Section, Division of Reactor Safety and Projects, and T. DiGaloma, Resource Analyst Region V, covering, as a minimum:
 - A listing of any efforts completed during the period;
 milestones reached, or if missed, an explanation provided;
 - The amount of funds authorized to date and the amount of funds expended for both manpower and computer services during the period and cumulative to date for the projects;
 - Any problems or delays encountered or anticipated and recommendations for their solutions;
 - A summary of the progress to date;
 - Plans for the next reporting period.

Project Title:	Team Inspection for Operation	FIN No. A-0760
Readiness - Pal	o Verde Unit 3	B&R No. 95-19-30-02-01

- B. Technical Letter Report A technical letter report shall be submitted periodically to the Region V Project Manager. This letter report shall contain the following information:
 - A listing of all inspections completed during the reporting period (exclude items identified in previous reports);
 - A listing of the criteria (ccues and standards) each modification was inspected against;
 - The results of each inspection, specifying any identified deviations from the evaluation criteria;
 - The dates the inspections were conducted.

7. SUB-CONTRACTOR INFORMATION

Inspection may be conducted in part by employees of EG&G, Inc. - Energy Management Group (EMG) located in offices in San Ramon, California. EG&G EMG is under contract to DOE and has been providing assistance to LLNL-NSSP through the SANL contracts division.

- 8. LIST NEW CAPITAL EQUIPMENT REQUIREMENTS N/A
- 9. SPECIAL FACILITIES REQUIRED N/A

10. CONFLICT OF INTEREST INFORMATION

The contractor shall assure that participants are not placed in a conflict of interest situation based on their inspection of NRC licensees.

11. MEETINGS AND TRAVEL

During the period of this work travel is required weekly to and from the site by each assigned engineer (cost estimates reflect one roundtrip/manweek by air). Additional local travel is anticipated between LLNL and the NRC Region V offices for planning and progress meetings.

12. NRC FURNISHED MATERIALS

Copies of codes, standards, procedures, specifications, and miscellaneous tools and supplies such as flashlights and weld gauges considered necessary by the NRC Project Manager or inspectors will be provided by the NRC or will be procured from LLNL sources at NRC expense.

Project Title: To	eam Inspection for Operation	FIN	No.	A-0760
Readiness - Palo	Verde Unit 3	B&R	No.	95-19-30-02-01

13. PROPRIETARY DATA

"In the event any proprietary information is submitted by the NRC in connection with this project, it must be specifically identified. The University agrees to exercise its best efforts to protect such proprietary data. Furthermore, limitation shall not be imposed on the use of any information and data previously delivered to the University or government without limitations or previously published in any form as to be generally available."

14. PATENT STATUS

This proposal is being transmitted in advance of patent review for evaluation purposes only. No further dissemination or publication shall be made without prior approval of the Assistant General Counsel for Patent, DOE.

15. TASK "X" ON-CALL ASSISTANCE - N/A

16. SUMMARIZE DELIVERABLES

The deliverables are monthly business letter reports and technical letter reports as required to summarize inspection periods and activites.